



TIMBER NOTICE OF SALE

SALE NAME: SCHWEITZER

AGREEMENT NO: 30-100724

AUCTION: December 17, 2020 starting at 10:00 a.m., COUNTY: Lewis Pacific Cascade Region Office, Castle Rock, WA

SALE LOCATION: Sale located approximately 6 miles West of Doty

PRODUCTS SOLD AND SALE AREA: All timber, except leave trees marked with blue paint, trees bounded out by yellow "Leave Tree Area" tags, all down timber existing 7 years prior to the day of sale; Unit 1 white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging. Unit 2 and Unit 4, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging, the N-710 road, and reprod. Unit 3, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging and the N-710 road. Unit 5, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging and the N-700 road. Unit 6, ROW, orange "Right-of-Way" tags and orange flagging with orange paint and the Nine Creek-Mainline,

All forest products above located on part(s) of Sections 19, 20 and 30 all in Township 13 North, Range 5 West, W.M., containing 138 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, Red alder, Hemlock, Red cedar, Maple, and Sale Total.

MINIMUM BID: \$0.00 BID METHOD: Sealed Bids

PERFORMANCE SECURITY: \$0.00 SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2022 ALLOCATION: Export Restricted

BID DEPOSIT: \$0.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: This sale can be harvested with cable systems, including cable assist and shovel systems. This sales is estimated to be 60% cable based harvest systems and 40% ground based harvest systems Ground Based Yarding will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator.

ROADS: 61.55 stations of optional construction. 372.00 stations of required prehaul maintenance. Rock used in accordance with the quantities on the ROCK LIST may be obtained from the B&E Pit (Sec 24 T13N R06W W.M). Rock for construction and pre-haul



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maintenance used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense subject to written approval from Contract Administrator. Road construction will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator. All road will not be permitted from November 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 April 30 unless authorized in writing by the Contract Administrator.

ACREAGE DETERMINATION

CRUISE METHOD: The sale acres were determined by GPS. The sale area was cruised using a variable plot cruise method.

FEES: \$122,995.00 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 has approximately 781 MBF special mill DF; 1,763 MBF 2 saw DF; 557 3 saw DF.

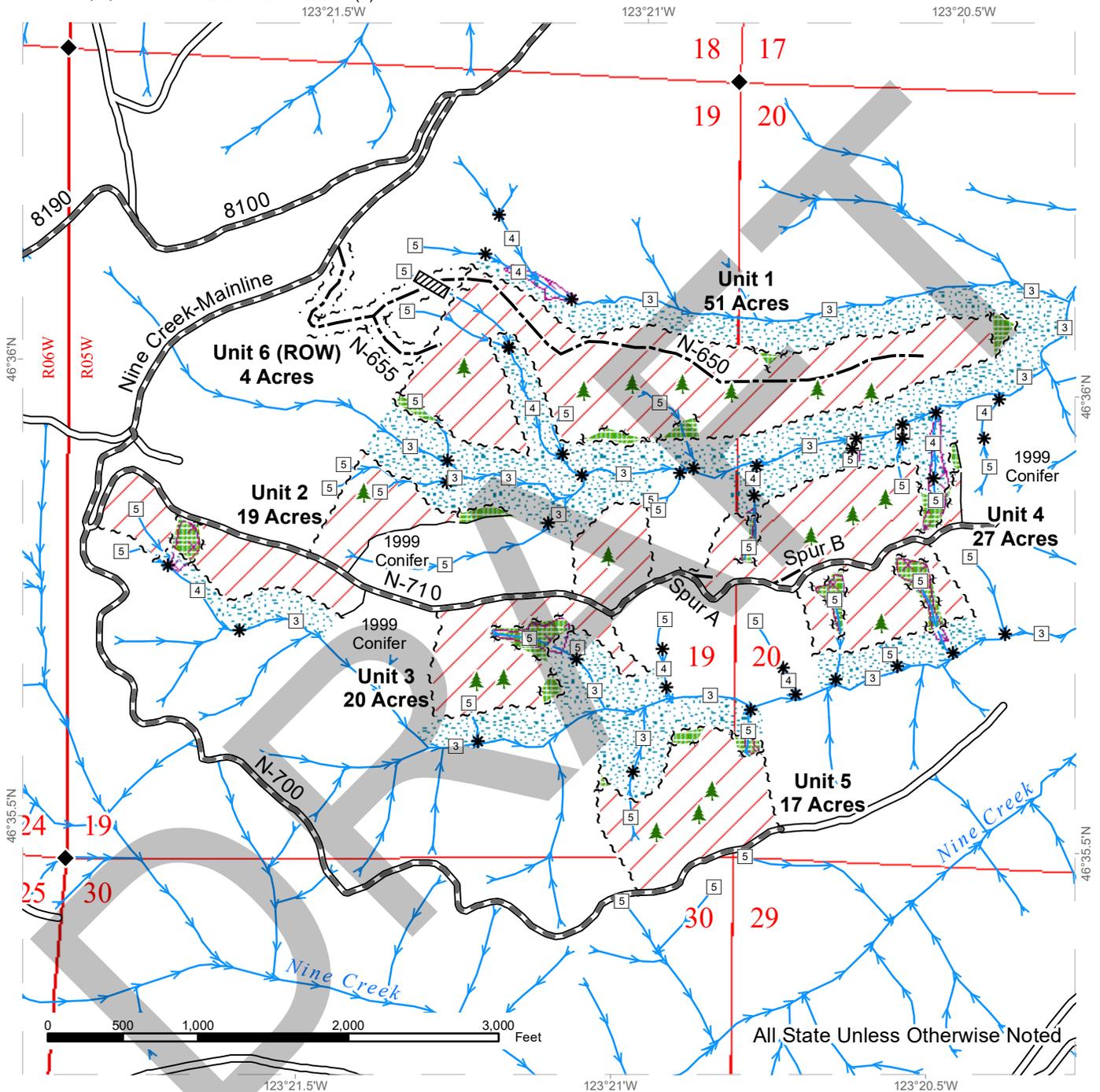
PCP 1-1 gate keys may be obtained from the Pacific Cascade Region office.

Intermediate supports may be needed in Unit 3 off the 710 Road.

TIMBER SALE MAP

SALE NAME: SCHWEITZER
AGREEMENT #: 30-100724
TOWNSHIP(S): T13R5W
TRUST(S): State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Lewis
ELEVATION RGE: 640-1200



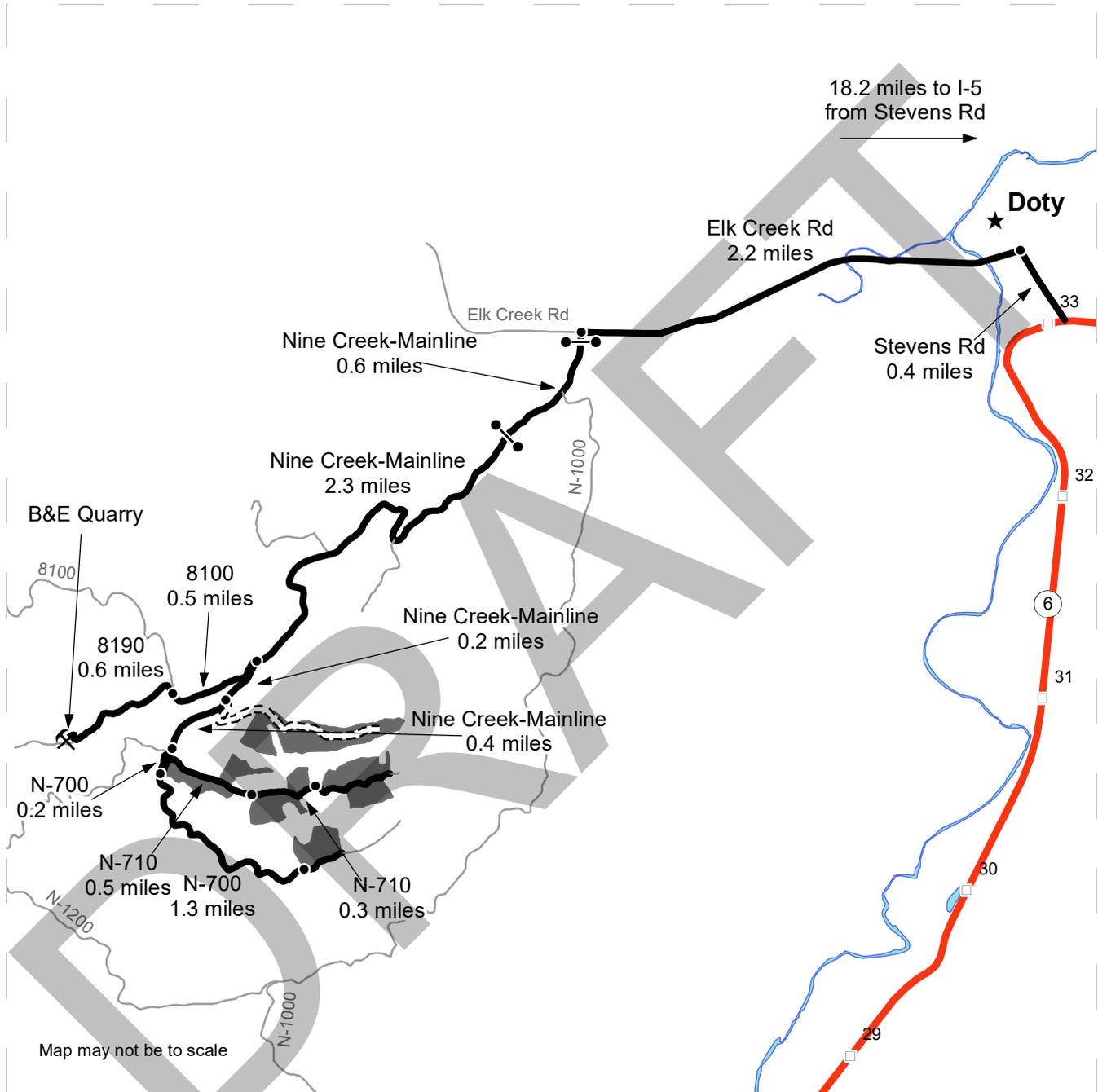
	Variable Retention Harvest		Existing Roads		Streams
	Leave Tree Area		Required Pre-Haul Maintenance		Stream Type
	Riparian Mgt Zone		Optional Construction		Stream Type Break
	Potentially Unstable Slopes		Sale Boundary Tags		Survey Monument
			Leave Tree Tags		Culvert
			Right of Way Tags		Leave Tree Area <1/4-acre
			Timber Type Change		



DRIVING MAP

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Map may not be to scale

- Timber Sale Unit
- Highway
- Haul Route
- New Road/ROW U6
- Other Road
- Milepost Markers
- Distance Indicator
- Gate (PCP 1-1)
- Rock Pit
- Town

DRIVING DIRECTIONS:

Units 1-6:

At MM 33 on SR 6, head north on Stevens Rd. Drive for 0.4 miles and turn left on to Elk Creek Rd. Drive for 2.2 miles and turn left on to Nine Creek-Mainline with farm gate (PCP 1-1). Continue for 0.6 miles to gate (PCP 1-1). Continue for 2.3 miles and take slight left to stay on the Nine Creek-Mainline. Continue for 0.2 miles to **Unit 6 (ROW)** on the left and **Unit 1** through U6 ROW. Continue on Nine Creek-Mainline for 0.4 miles and turn left on to the N-700. Drive for 0.2 miles and turn left on to the N-710 and **Unit 2** is on the right. Continue for 0.5 miles to **Unit 3** on the right. Continue for 0.3 miles to **Unit 4** on the left. From the N-700 and N-710 junction, continue on the N-700 for 1.3 miles to **Unit 5**.

B+E Quarry:

From the 8100 and Nine Creek-Mainline junction, drive on the 8100 for 0.5 miles and turn left on to the 8190. Drive for 0.6 miles to the **B+E Quarry**.



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted Lump Sum AGREEMENT NO. 30-0100724

SALE NAME: SCHWEITZER

**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 December 17, 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 leave trees marked with blue paint, trees bounded out by yellow "Leave Tree Area" tags, all down timber existing 7 years prior to the day of sale; Unit 1 white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging. Unit 2 and Unit 4, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging, the N-710 road, and reprod. Unit 3, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging and the N-710 road. Unit 5, white "Timber Sale Boundary" tags with pink "Timber Harvest Boundary" flagging and the N-700 road. Unit 6, ROW, orange "Right-of-Way" tags and orange flagging with orange paint and the Nine Creek-Mainline,

All forest products above located on approximately 138 acres on part(s) of Sections 19, 20, and 30 all in Township 13 North, Range 5 West W.M. in Lewis 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, 2022.

G-040 Contract Term Adjustment - No Payment

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

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

G-051 Contract Term Extension - Payment

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

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

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

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

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

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

- e. Payment of \$958.00 per acre per annum for the acres on which an operating release has not been issued for all harvest areas.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

G-053 Surveys - Sensitive, Threatened, Endangered Species

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

G-060 Exclusion of Warranties

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

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.

- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.
- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the Services' Incidental Take Permit Nos. TE812521-1 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

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

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

G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts,

or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.

- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.
- c. Purchaser shall refer to a specific ITP number, ITP TE812521-1 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

G-064 Permits

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

G-065 Regulatory Disclaimer

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

G-066 Governmental Regulatory Actions

- a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does

not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

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

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

c. Adjustment of Price

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

G-070 Limitation on Damage

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

G-080 Scope of State Advice

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

G-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: PwC-SFIFM-513.

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

G-120 Responsibility for Work

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

G-121 Exceptions

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

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

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

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

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

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

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

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

G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless State, agencies of State and all officials, agents and employees of State, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury,

sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Purchasers' obligations to indemnify, defend, and hold harmless includes any claim by Purchasers' agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Purchasers' or any subcontractors' performance or failure to perform the contract. Purchasers' obligation to indemnify, defend, and hold harmless State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

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

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

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

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

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

Purchaser shall include all subcontractors as insured under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each

subcontractor. Subcontractor(s) must comply fully with all insurance requirements stated herein. Failure of subcontractor(s) to comply with insurance requirements does not limit Purchaser's liability or responsibility.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured 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; Nine Creek-Mainline, N-650, N-655, N-700, N-710, 8100, 8190, Spur A, Spur B. 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 Nine Creek Mainline, 8100, 8190, 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 Ernest Lusk and Louise J. Lusk. Dated: 03/28/1972
Expires: Indefinitely

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.

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 \$188,110.00. The total contract price consists of a \$0.00 contract bid price plus \$188,110.00 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 \$0.00. 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-010 Cutting and Yarding Schedule

Ground Based Yarding will not be permitted from November 1 to April 30 in all units unless authorized in writing by the Contract Administrator.

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-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 assisted systems and shovels. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-130 Hauling Schedule

The hauling of forest products will not be permitted from November 1 to April 30 all units unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

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

Ground based yarding equipment will not be permitted on sustained slopes over 40%.

Cable-assist will only be allowed in areas where a written harvest plan has been provided to the CA and the CA has provided written approval for cable-assist logging to occur.

Long butts remaining on the sale must be dispersed as directed by the Contract Administrator.

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.

Intermidate supports may be needed in Unit 3 off the 710 Road.

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:

No yarding will be permitted through or over areas identified to be potentially unstable on the FPA Slope Stability Form and all maps.

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-240 Lop and Scatter

The tops of all felled trees shall be lopped and slash scattered away from leave trees .

Section C: Construction and Maintenance

C-040 Road Plan

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

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on N-650, N-655, N-700, N-710, Spur A, Spur B. 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.

Section S: Site Preparation and Protection

S-001 Emergency Response Plan

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

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

S-010 Fire Hazardous Conditions

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

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

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

S-030 Landing Debris Clean Up

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

S-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-070 Water Supply

Purchaser shall provide, during the "closed season", a water supply with a minimum capacity of 300 gallons for rapid filling of pump trucks or trailers at a location designated by the Contract Administrator.

S-100 Stream Cleanout

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

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

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

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

b. Hazardous Materials Spill Prevention

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

c. Hazardous Materials Spill Containment, Control and Cleanup

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

d. Hazardous Material Release Reporting

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

- Department of Emergency Management (contact information below).
- National Response Center (contact information below).
- Appropriate Department of Ecology (DOE) regional office (contact information below).
- DNR Contract Administrator

DOE - Northwest Region: 1-425-649-7000
(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

DOE - Southwest Region: 1-360-407-6300
(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

DOE - Central Region: 1-509-575-2490
(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

DOE - Eastern Region: 1-509-329-3400
(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

Department of Emergency Management 24-hour Number: 1-800-258-5990

National Response Center: 1-800-424-8802

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.

SIGNATURES

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

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Eric Wisch

Pacific Cascade Region Manager

Print Name

Date: _____

Date: _____

Address: _____

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

STATE OF _____)

COUNTY OF _____)

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

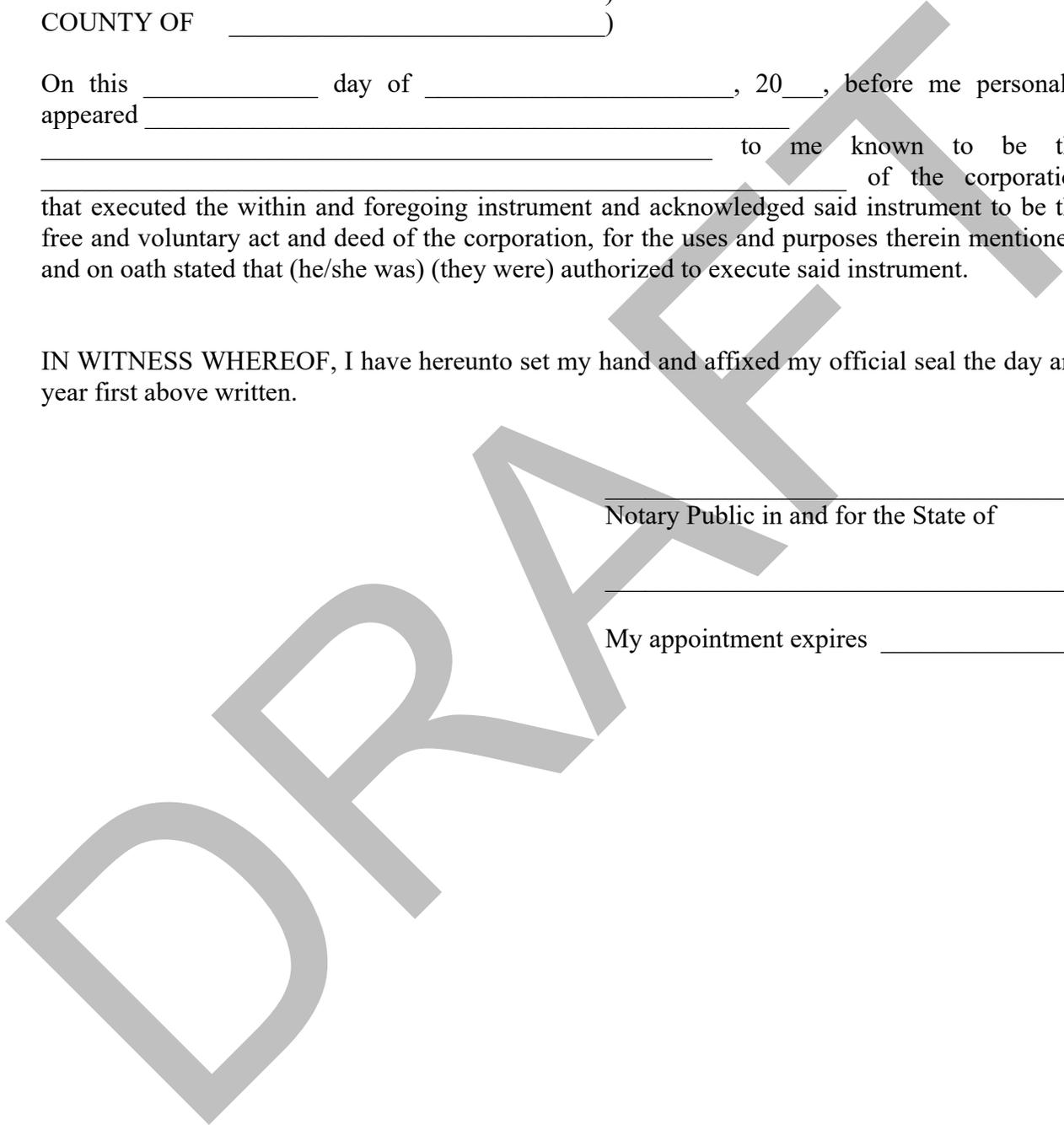
_____ to me known to be the
_____ of the corporation

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

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

Notary Public in and for the State of

My appointment expires _____





WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: Pacific Cascade

Timber Sale Name: Schweitzer TBS

Application Number: 30- 100724

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 6,155 **linear feet**
Road to be constructed (optional and required) but not abandoned

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

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

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

Pre-Haul Maintenance: 37,200 **linear feet**
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

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

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

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

DNR Timber Sale Trust Distribution Form

Sale Name
SCHWEITZER

Agreement Number
100724

Region
Pacific Cascade

District
LEWIS

Unit
Frances

Legal Location

Section(s) 19, 20, 30	Township	13	Range	5	E/W	W
-----------------------	----------	----	-------	---	-----	---

Auction Date
12/17/2020

Contract Expiration Date
10/31/2022

Sale Acres
138

Sale Class
Board

Sale Method
Lump Sum

Stand Origin Year
1940

FPA Number

FPA Renewal Date

Sale Volume Ratio

Harvest Type

Conifer		
Red cedar	67	0.90%
Hemlock	165	2.30%
Douglas fir	6323	87.40%
Totals For Conifer	6555	90.60%
Hardwood		
Red alder	625	8.60%
Maple	55	0.80%
Totals For Hardwood	680	9.40%
Total	7235	100.00%

Trust Distribution Table

County	1	Totals					
21 - Lewis	100.00%	100.00%					
		100.00%					

DNR Timber Sale Trust Distribution Form

Trust Levy Codes

Instructions:

To ensure proper distribution of funds to the trust beneficiaries of this sale, the State Lands Assistant must review the data in NaturE and sign in the space provided below.

NaturE Data Reviewed by:

X

(Print Name)

(Signature)

Date:

DRAFT

DNR Timber Sale Trust Distribution Form

Trust Distribution Details

21-Lewis

Trust	Harvest Area	Volume
1	1	2681.50
	2	1077.40
	3	1132.80
	4	1162.60
	5	1126.50
	6	53.20
Total for 1		7234.00

Total For 21-Lewis 7234.00

Total Volume 7234.00

DRAFT

**State of Washington
Department of Natural Resources
Timber Bill of Sale Extension Charges**

Extension Per Acre Charge Worksheet

Agreement No.:
 Sale Name:
 Region:
 Sale Method:
 Harvest Type:
 Geographic Area:
 Site Class (westside only):

- 1. Growth Loss
 - 2. Additional Growth
 - 3. Loss thru Disrupt.
- Per Acre Charge

Westside PC/Thin		Westside Evenage		Eastside PC/Thin		Eastside Evenage	
scale	lump	scale	lump	scale	lump	scale	lump
			29.00				
			884.34				
			44.22				
\$0.00	\$0.00	\$0.00	\$957.56	\$0.00	\$0.00	\$0.00	\$0.00

Total Per Acre Charge:

This figure to be Input into the G-050 or G051 clause.

PRE-CRUISE NARRATIVE

Sale Name: Schweitzer	Region: Pacific Cascade
Agreement #: 30-100724	District: Lewis
Contact Forester: Devin Schlapbach Phone / Location: 360-827-1247	County(s): Lewis
Alternate Contact: Roy Franklin Phone / Location: 360-520-1971	Other information: Click here to enter text.

Type of Sale: Lump Sum	
Harvest System: Ground based	40%
Harvest System: Uphill Cable	60%

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	Sec 19, 20 / T13N / R05W	01	99	45	3	0	0	51	GPS (Garmin)
2	Sec 19 / T13N / R05W	01	33	12	2	0	0	19	GPS (Garmin)
3	Sec 19 / T13N / R05W	01	37	15	2	0	0	20	GPS (Garmin)
4	Sec 19, 20 / T13N / R05W	01	48	16	5	0	0	27	GPS (Garmin)
5	Sec 19, 20, 30 / T13N / R05W	01	27	9	1	0	0	17	GPS (Garmin)
6 (ROW)	Sec 19 / T13N / R05W	01	4	0	0	0	0	4	ArcGIS
TOTAL ACRES			248	97	13	0	0	138	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Variable retention harvest. Boundaries are marked with white "Timber Sale Boundary" tags and pink "Timber Harvest Boundary" flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink "Timber Harvest Boundary" flagging, and blue paint. Individual trees are marked with blue paint.		Leave trees are marked mainly in clumps.

2	Variable retention harvest. Boundaries are marked with white "Timber Sale Boundary" tags and pink "Timber Harvest Boundary" flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink "Timber Harvest Boundary" flagging, and blue paint. Individual trees are marked with blue paint.		Leave trees are marked mainly in clumps.
3	Variable retention harvest. Boundaries are marked with white "Timber Sale Boundary" tags and pink "Timber Harvest Boundary" flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink "Timber Harvest Boundary" flagging, and blue paint. Individual trees are marked with blue paint.		Leave trees are marked mainly in clumps.
4	Variable retention harvest. Boundaries are marked with white "Timber Sale Boundary" tags and pink "Timber Harvest Boundary" flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink "Timber Harvest Boundary" flagging, and blue paint. Individual trees are marked with blue paint.		Leave trees are marked mainly in clumps.
5	Variable retention harvest. Boundaries are marked with white "Timber Sale Boundary" tags and pink "Timber Harvest Boundary" flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink "Timber Harvest Boundary" flagging, and blue paint. Individual trees are marked with blue paint.		Leave trees are marked mainly in clumps.
6 (ROW)	Right-of-Way harvest. Boundaries are marked with Orange "Right-of-Way" tags, orange flagging, and orange paint.		

OTHER PRE-CRUISE INFORMATION:

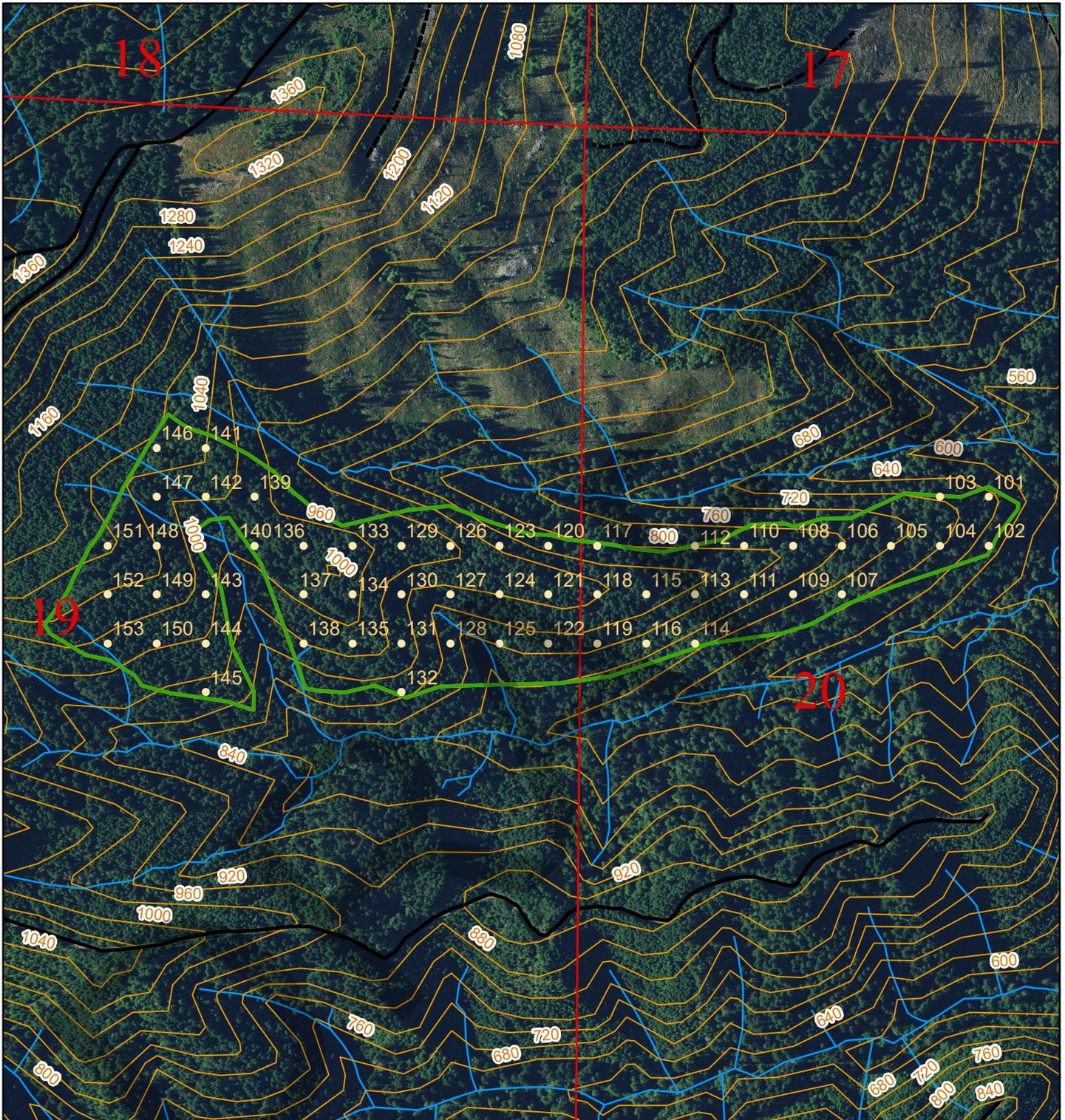
Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	DF, WH, WRC, RA, BM 2100 MBF	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), continue to Unit 1. Unit 6 (ROW) leads to Unit 1 off of the Nine Creek-Mainline.	Maps on TSDC
2	DF, WH, WRC, RA, BM	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left	Maps on TSDC

	800 MBF	on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), turn left on N-700, turn left on N-710 to Units 2, 3, and 4.	
3	DF, WH, WRC, RA, BM 800 MBF	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), turn left on N-700, turn left on N-710 to Units 2, 3, and 4.	Maps on TSDC
4	DF, WH, WRC, RA, BM 1000 MBF	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), turn left on N-700, turn left on N-710 to Units 2, 3, and 4.	Maps on TSDC
5	DF, WH, WRC, RA, BM 650 MBF	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), turn left on N-700 to Unit 5.	Maps on TSDC
6 (ROW)	DF, WH, RA 50 MBF	At MM 33 on SR 6 head north on Stevens Road, turn left on Elk Creek Road, turn left on Nine Creek-Mainline (Gate PCP-1 at farm), to another (Gate, PCP-1), continue to Unit 6 (ROW) off of the Nine Creek-Mainline.	Maps on TSDC
TOTAL MBF	5400 MBF		

REMARKS:

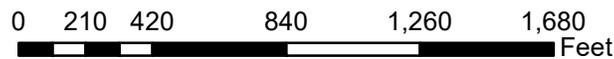
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Prepared By: Devin Schlapbach Date: 06/24/2019	Title: State Lands Forester 2	CC:
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FMA POLYGON AND SAMPLE POINT INFORMATION

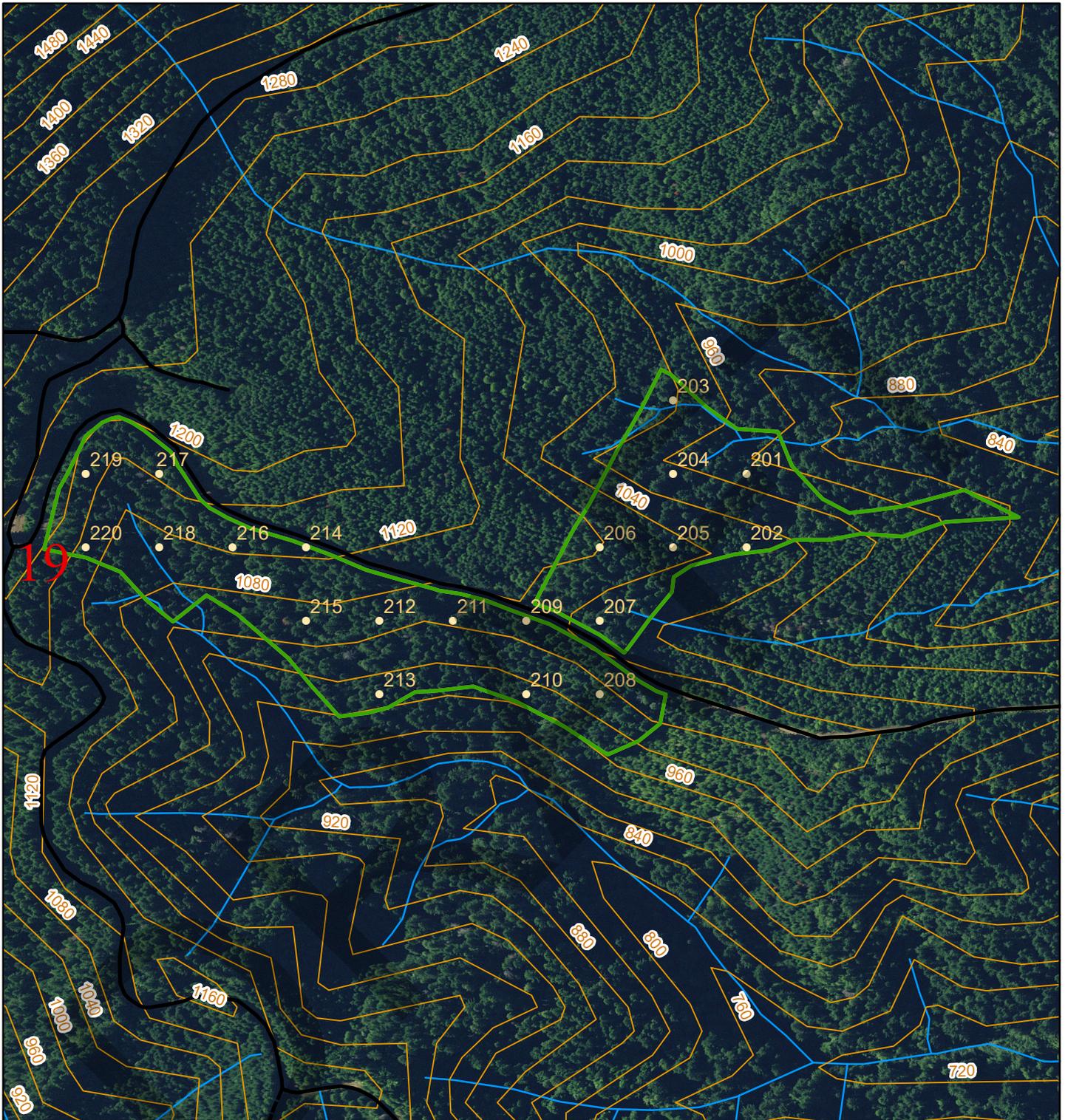
FMA_NM:	SCHWEITZER U1	Township:	T13R05W
FMA_ID:	198828	DNR Region:	PACIFIC CASC
Acres:	54	Total Sample Points:	53
County:	LEWIS	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Scale 1:7,200

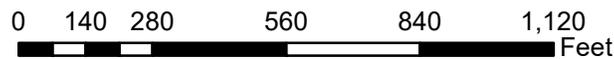
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections
- Contours 40-foot



FMA POLYGON AND SAMPLE POINT INFORMATION

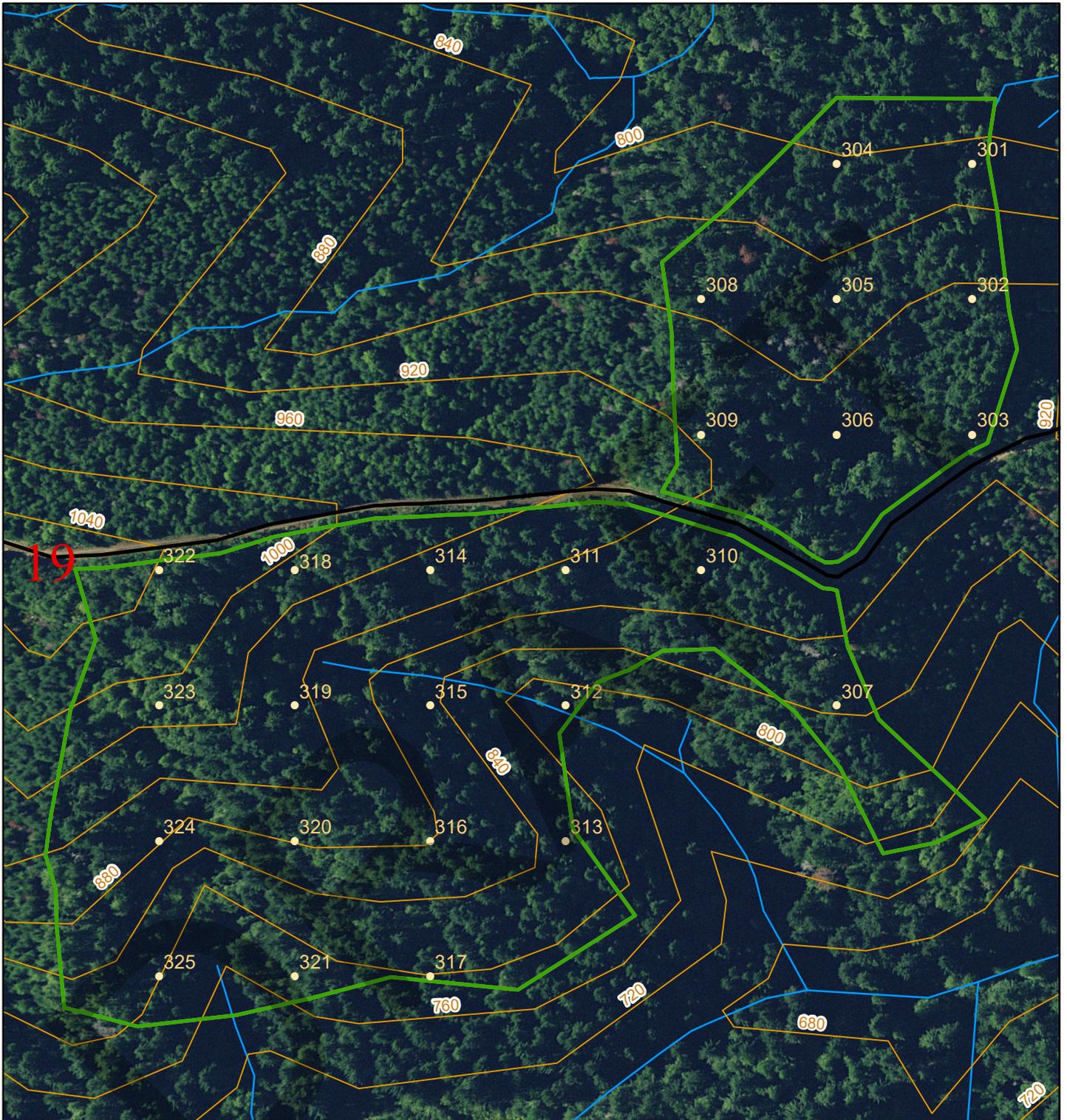
FMA_NM:	SCHWEITZER U2	Township:	T13R05W
FMA_ID:	261649	DNR Region:	PACIFIC CASC
Acres:	21	Total Sample Points:	20
County:	LEWIS	Spacing Between Points: Width:	208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Scale 1:4,800

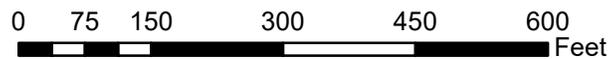
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections
- Contours 40-foot



FMA POLYGON AND SAMPLE POINT INFORMATION

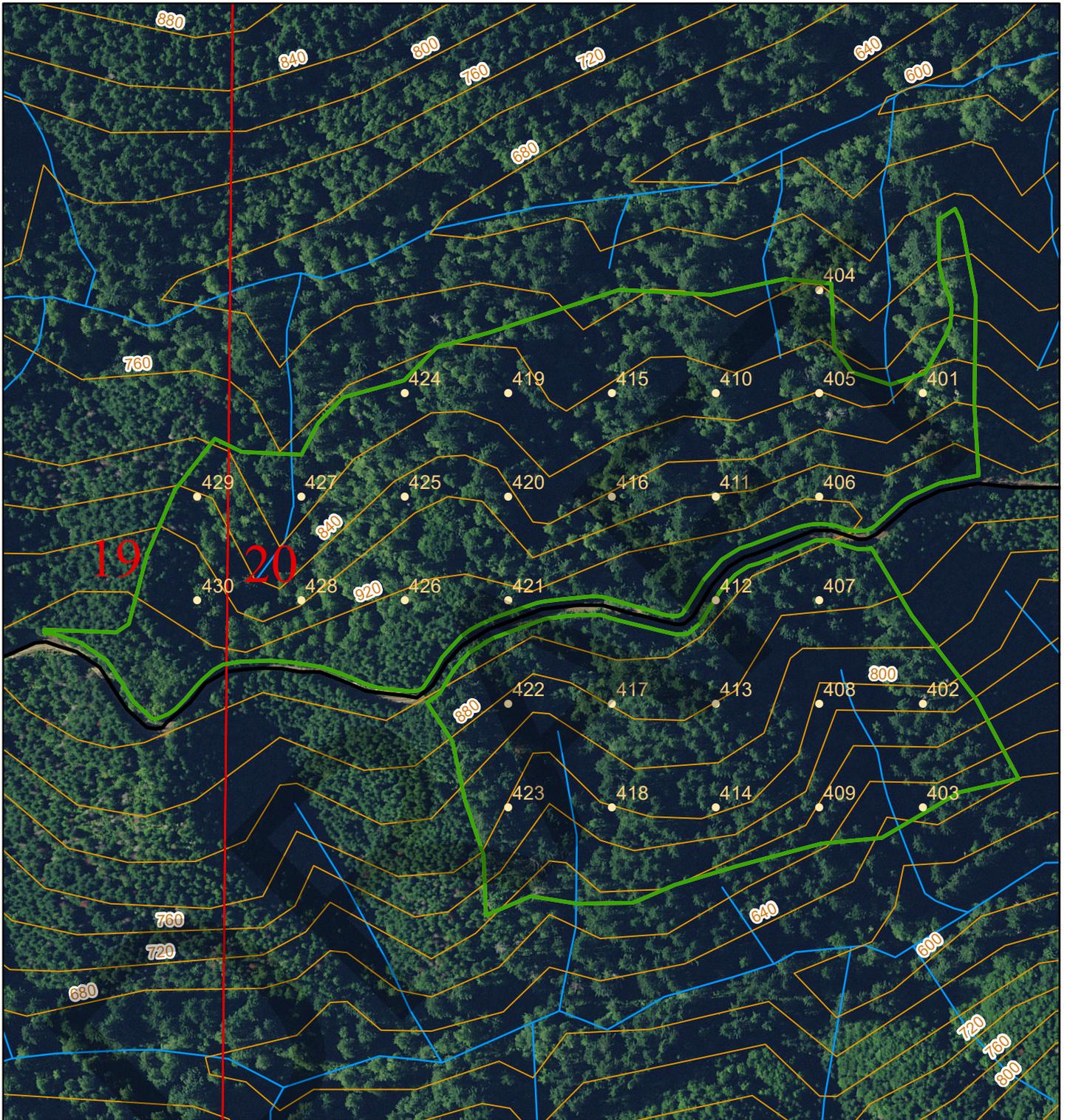
FMA_NM:	SCHWEITZER U3	Township:	T13R05W
FMA_ID:	158709	DNR Region:	PACIFIC CASC
Acres:	22	Total Sample Points:	25
County:	LEWIS	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Scale 1:2,600

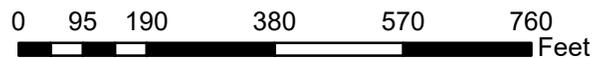
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections
- Contours 40-foot



FMA POLYGON AND SAMPLE POINT INFORMATION

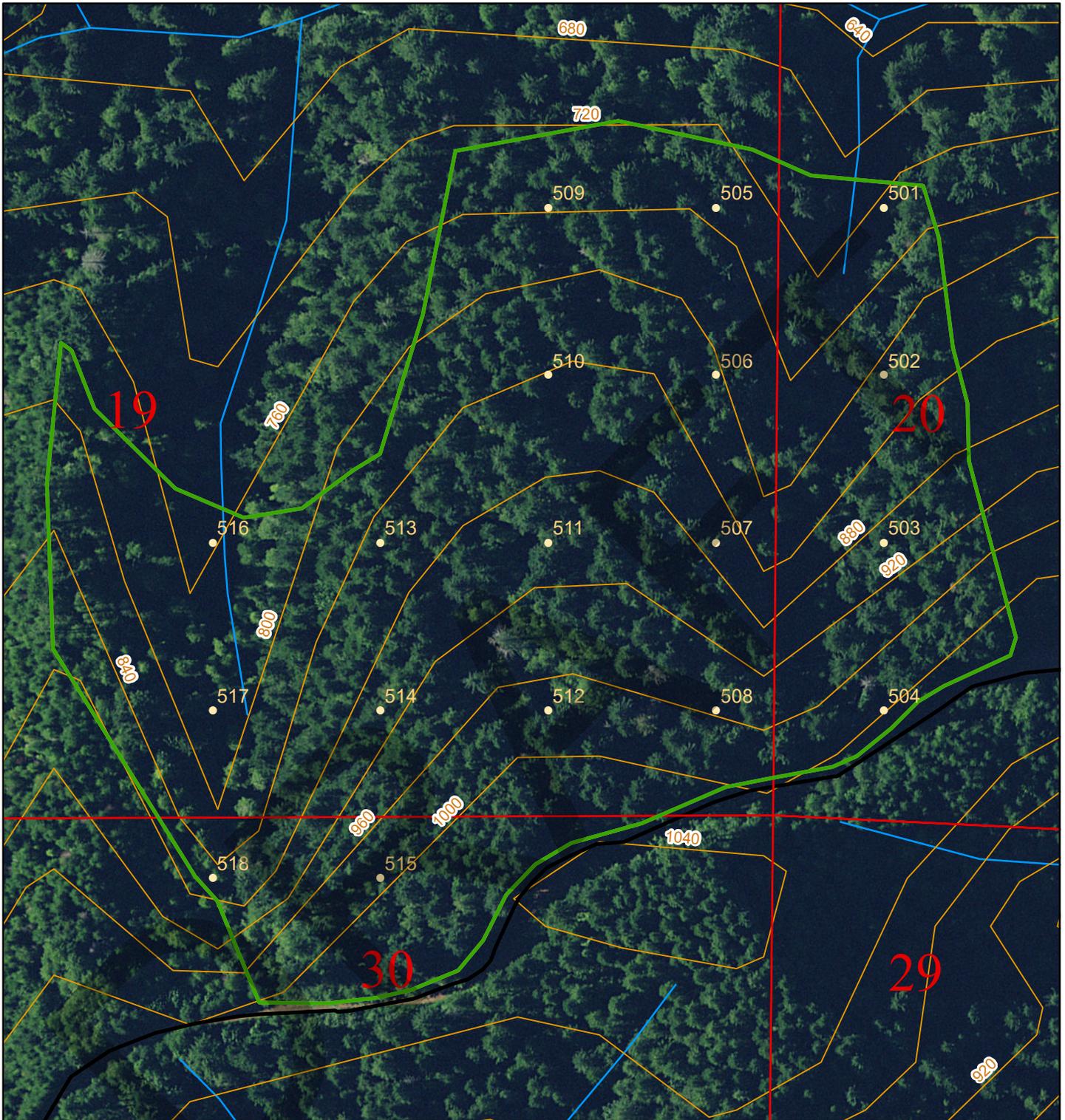
FMA_NM:	SCHWEITZER U4	Township:	T13R05W
FMA_ID:	198827	DNR Region:	PACIFIC CASC
Acres:	32	Total Sample Points:	30
County:	LEWIS	Spacing Between Points:	Width: 208 Height: 208
Imagery:	2017 Orthophoto (1-ft Color) [HXIP]	Point Rotation Degrees:	0



Scale 1:3,400

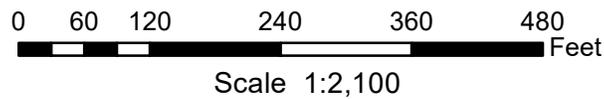
Legend

- Sample Points
- FMA polys
- Public Land Survey Sections
- Contours 40-foot



FMA POLYGON AND SAMPLE POINT INFORMATION

FMA_NM:	SCHWEITZER U5	Township:	T13R05W
FMA_ID:	261650	DNR Region:	PACIFIC CASC
Acres:	acres	Total Sample Points:	18
County:	LEWIS	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
- Contours 40-foot

Timber Sale Cruise Report Schweitzer

Sale Name: SCHWEITZER

Sale Type: LUMP SUM

Region: PACIFIC CASC

District: LEWIS

Lead Cruiser: Alex Chaney

Other Cruisers: Kalvin Bailey, Dan Clark

Cruise Narrative: Schweitzer consist of 5 units and 1 Right of way.

Units 1 through 5 are variable 75 year old stands with Douglas fir being the dominant species and the minor species being Western hemlock, Big leaf maple, Red cedar and pockets of Red alder. This sale has domestic logs, a small amount of rough logs and a good amount of high quality logs in it, including special mill, high quality A and high quality B logs. The average DBH for Douglas fir is 21" with a bole length of 96 ft. The Right of way for this sale is 4 acres of 25 year old Douglas fir with a few Red alder. The average DBH of Douglas fir for this Right of way is 9" with a bole length of 50 ft.

The damages I observed throughout the sale were forks, sweep, crooks, small spike knots, swollen butts, storm damage and light root rot and conks. No bear damage observed.

Overall this sale has domestic and a good amount of high quality logs in it. This sale is 60% uphill cable ground and 40% ground based harvest. You can access this sale from Elk Creek Rd and turn left on to the Nine Creek-Mainline. You will pass through 2 gates which one of them is a farm gate and the PCP 1-1 key works for both of them. All roads are driveable but some Pre-Haul maintenance is required and there's optional construction for the Right of Way and to access unit 1.

Timber Sale Notice Volume (MBF)

Sp	QMD	Rings/In	Age	MBF Volume by Grade						
				All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	21.6	6.0	75	6,322.6	780.5		3,821.2	1,334.1	295.5	91.2
RA	15.3			625.5		13.1	160.1	164.8	223.3	64.2
WH	15.3			164.9			39.1	79.2	46.5	
RC	16.7			66.5				52.0	14.5	
MA	17.7			54.5		2.7	11.9		5.3	34.5
ALL	19.5	6.0	75	7,234.0	780.5	15.8	4,032.5	1,630.3	585.1	189.9

Timber Sale Notice Weight (tons)

Sp	Tons by Grade						
	All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	41,672.1	4,530.6		23,616.4	10,396.3	2,465.1	663.7
RA	5,342.4		85.0	1,225.0	1,288.9	2,137.6	605.9
WH	1,566.6			314.4	751.2	501.0	
RC	594.3				469.6	124.7	
MA	518.4		20.5	100.6		54.3	343.0
ALL	49,693.8	4,530.6	105.5	25,256.3	12,905.9	5,282.9	1,612.5

Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
289.7	4.1	179.4	2.2	52,420	4.6

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SCHWEITZER U1	B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	51.0	53.9	50	25	0
SCHWEITZER U2	B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	19.0	20.5	19	10	0
SCHWEITZER U3	B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	20.0	22.3	22	11	0
SCHWEITZER U4	B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	27.0	32.2	27	15	0
SCHWEITZER U5	B2C: VR, 2 BAF (54.44, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	17.0	18.3	16	10	0
SCHWEITZER U6 ROW	B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	4.0	3.6	4	2	0
All		138.0	150.9	138	73	0

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	DEAD	CULL	Cull	7.6	15.0	0	100.0	0.0	0.0
DF	DEAD	UTILITY	Pulp	13.7	40.0	167	0.0	171.9	23.0
DF	LIVE	2 SAW	Domestic	16.7	39.0	11,755	2.6	9,762.4	1,622.2
DF	LIVE	2 SAW	HQ-A	14.4	40.0	3,158	0.3	2,882.6	435.8
DF	LIVE	2 SAW	HQ-B	16.4	39.0	12,777	2.2	10,971.4	1,763.3
DF	LIVE	3 SAW	Domestic	9.0	37.0	5,630	1.7	6,340.1	777.0
DF	LIVE	3 SAW	HQ-B	10.2	39.0	4,038	1.4	4,056.2	557.2
DF	LIVE	4 SAW	Domestic	6.0	23.0	2,141	2.4	2,465.1	295.5
DF	LIVE	CULL	Cull	9.6	4.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	18.5	40.0	5,656	0.3	4,530.6	780.5
DF	LIVE	UTILITY	Pulp	10.5	20.0	494	0.0	491.8	68.2
MA	LIVE	1 SAW	Domestic	21.5	18.0	20	22.2	20.5	2.7
MA	LIVE	2 SAW	Domestic	13.3	30.0	87	9.8	100.6	12.0
MA	LIVE	4 SAW	Domestic	10.3	30.0	39	6.6	54.3	5.3
MA	LIVE	CULL	Cull	5.8	27.0	0	100.0	0.0	0.0
MA	LIVE	UTILITY	Pulp	7.4	24.0	250	0.0	343.0	34.5
RA	LIVE	1 SAW	Domestic	16.4	30.0	95	0.0	85.0	13.1
RA	LIVE	2 SAW	Domestic	13.4	32.0	1,161	1.9	1,225.0	160.2
RA	LIVE	3 SAW	Domestic	10.7	32.0	1,194	2.9	1,288.9	164.8
RA	LIVE	4 SAW	Domestic	6.5	29.0	1,618	3.2	2,137.6	223.3
RA	LIVE	CULL	Cull	8.0	8.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	6.7	23.0	465	22.7	605.9	64.1
RC	LIVE	3 SAW	Domestic	9.5	37.0	376	4.1	469.5	52.0
RC	LIVE	4 SAW	Domestic	5.4	27.0	105	1.6	124.8	14.5
RC	LIVE	CULL	Cull	8.4	3.0	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	14.4	37.0	283	0.0	314.4	39.1
WH	LIVE	3 SAW	Domestic	10.4	38.0	574	2.8	751.2	79.2
WH	LIVE	4 SAW	Domestic	5.4	35.0	337	1.1	501.0	46.6
WH	LIVE	CULL	Cull	5.3	4.0	0	100.0	0.0	0.0

Timber Sale Log Grade x Diameter Bin Summary

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	CULL	5.6	4.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	UTILITY	5.6	31.0	123	0.0	179.2	16.9
DF	5 - 7	LIVE	4 SAW	5.7	25.0	1,838	2.4	2,094.4	253.7
DF	5 - 7	LIVE	3 SAW	7.3	38.0	987	2.2	1,177.6	136.2

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	DEAD	CULL	7.6	15.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	UTILITY	8.8	13.0	28	0.0	32.2	3.9
DF	8 - 11	LIVE	4 SAW	8.9	23.0	303	2.1	370.7	41.8
DF	8 - 11	LIVE	CULL	9.2	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	3 SAW	9.9	38.0	8,272	1.5	8,869.3	1,141.5
DF	8 - 11	DEAD	UTILITY	10.8	40.0	46	0.0	51.0	6.4
DF	12 - 15	LIVE	CULL	12.9	8.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	3 SAW	13.2	31.0	303	2.0	272.5	41.8
DF	12 - 15	LIVE	UTILITY	13.4	14.0	109	0.0	95.0	15.0
DF	12 - 15	LIVE	2 SAW	14.1	39.0	10,600	1.5	9,839.7	1,462.8
DF	16 - 19	DEAD	UTILITY	16.6	40.0	121	0.0	120.9	16.7
DF	16 - 19	LIVE	3 SAW	17.1	40.0	106	0.0	76.9	14.6
DF	16 - 19	LIVE	SPECIAL MILL	17.7	40.0	3,435	0.1	2,872.7	474.1
DF	16 - 19	LIVE	UTILITY	17.7	16.0	61	0.0	49.9	8.5
DF	16 - 19	LIVE	2 SAW	17.8	40.0	8,204	2.8	6,813.8	1,132.1
DF	16 - 19	LIVE	CULL	18.0	1.0	0	100.0	0.0	0.0
DF	20+	LIVE	UTILITY	21.2	13.0	173	0.0	135.4	23.8
DF	20+	LIVE	SPECIAL MILL	21.6	39.0	2,221	0.5	1,657.9	306.4
DF	20+	LIVE	2 SAW	23.0	40.0	8,887	2.3	6,962.9	1,226.3
DF	20+	LIVE	CULL	23.3	6.0	0	100.0	0.0	0.0
MA	5 - 7	LIVE	UTILITY	5.3	25.0	98	0.0	174.3	13.5
MA	5 - 7	LIVE	CULL	5.9	26.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	CULL	8.8	27.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	UTILITY	10.2	31.0	39	0.0	58.8	5.4
MA	8 - 11	LIVE	4 SAW	10.3	30.0	39	6.6	54.3	5.3
MA	12 - 15	LIVE	2 SAW	12.9	30.0	56	9.7	70.7	7.8
MA	12 - 15	LIVE	UTILITY	13.9	16.0	38	0.0	35.9	5.2
MA	16 - 19	LIVE	2 SAW	17.0	30.0	30	10.1	29.8	4.2
MA	16 - 19	LIVE	UTILITY	18.1	29.0	75	0.0	74.0	10.4
MA	20+	LIVE	1 SAW	21.5	18.0	20	22.2	20.5	2.7
RA	5 - 7	LIVE	4 SAW	5.4	28.0	811	1.8	1,040.9	111.9
RA	5 - 7	LIVE	UTILITY	5.6	23.0	223	7.7	310.3	30.8
RA	5 - 7	LIVE	CULL	5.7	12.0	0	100.0	0.0	0.0
RA	8 - 11	LIVE	4 SAW	9.0	32.0	807	4.7	1,096.8	111.4
RA	8 - 11	LIVE	UTILITY	9.9	24.0	184	0.0	220.5	25.3
RA	8 - 11	LIVE	3 SAW	10.8	32.0	1,194	2.9	1,288.9	164.8
RA	12 - 15	LIVE	2 SAW	13.3	31.0	1,084	1.4	1,147.1	149.6
RA	12 - 15	LIVE	UTILITY	13.6	30.0	58	0.0	75.1	8.0

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	12 - 15	LIVE	CULL	14.2	3.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	1 SAW	16.4	30.0	95	0.0	85.0	13.1
RA	16 - 19	LIVE	CULL	17.0	4.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	UTILITY	17.4	16.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	2 SAW	18.4	36.0	76	8.2	77.9	10.5
RC	5 - 7	LIVE	CULL	5.1	4.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	4 SAW	5.4	26.0	103	1.7	121.6	14.2
RC	5 - 7	LIVE	3 SAW	6.5	37.0	77	0.0	114.5	10.6
RC	8 - 11	LIVE	4 SAW	9.6	16.0	2	0.0	3.2	0.3
RC	8 - 11	LIVE	3 SAW	9.8	33.0	145	3.7	182.0	19.9
RC	8 - 11	LIVE	CULL	10.1	4.0	0	100.0	0.0	0.0
RC	12 - 15	LIVE	3 SAW	13.1	38.0	89	4.0	98.2	12.2
RC	16 - 19	LIVE	3 SAW	17.0	40.0	23	15.0	37.8	3.1
RC	16 - 19	LIVE	CULL	17.1	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	CULL	21.9	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	3 SAW	22.4	32.0	44	6.3	37.1	6.0
WH	5 - 7	LIVE	CULL	5.1	4.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	4 SAW	5.4	33.0	337	1.1	501.0	46.6
WH	5 - 7	LIVE	3 SAW	7.4	40.0	62	1.6	109.7	8.5
WH	8 - 11	LIVE	CULL	10.8	4.0	0	100.0	0.0	0.0
WH	8 - 11	LIVE	3 SAW	11.2	35.0	512	2.9	641.5	70.7
WH	12 - 15	LIVE	2 SAW	13.6	38.0	181	0.0	211.0	24.9
WH	16 - 19	LIVE	2 SAW	16.5	36.0	103	0.0	103.4	14.2

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Cull	5.6	4.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Pulp	5.6	31.0	123	0.0	179.2	16.9
DF	5 - 7	LIVE	Domestic	6.0	27.0	2,825	2.4	3,272.0	389.9
DF	5 - 7	DEAD	Cull	7.6	15.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	Pulp	8.8	13.0	28	0.0	32.2	3.9
DF	8 - 11	LIVE	Cull	9.2	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	Domestic	9.6	35.0	4,537	1.6	5,183.8	626.1
DF	8 - 11	LIVE	HQ-B	10.1	39.0	4,038	1.4	4,056.2	557.2
DF	8 - 11	DEAD	Pulp	10.8	40.0	46	0.0	51.0	6.4
DF	12 - 15	LIVE	Cull	12.9	8.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	Pulp	13.4	14.0	109	0.0	95.0	15.0

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	Domestic	13.9	38.0	3,645	2.1	3,337.6	503.0
DF	12 - 15	LIVE	HQ-B	14.1	39.0	4,357	1.9	4,093.7	601.3
DF	12 - 15	LIVE	HQ-A	14.2	40.0	2,901	0.4	2,680.9	400.3
DF	16 - 19	DEAD	Pulp	16.6	40.0	121	0.0	120.9	16.7
DF	16 - 19	LIVE	Domestic	17.6	39.0	3,863	3.1	3,129.4	533.1
DF	16 - 19	LIVE	Pulp	17.7	16.0	61	0.0	49.9	8.5
DF	16 - 19	LIVE	HQ-A	17.8	40.0	3,560	0.1	2,970.7	491.3
DF	16 - 19	LIVE	HQ-B	17.9	40.0	4,322	2.5	3,663.4	596.5
DF	16 - 19	LIVE	Cull	18.0	1.0	0	100.0	0.0	0.0
DF	20+	LIVE	Pulp	21.2	13.0	173	0.0	135.4	23.8
DF	20+	LIVE	HQ-A	21.6	39.0	2,353	0.5	1,761.7	324.7
DF	20+	LIVE	HQ-B	22.6	40.0	4,098	2.2	3,214.3	565.5
DF	20+	LIVE	Cull	23.3	6.0	0	100.0	0.0	0.0
DF	20+	LIVE	Domestic	23.5	40.0	4,656	2.4	3,644.8	642.6
MA	5 - 7	LIVE	Pulp	5.3	25.0	98	0.0	174.3	13.5
MA	5 - 7	LIVE	Cull	5.9	26.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	Cull	8.8	27.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	Pulp	10.2	31.0	39	0.0	58.8	5.4
MA	8 - 11	LIVE	Domestic	10.3	30.0	39	6.6	54.3	5.3
MA	12 - 15	LIVE	Domestic	12.9	30.0	56	9.7	70.7	7.8
MA	12 - 15	LIVE	Pulp	13.9	16.0	38	0.0	35.9	5.2
MA	16 - 19	LIVE	Domestic	17.0	30.0	30	10.1	29.8	4.2
MA	16 - 19	LIVE	Pulp	18.1	29.0	75	0.0	74.0	10.4
MA	20+	LIVE	Domestic	21.5	18.0	20	22.2	20.5	2.7
RA	5 - 7	LIVE	Domestic	5.4	28.0	811	1.8	1,040.9	111.9
RA	5 - 7	LIVE	Pulp	5.6	23.0	223	7.7	310.3	30.8
RA	5 - 7	LIVE	Cull	5.7	12.0	0	100.0	0.0	0.0
RA	8 - 11	LIVE	Domestic	9.8	32.0	2,001	3.6	2,385.6	276.2
RA	8 - 11	LIVE	Pulp	9.9	24.0	184	0.0	220.5	25.3
RA	12 - 15	LIVE	Domestic	13.3	31.0	1,084	1.4	1,147.1	149.6
RA	12 - 15	LIVE	Pulp	13.6	30.0	58	0.0	75.1	8.0
RA	12 - 15	LIVE	Cull	14.2	3.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	Cull	17.0	4.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	Domestic	17.2	32.0	171	3.9	162.9	23.6
RA	16 - 19	LIVE	Pulp	17.4	16.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Cull	5.1	4.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Domestic	5.7	29.0	180	1.0	236.1	24.8
RC	8 - 11	LIVE	Domestic	9.8	32.0	147	3.6	185.2	20.3

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
RC	8 - 11	LIVE	Cull	10.1	4.0	0	100.0	0.0	0.0
RC	12 - 15	LIVE	Domestic	13.1	38.0	89	4.0	98.2	12.2
RC	16 - 19	LIVE	Domestic	17.0	40.0	23	15.0	37.8	3.1
RC	16 - 19	LIVE	Cull	17.1	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	Cull	21.9	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	Domestic	22.4	32.0	44	6.3	37.1	6.0
WH	5 - 7	LIVE	Cull	5.1	4.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	5.7	34.0	399	1.2	610.7	55.1
WH	8 - 11	LIVE	Cull	10.8	4.0	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Domestic	11.2	35.0	512	2.9	641.5	70.7
WH	12 - 15	LIVE	Domestic	13.6	38.0	181	0.0	211.0	24.9
WH	16 - 19	LIVE	Domestic	16.5	36.0	103	0.0	103.4	14.2

Timber Sale Distribution of Volume by County and Timber Trust by Sale Unit

Unit	Harvest Type	N Trusts	Timber Trust	County	Unit MBF	Sale MBF	Unit % of Sale	Trust % of Unit	Trust % of Sale
SCHWEITZER U1	VRH	1	1	Lewis	2,681.5	7,234.0	37.07	100.00	37.07
SCHWEITZER U2	VRH	1	1	Lewis	1,077.4	7,234.0	14.89	100.00	14.89
SCHWEITZER U3	VRH	1	1	Lewis	1,132.8	7,234.0	15.66	100.00	15.66
SCHWEITZER U4	VRH	1	1	Lewis	1,162.6	7,234.0	16.07	100.00	16.07
SCHWEITZER U5	VRH	1	1	Lewis	1,126.5	7,234.0	15.57	100.00	15.57
SCHWEITZER U6 ROW	LAND_USE_CONV	1	1	Lewis	53.2	7,234.0	0.74	100.00	0.74

Timber Sale Distribution of Volume by County and Timber Trust for the Timber Sale

Timber Trust	County	Trust % of Sale
1	Lewis	100.00

Cruise Unit Report SCHWEITZER U1

Unit Sale Notice Volume (MBF): SCHWEITZER U1

Sp	QMD	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	20.7	6.0	75	2,284.2	173.7	1,344.8	629.7	98.4	37.6
RA	14.6			286.9		40.0	100.4	133.2	13.3
WH	12.5			79.4			46.6	32.8	
RC	15.3			16.6			13.2	3.4	
MA	18.8			14.3		4.4		5.3	4.6
ALL	18.8	6.0	75	2,681.5	173.7	1,389.3	789.9	273.2	55.5

Unit Sale Notice Weight (tons): SCHWEITZER U1

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	15,570.9	1,029.5	8,615.3	4,914.0	766.2	245.9
RA	2,508.0		322.1	791.0	1,282.2	112.8
WH	768.9			430.3	338.6	
RC	146.9			119.3	27.6	
MA	130.5		41.5		54.3	34.7
ALL	19,125.2	1,029.5	8,978.9	6,254.6	2,468.9	393.3

Unit Cruise Design: SCHWEITZER U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	51.0	53.9	50	25	0

Unit Cruise Summary: SCHWEITZER U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	85	173	3.5	1
RA	24	64	1.3	0
WH	3	10	0.2	0
RC	4	4	0.1	0
MA	3	5	0.1	0
ALL	119	256	5.1	1

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	227.4	73.5	10.4	196.9	22.3	2.4	44,789	76.8	10.7
RA	53.6	146.4	20.7	105.0	16.6	3.4	5,626	147.3	21.0
WH	13.1	247.4	35.0	118.8	17.0	9.8	1,557	248.0	36.3
RC	3.5	542.5	76.7	92.5	19.7	9.8	326	542.9	77.4
MA	4.7	364.4	51.5	60.4	22.3	12.9	281	365.1	53.1
ALL	302.3	42.8	6.0	173.9	33.5	3.1	52,579	54.3	6.8

Unit Summary: SCHWEITZER U1

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	DEAD	CUT	1	ALL	25.0	98	125	268	2.3	0.4	1.4	0.3	93.3	13.7
DF	LIVE	CUT	84	ALL	20.7	97	126	44,521	2.3	96.7	226.1	49.7	15,477.6	2,270.6
MA	LIVE	CUT	3	ALL	18.8	52	63	281	18.5	2.4	4.7	1.1	130.5	14.3
RA	LIVE	CUT	24	ALL	14.6	64	79	5,626	3.8	46.1	53.6	14.0	2,508.0	286.9
RC	LIVE	CUT	4	ALL	15.3	59	73	326	3.9	2.8	3.5	0.9	146.9	16.6
WH	LIVE	CUT	3	ALL	12.5	69	85	1,557	3.2	15.4	13.1	3.7	768.9	79.4
ALL	DEAD	CUT	1	ALL	25.0	98	125	268	2.5	0.4	1.4	0.3	93.3	13.7
ALL	LIVE	CUT	118	ALL	18.4	84	107	52,311	2.6	163.4	301.0	69.4	19,031.9	2,667.8
ALL	ALL	ALL	119	ALL	18.4	84	107	52,579	2.6	163.8	302.4	69.7	19,125.2	2,681.5

Unit Stand Table: SCHWEITZER U1

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	12	LIVE	CUT	3	11.6	72	90	996	3.6	11.4	8.5	2.5	400.9	50.8
DF	14	LIVE	CUT	3	13.6	72	91	924	4.5	8.2	8.3	2.3	421.6	47.1
DF	16	LIVE	CUT	6	15.9	99	127	2,729	5.0	12.2	16.8	4.2	1,018.3	139.2
DF	18	LIVE	CUT	9	17.3	97	128	4,079	3.2	14.6	23.8	5.7	1,580.5	208.0
DF	20	LIVE	CUT	7	19.4	96	128	3,140	1.2	9.0	18.5	4.2	1,214.8	160.1
DF	22	LIVE	CUT	10	21.5	101	132	5,108	2.0	10.3	25.8	5.6	1,773.5	260.5
DF	24	LIVE	CUT	15	23.4	109	139	8,190	2.0	13.2	39.6	8.2	2,848.6	417.7
DF	26	DEAD	CUT	1	25.0	98	125	452	3.7	0.8	2.8	0.6	171.9	23.0
DF	26	LIVE	CUT	5	25.8	116	148	2,892	1.9	3.7	13.3	2.6	1,000.8	147.5
DF	28	LIVE	CUT	10	27.5	110	145	5,852	2.2	6.7	27.4	5.2	1,958.6	298.4
DF	30	LIVE	CUT	6	29.5	107	155	3,815	2.2	3.3	15.9	2.9	1,158.7	194.6
DF	32	LIVE	CUT	5	31.4	114	146	3,047	1.9	2.5	13.4	2.4	990.0	155.4
DF	34	LIVE	CUT	1	34.0	110	141	630	0.0	0.4	2.6	0.5	191.2	32.1

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	36	LIVE	CUT	1	35.0	118	152	659	3.9	0.4	2.8	0.5	213.2	33.6
DF	46	LIVE	CUT	1	45.0	114	146	672	0.0	0.3	2.8	0.4	203.5	34.3
DF	48	LIVE	CUT	2	47.5	131	169	1,603	2.2	0.4	5.0	0.7	424.5	81.7
MA	18	LIVE	CUT	1	17.0	57	70	104	25.0	1.1	1.7	0.4	54.3	5.3
MA	20	LIVE	CUT	2	20.0	48	58	177	15.4	1.4	3.0	0.7	76.2	9.0
RA	12	LIVE	CUT	3	11.6	55	67	563	11.0	9.3	6.9	2.0	252.4	28.7
RA	14	LIVE	CUT	7	13.2	65	80	1,565	3.2	16.3	15.6	4.3	712.8	79.8
RA	16	LIVE	CUT	7	15.3	67	82	1,779	2.9	12.2	15.6	4.0	760.3	90.7
RA	18	LIVE	CUT	4	17.5	71	88	1,013	3.9	5.4	9.0	2.2	459.1	51.7
RA	20	LIVE	CUT	2	19.5	66	81	471	2.1	2.1	4.3	1.0	212.0	24.0
RA	22	LIVE	CUT	1	21.0	68	84	234	0.8	0.9	2.2	0.5	111.5	12.0
RC	10	LIVE	CUT	1	10.0	46	56	59	0.0	1.5	0.8	0.3	23.4	3.0
RC	20	LIVE	CUT	2	19.5	71	90	166	5.3	0.8	1.7	0.4	76.1	8.5
RC	22	LIVE	CUT	1	21.0	81	103	101	3.9	0.4	1.0	0.2	47.4	5.1
WH	10	LIVE	CUT	1	9.0	62	76	420	6.5	9.8	4.3	1.4	191.5	21.4
WH	16	LIVE	CUT	1	16.0	86	108	623	3.5	3.3	4.5	1.1	312.4	31.8
WH	18	LIVE	CUT	1	18.0	75	93	514	0.0	2.4	4.2	1.0	265.0	26.2

Unit Log Grade Summary: SCHWEITZER U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	DEAD	CULL	7.6	15.0	0	100.0	0.0	0.0
DF	DEAD	UTILITY	13.7	40.0	452	0.0	171.9	23.0
DF	LIVE	2 SAW	15.9	40.0	26,368	2.1	8,615.3	1,344.8
DF	LIVE	3 SAW	9.2	38.0	12,347	1.9	4,914.0	629.7
DF	LIVE	4 SAW	5.9	22.0	1,929	1.2	766.2	98.4
DF	LIVE	CULL	9.3	5.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	18.1	40.0	3,407	0.9	1,029.5	173.7
DF	LIVE	UTILITY	13.8	12.0	286	0.0	73.9	14.6
MA	LIVE	2 SAW	12.6	30.0	87	6.8	41.5	4.4
MA	LIVE	4 SAW	10.3	30.0	104	6.6	54.3	5.3
MA	LIVE	CULL	5.4	27.0	0	100.0	0.0	0.0
MA	LIVE	UTILITY	10.8	15.0	89	0.0	34.7	4.6
RA	LIVE	2 SAW	13.0	34.0	785	1.3	322.1	40.0
RA	LIVE	3 SAW	10.7	32.0	1,969	3.3	791.0	100.4
RA	LIVE	4 SAW	6.6	29.0	2,612	3.2	1,282.2	133.2
RA	LIVE	CULL	5.2	4.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	5.8	23.0	261	16.0	112.8	13.3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RC	LIVE	3 SAW	9.7	40.0	259	4.9	119.3	13.2
RC	LIVE	4 SAW	5.2	32.0	67	0.0	27.6	3.4
WH	LIVE	3 SAW	11.2	40.0	913	1.4	430.3	46.6
WH	LIVE	4 SAW	5.5	39.0	644	0.0	338.6	32.8
WH	LIVE	CULL	5.0	3.0	0	100.0	0.0	0.0

Unit Log Sort Summary: SCHWEITZER U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	DEAD	Cull	7.6	15.0	0	100.0	0.0	0.0
DF	DEAD	Pulp	13.7	40.0	452	0.0	171.9	23.0
DF	LIVE	Cull	9.3	5.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	8.7	32.0	20,097	2.1	7,239.7	1,025.0
DF	LIVE	HQ-A	15.7	40.0	6,664	0.6	2,142.0	339.9
DF	LIVE	HQ-B	13.3	39.0	17,289	2.2	5,943.3	881.8
DF	LIVE	Pulp	13.8	12.0	286	0.0	73.9	14.6
MA	LIVE	Cull	5.4	27.0	0	100.0	0.0	0.0
MA	LIVE	Domestic	11.2	30.0	192	6.7	95.8	9.8
MA	LIVE	Pulp	10.8	15.0	89	0.0	34.7	4.6
RA	LIVE	Cull	5.2	4.0	0	100.0	0.0	0.0
RA	LIVE	Domestic	7.7	30.0	5,365	3.0	2,395.2	273.6
RA	LIVE	Pulp	5.8	23.0	261	16.0	112.8	13.3
RC	LIVE	Domestic	7.5	36.0	326	3.9	146.9	16.6
WH	LIVE	Cull	5.0	3.0	0	100.0	0.0	0.0
WH	LIVE	Domestic	7.0	39.0	1,557	0.8	768.9	79.4

Unit Log Grade x Sort Summary: SCHWEITZER U1

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	DEAD	CULL	Cull	7.6	15.0	0	100.0	0.0	0.0
DF	DEAD	UTILITY	Pulp	13.7	40.0	452	0.0	171.9	23.0
DF	LIVE	2 SAW	Domestic	16.1	39.0	10,570	2.2	3,330.2	539.1
DF	LIVE	2 SAW	HQ-A	14.4	40.0	3,258	0.2	1,112.5	166.1
DF	LIVE	2 SAW	HQ-B	16.2	40.0	12,540	2.4	4,172.7	639.5
DF	LIVE	3 SAW	Domestic	8.7	37.0	7,598	2.2	3,143.3	387.5
DF	LIVE	3 SAW	HQ-B	10.5	39.0	4,749	1.5	1,770.7	242.2
DF	LIVE	4 SAW	Domestic	5.9	22.0	1,929	1.2	766.2	98.4
DF	LIVE	CULL	Cull	9.3	5.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	18.1	40.0	3,407	0.9	1,029.5	173.7

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	UTILITY	Pulp	13.8	12.0	286	0.0	73.9	14.6
MA	LIVE	2 SAW	Domestic	12.6	30.0	87	6.8	41.5	4.4
MA	LIVE	4 SAW	Domestic	10.3	30.0	104	6.6	54.3	5.3
MA	LIVE	CULL	Cull	5.4	27.0	0	100.0	0.0	0.0
MA	LIVE	UTILITY	Pulp	10.8	15.0	89	0.0	34.7	4.6
RA	LIVE	2 SAW	Domestic	13.0	34.0	785	1.3	322.1	40.0
RA	LIVE	3 SAW	Domestic	10.7	32.0	1,969	3.3	791.0	100.4
RA	LIVE	4 SAW	Domestic	6.6	29.0	2,612	3.2	1,282.2	133.2
RA	LIVE	CULL	Cull	5.2	4.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	5.8	23.0	261	16.0	112.8	13.3
RC	LIVE	3 SAW	Domestic	9.7	40.0	259	4.9	119.3	13.2
RC	LIVE	4 SAW	Domestic	5.2	32.0	67	0.0	27.6	3.4
WH	LIVE	3 SAW	Domestic	11.2	40.0	913	1.4	430.3	46.6
WH	LIVE	4 SAW	Domestic	5.5	39.0	644	0.0	338.6	32.8
WH	LIVE	CULL	Cull	5.0	3.0	0	100.0	0.0	0.0

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U1

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	CULL	5.3	4.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	4 SAW	5.7	22.0	1,674	0.3	642.8	85.4
DF	5 - 7	LIVE	3 SAW	7.3	38.0	2,245	2.7	988.5	114.5
DF	5 - 7	DEAD	CULL	7.6	15.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	UTILITY	8.0	12.0	25	0.0	10.3	1.3
DF	8 - 11	LIVE	4 SAW	8.7	22.0	255	6.6	123.4	13.0
DF	8 - 11	LIVE	CULL	8.7	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	3 SAW	10.0	38.0	9,922	1.8	3,864.2	506.0
DF	8 - 11	DEAD	UTILITY	10.8	40.0	125	0.0	51.0	6.4
DF	12 - 15	LIVE	CULL	12.9	9.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	3 SAW	13.3	25.0	181	0.0	61.3	9.2
DF	12 - 15	LIVE	2 SAW	14.1	39.0	12,353	1.7	4,236.7	630.0
DF	16 - 19	DEAD	UTILITY	16.6	40.0	327	0.0	120.9	16.7
DF	16 - 19	LIVE	SPECIAL MILL	16.8	40.0	2,190	0.0	685.7	111.7
DF	16 - 19	LIVE	2 SAW	17.9	40.0	8,529	3.0	2,766.6	435.0
DF	16 - 19	LIVE	CULL	18.0	1.0	0	100.0	0.0	0.0
DF	20+	LIVE	UTILITY	20.8	12.0	261	0.0	63.7	13.3
DF	20+	LIVE	SPECIAL MILL	22.9	40.0	1,216	2.5	343.8	62.0
DF	20+	LIVE	2 SAW	23.1	40.0	5,487	1.4	1,612.0	279.8

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
MA	5-7	LIVE	CULL	5.4	27.0	0	100.0	0.0	0.0
MA	5-7	LIVE	UTILITY	6.3	17.0	13	0.0	7.8	0.7
MA	8-11	LIVE	4 SAW	10.3	30.0	104	6.6	54.3	5.3
MA	12-15	LIVE	2 SAW	12.6	30.0	87	6.8	41.5	4.4
MA	12-15	LIVE	UTILITY	14.5	14.0	76	0.0	26.9	3.9
RA	5-7	LIVE	CULL	5.2	4.0	0	100.0	0.0	0.0
RA	5-7	LIVE	4 SAW	5.5	27.0	1,313	1.3	599.4	67.0
RA	5-7	LIVE	UTILITY	5.8	23.0	261	16.0	112.8	13.3
RA	8-11	LIVE	4 SAW	8.9	32.0	1,298	5.1	682.8	66.2
RA	8-11	LIVE	3 SAW	10.7	32.0	1,969	3.3	791.0	100.4
RA	12-15	LIVE	2 SAW	13.0	34.0	785	1.3	322.1	40.0
RC	5-7	LIVE	4 SAW	5.2	32.0	67	0.0	27.6	3.4
RC	5-7	LIVE	3 SAW	6.2	39.0	49	0.0	20.4	2.5
RC	8-11	LIVE	3 SAW	10.6	40.0	64	5.2	29.9	3.2
RC	12-15	LIVE	3 SAW	12.6	40.0	146	6.3	69.0	7.4
WH	5-7	LIVE	CULL	5.0	3.0	0	100.0	0.0	0.0
WH	5-7	LIVE	4 SAW	5.5	39.0	644	0.0	338.6	32.8
WH	8-11	LIVE	3 SAW	11.2	40.0	913	1.4	430.3	46.6

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U1

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	Cull	5.3	4.0	0	100.0	0.0	0.0
DF	5-7	LIVE	Domestic	6.3	27.0	3,919	1.7	1,631.3	199.8
DF	5-7	DEAD	Cull	7.6	15.0	0	100.0	0.0	0.0
DF	8-11	LIVE	Pulp	8.0	12.0	25	0.0	10.3	1.3
DF	8-11	LIVE	Cull	8.7	3.0	0	100.0	0.0	0.0
DF	8-11	LIVE	Domestic	9.6	36.0	5,427	2.3	2,217.0	276.8
DF	8-11	LIVE	HQ-B	10.5	39.0	4,749	1.5	1,770.7	242.2
DF	8-11	DEAD	Pulp	10.8	40.0	125	0.0	51.0	6.4
DF	12-15	LIVE	Cull	12.9	9.0	0	100.0	0.0	0.0
DF	12-15	LIVE	Domestic	13.9	38.0	4,574	1.5	1,521.7	233.3
DF	12-15	LIVE	HQ-B	14.1	39.0	4,702	2.9	1,663.8	239.8
DF	12-15	LIVE	HQ-A	14.4	40.0	3,258	0.2	1,112.5	166.1
DF	16-19	DEAD	Pulp	16.6	40.0	327	0.0	120.9	16.7
DF	16-19	LIVE	HQ-A	16.8	40.0	2,190	0.0	685.7	111.7
DF	16-19	LIVE	Domestic	17.7	40.0	3,066	3.5	969.8	156.4
DF	16-19	LIVE	Cull	18.0	1.0	0	100.0	0.0	0.0

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	16 - 19	LIVE	HQ-B	18.0	40.0	5,463	2.6	1,796.9	278.6
DF	20+	LIVE	Pulp	20.8	12.0	261	0.0	63.7	13.3
DF	20+	LIVE	HQ-B	22.1	40.0	2,376	0.8	712.0	121.2
DF	20+	LIVE	HQ-A	22.9	40.0	1,216	2.5	343.8	62.0
DF	20+	LIVE	Domestic	24.0	40.0	3,111	1.8	900.0	158.7
MA	5 - 7	LIVE	Cull	5.4	27.0	0	100.0	0.0	0.0
MA	5 - 7	LIVE	Pulp	6.3	17.0	13	0.0	7.8	0.7
MA	8 - 11	LIVE	Domestic	10.3	30.0	104	6.6	54.3	5.3
MA	12 - 15	LIVE	Domestic	12.6	30.0	87	6.8	41.5	4.4
MA	12 - 15	LIVE	Pulp	14.5	14.0	76	0.0	26.9	3.9
RA	5 - 7	LIVE	Cull	5.2	4.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Domestic	5.5	27.0	1,313	1.3	599.4	67.0
RA	5 - 7	LIVE	Pulp	5.8	23.0	261	16.0	112.8	13.3
RA	8 - 11	LIVE	Domestic	9.7	32.0	3,267	4.0	1,473.7	166.6
RA	12 - 15	LIVE	Domestic	13.0	34.0	785	1.3	322.1	40.0
RC	5 - 7	LIVE	Domestic	5.5	34.0	117	0.0	48.0	6.0
RC	8 - 11	LIVE	Domestic	10.6	40.0	64	5.2	29.9	3.2
RC	12 - 15	LIVE	Domestic	12.6	40.0	146	6.3	69.0	7.4
WH	5 - 7	LIVE	Cull	5.0	3.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	5.5	39.0	644	0.0	338.6	32.8
WH	8 - 11	LIVE	Domestic	11.2	40.0	913	1.4	430.3	46.6

Cruise Unit Report SCHWEITZER U2

Unit Sale Notice Volume (MBF): SCHWEITZER U2

Sp	QMD	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	21.4	6.0	75	970.4	90.3	578.5	231.4	45.8	24.4
WH	19.0			68.6		39.1	23.6	5.8	
RA	15.7			21.9			14.5	5.2	2.2
RC	12.8			16.6			8.2	8.4	
ALL	19.2	6.0	75	1,077.4	90.3	617.6	277.8	65.1	26.6

Unit Sale Notice Weight (tons): SCHWEITZER U2

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	6,469.3	539.5	3,709.3	1,688.5	380.3	151.7
WH	600.4		314.4	219.7	66.3	
RA	185.1			117.0	49.2	18.9
RC	144.1			69.3	74.8	
ALL	7,398.9	539.5	4,023.7	2,094.5	570.6	170.6

Unit Cruise Design: SCHWEITZER U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	19.0	20.5	19	10	0

Unit Cruise Summary: SCHWEITZER U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	36	72	3.8	1
WH	4	7	0.4	0
RA	5	6	0.3	0
RC	6	6	0.3	0
ALL	51	91	4.8	1

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	241.5	49.8	11.4	211.5	17.7	3.0	51,072	52.8	11.8
WH	23.8	162.4	37.3	151.6	19.4	9.7	3,609	163.6	38.5
RA	12.4	183.3	42.1	93.0	13.7	6.1	1,151	183.8	42.5
RC	14.1	186.2	42.7	62.0	33.7	13.8	874	189.2	44.9
ALL	291.8	39.4	9.0	194.3	33.7	4.7	56,705	51.9	10.2

Unit Summary: SCHWEITZER U2

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	36	ALL	21.4	104	134	51,072	1.5	96.7	241.5	52.2	6,469.3	970.4
RA	LIVE	CUT	5	ALL	15.7	58	70	1,151	11.2	9.2	12.4	3.1	185.1	21.9
RC	LIVE	CUT	6	ALL	12.8	42	52	874	7.1	15.8	14.1	3.9	144.1	16.6
WH	LIVE	CUT	4	ALL	19.0	83	103	3,609	3.6	12.1	23.8	5.5	600.4	68.6
ALL	LIVE	CUT	51	ALL	20.0	92	117	56,706	1.9	133.8	291.8	64.7	7,398.9	1,077.5
ALL	ALL	ALL	51	ALL	20.0	92	117	56,706	1.9	133.8	291.8	64.7	7,398.9	1,077.5

Unit Stand Table: SCHWEITZER U2

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	12	LIVE	CUT	1	12.0	80	102	940	5.3	8.7	6.8	2.0	136.7	17.9
DF	16	LIVE	CUT	3	16.0	92	117	3,269	1.5	14.4	20.1	5.0	447.9	62.1
DF	18	LIVE	CUT	3	17.7	97	123	3,307	1.1	11.6	19.7	4.7	466.0	62.8
DF	20	LIVE	CUT	5	19.6	102	138	6,483	1.0	15.6	32.6	7.4	860.9	123.2
DF	22	LIVE	CUT	4	21.5	107	136	5,264	1.1	10.6	26.7	5.8	704.6	100.0
DF	24	LIVE	CUT	5	23.2	112	144	7,212	1.3	11.6	33.9	7.0	911.7	137.0
DF	26	LIVE	CUT	7	25.6	118	151	10,994	0.6	13.2	47.1	9.3	1,349.6	208.9
DF	28	LIVE	CUT	2	27.5	126	162	3,466	0.0	3.2	13.4	2.5	403.0	65.9
DF	30	LIVE	CUT	3	29.7	115	148	4,744	3.8	4.3	20.5	3.8	573.2	90.1
DF	32	LIVE	CUT	3	31.3	125	161	5,393	2.6	3.9	20.7	3.7	615.9	102.5
RA	14	LIVE	CUT	1	14.0	52	63	211	0.0	2.3	2.5	0.7	35.2	4.0
RA	16	LIVE	CUT	3	16.0	58	71	701	12.1	5.4	7.5	1.9	114.6	13.3
RA	18	LIVE	CUT	1	17.0	64	79	238	16.2	1.5	2.4	0.6	35.3	4.5
RC	10	LIVE	CUT	1	10.0	38	46	139	0.0	4.4	2.4	0.8	21.8	2.6
RC	12	LIVE	CUT	1	11.0	41	50	129	0.0	3.6	2.4	0.7	23.0	2.5
RC	14	LIVE	CUT	2	13.4	42	51	296	5.7	5.0	4.9	1.3	49.2	5.6
RC	16	LIVE	CUT	1	16.0	45	55	105	3.1	1.6	2.3	0.6	25.8	2.0

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
RC	18	LIVE	CUT	1	18.0	60	75	205	17.2	1.2	2.1	0.5	24.3	3.9
WH	16	LIVE	CUT	1	16.0	72	89	695	6.4	4.3	6.0	1.5	132.9	13.2
WH	20	LIVE	CUT	2	19.5	86	108	1,800	2.8	5.7	11.8	2.7	301.1	34.2
WH	24	LIVE	CUT	1	23.0	95	120	1,114	3.1	2.1	6.0	1.2	166.4	21.2

Unit Log Grade Summary: SCHWEITZER U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	15.5	40.0	30,448	2.0	3,709.3	578.5
DF	LIVE	3 SAW	9.7	37.0	12,180	1.0	1,688.5	231.4
DF	LIVE	4 SAW	6.3	27.0	2,409	0.0	380.3	45.8
DF	LIVE	CULL	5.1	2.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	18.0	40.0	4,752	0.0	539.5	90.3
DF	LIVE	UTILITY	11.4	15.0	1,283	0.0	151.7	24.4
RA	LIVE	3 SAW	10.6	32.0	765	6.1	117.0	14.5
RA	LIVE	4 SAW	6.9	29.0	272	0.0	49.2	5.2
RA	LIVE	CULL	15.7	3.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	5.1	19.0	114	0.0	18.9	2.2
RC	LIVE	3 SAW	8.4	35.0	432	0.0	69.3	8.2
RC	LIVE	4 SAW	5.5	27.0	442	1.5	74.8	8.4
RC	LIVE	CULL	7.7	3.0	0	100.0	0.0	0.0
WH	LIVE	2 SAW	14.4	37.0	2,059	0.0	314.4	39.1
WH	LIVE	3 SAW	10.4	32.0	1,244	5.8	219.7	23.6
WH	LIVE	4 SAW	6.0	28.0	307	2.0	66.3	5.8
WH	LIVE	CULL	8.7	4.0	0	100.0	0.0	0.0

Unit Log Sort Summary: SCHWEITZER U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	5.1	2.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	9.0	31.0	16,559	1.6	2,157.0	314.6
DF	LIVE	HQ-A	15.0	40.0	9,504	0.6	1,176.9	180.6
DF	LIVE	HQ-B	12.6	39.0	23,726	1.7	2,983.6	450.8
DF	LIVE	Pulp	11.4	15.0	1,283	0.0	151.7	24.4
RA	LIVE	Cull	15.7	3.0	0	100.0	0.0	0.0
RA	LIVE	Domestic	8.9	31.0	1,037	4.6	166.2	19.7
RA	LIVE	Pulp	5.1	19.0	114	0.0	18.9	2.2
RC	LIVE	Cull	7.7	3.0	0	100.0	0.0	0.0
RC	LIVE	Domestic	6.3	29.0	874	0.7	144.1	16.6

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	LIVE	Cull	8.7	4.0	0	100.0	0.0	0.0
WH	LIVE	Domestic	10.0	32.0	3,609	2.2	600.4	68.6

Unit Log Grade x Sort Summary: SCHWEITZER U2

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	17.2	39.0	9,452	2.5	1,076.7	179.6
DF	LIVE	2 SAW	HQ-A	13.5	40.0	4,752	1.2	637.5	90.3
DF	LIVE	2 SAW	HQ-B	15.5	39.0	16,244	2.0	1,995.1	308.6
DF	LIVE	3 SAW	Domestic	9.2	34.0	4,698	0.6	700.0	89.3
DF	LIVE	3 SAW	HQ-B	10.1	39.0	7,482	1.2	988.5	142.2
DF	LIVE	4 SAW	Domestic	6.3	27.0	2,409	0.0	380.3	45.8
DF	LIVE	CULL	Cull	5.1	2.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	18.0	40.0	4,752	0.0	539.5	90.3
DF	LIVE	UTILITY	Pulp	11.4	15.0	1,283	0.0	151.7	24.4
RA	LIVE	3 SAW	Domestic	10.6	32.0	765	6.1	117.0	14.5
RA	LIVE	4 SAW	Domestic	6.9	29.0	272	0.0	49.2	5.2
RA	LIVE	CULL	Cull	15.7	3.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	5.1	19.0	114	0.0	18.9	2.2
RC	LIVE	3 SAW	Domestic	8.4	35.0	432	0.0	69.3	8.2
RC	LIVE	4 SAW	Domestic	5.5	27.0	442	1.5	74.8	8.4
RC	LIVE	CULL	Cull	7.7	3.0	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	14.4	37.0	2,059	0.0	314.4	39.1
WH	LIVE	3 SAW	Domestic	10.4	32.0	1,244	5.8	219.7	23.6
WH	LIVE	4 SAW	Domestic	6.0	28.0	307	2.0	66.3	5.8
WH	LIVE	CULL	Cull	8.7	4.0	0	100.0	0.0	0.0

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U2

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	CULL	5.1	2.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	UTILITY	5.1	14.0	70	0.0	7.6	1.3
DF	5 - 7	LIVE	4 SAW	6.0	27.0	1,962	0.0	320.5	37.3
DF	5 - 7	LIVE	3 SAW	7.4	38.0	743	0.0	124.5	14.1
DF	8 - 11	LIVE	4 SAW	9.5	26.0	446	0.0	59.8	8.5
DF	8 - 11	LIVE	3 SAW	9.7	37.0	10,350	1.0	1,438.4	196.6
DF	8 - 11	LIVE	UTILITY	9.7	16.0	51	0.0	8.5	1.0
DF	12 - 15	LIVE	UTILITY	13.3	14.0	716	0.0	85.7	13.6
DF	12 - 15	LIVE	3 SAW	13.8	33.0	1,088	1.4	125.7	20.7

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	2 SAW	13.9	40.0	15,121	1.2	1,953.4	287.3
DF	16 - 19	LIVE	2 SAW	17.5	39.0	9,611	1.5	1,076.4	182.6
DF	16 - 19	LIVE	UTILITY	17.7	16.0	446	0.0	49.9	8.5
DF	16 - 19	LIVE	SPECIAL MILL	18.0	40.0	4,752	0.0	539.5	90.3
DF	20+	LIVE	2 SAW	21.4	40.0	5,717	5.0	679.5	108.6
RA	5 - 7	LIVE	UTILITY	5.1	19.0	114	0.0	18.9	2.2
RA	5 - 7	LIVE	4 SAW	5.3	29.0	104	0.0	20.1	2.0
RA	8 - 11	LIVE	4 SAW	9.2	30.0	167	0.0	29.1	3.2
RA	8 - 11	LIVE	3 SAW	10.6	32.0	765	6.1	117.0	14.5
RA	12 - 15	LIVE	CULL	15.2	3.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	CULL	16.2	3.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	CULL	5.2	3.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	4 SAW	5.5	27.0	442	1.5	74.8	8.4
RC	5 - 7	LIVE	3 SAW	6.4	40.0	105	0.0	25.8	2.0
RC	8 - 11	LIVE	3 SAW	9.4	32.0	328	0.0	43.5	6.2
RC	16 - 19	LIVE	CULL	17.1	3.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	4 SAW	6.0	28.0	307	2.0	66.3	5.8
WH	5 - 7	LIVE	CULL	6.4	4.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	3 SAW	7.5	40.0	198	0.0	45.0	3.8
WH	8 - 11	LIVE	CULL	10.8	4.0	0	100.0	0.0	0.0
WH	8 - 11	LIVE	3 SAW	11.2	30.0	1,046	6.8	174.7	19.9
WH	12 - 15	LIVE	2 SAW	13.6	38.0	1,311	0.0	211.0	24.9
WH	16 - 19	LIVE	2 SAW	16.5	36.0	747	0.0	103.4	14.2

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U2

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Cull	5.1	2.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Pulp	5.1	14.0	70	0.0	7.6	1.3
DF	5 - 7	LIVE	Domestic	6.2	29.0	2,705	0.0	445.0	51.4
DF	8 - 11	LIVE	Domestic	9.1	32.0	3,314	0.4	509.6	63.0
DF	8 - 11	LIVE	Pulp	9.7	16.0	51	0.0	8.5	1.0
DF	8 - 11	LIVE	HQ-B	10.1	39.0	7,482	1.2	988.5	142.2
DF	12 - 15	LIVE	Pulp	13.3	14.0	716	0.0	85.7	13.6
DF	12 - 15	LIVE	HQ-A	13.5	40.0	4,752	1.2	637.5	90.3
DF	12 - 15	LIVE	Domestic	14.1	37.0	3,490	0.4	407.6	66.3
DF	12 - 15	LIVE	HQ-B	14.1	39.0	7,967	1.6	1,034.0	151.4
DF	16 - 19	LIVE	Domestic	17.2	39.0	3,204	2.1	345.6	60.9

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	16 - 19	LIVE	HQ-B	17.6	40.0	6,406	1.1	730.8	121.7
DF	16 - 19	LIVE	Pulp	17.7	16.0	446	0.0	49.9	8.5
DF	16 - 19	LIVE	HQ-A	18.0	40.0	4,752	0.0	539.5	90.3
DF	20+	LIVE	HQ-B	20.8	40.0	1,871	6.3	230.3	35.5
DF	20+	LIVE	Domestic	21.7	40.0	3,846	4.4	449.2	73.1
RA	5 - 7	LIVE	Pulp	5.1	19.0	114	0.0	18.9	2.2
RA	5 - 7	LIVE	Domestic	5.3	29.0	104	0.0	20.1	2.0
RA	8 - 11	LIVE	Domestic	10.3	31.0	932	5.1	146.1	17.7
RA	12 - 15	LIVE	Cull	15.2	3.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	Cull	16.2	3.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Cull	5.2	3.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Domestic	5.6	28.0	546	1.2	100.6	10.4
RC	8 - 11	LIVE	Domestic	9.4	32.0	328	0.0	43.5	6.2
RC	16 - 19	LIVE	Cull	17.1	3.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	6.3	31.0	504	1.2	111.3	9.6
WH	5 - 7	LIVE	Cull	6.4	4.0	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Cull	10.8	4.0	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Domestic	11.2	30.0	1,046	6.8	174.7	19.9
WH	12 - 15	LIVE	Domestic	13.6	38.0	1,311	0.0	211.0	24.9
WH	16 - 19	LIVE	Domestic	16.5	36.0	747	0.0	103.4	14.2

Cruise Unit Report SCHWEITZER U3

Unit Sale Notice Volume (MBF): SCHWEITZER U3

Sp	QMD	Rings/In	Age	MBF Volume by Grade						
				All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	24.6	6.0	75	986.6	257.6		562.9	132.6	33.5	
RA	17.5			131.9		13.1	43.1	25.7	26.4	23.6
WH	15.8			9.7				9.0	0.7	
RC	14.1			4.6				3.4	1.2	
ALL	21.8	6.0	75	1,132.8	257.6	13.1	606.1	170.7	61.8	23.6

Unit Sale Notice Weight (tons): SCHWEITZER U3

Sp	Tons by Grade						
	All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	6,456.3	1,477.9		3,592.3	1,061.5	324.6	
RA	972.9		85.0	291.9	190.0	222.9	183.1
WH	109.6				101.2	8.4	
RC	55.2				45.7	9.5	
ALL	7,594.0	1,477.9	85.0	3,884.2	1,398.3	565.5	183.1

Unit Cruise Design: SCHWEITZER U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	20.0	22.3	22	11	0

Unit Cruise Summary: SCHWEITZER U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	38	83	3.8	1
RA	9	31	1.4	0
WH	2	3	0.1	0
RC	3	3	0.1	0
ALL	52	120	5.5	1

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U3

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	237.9	76.2	16.2	207.3	19.6	3.2	49,332	78.7	16.6
RA	55.2	114.3	24.4	119.5	32.7	10.9	6,593	118.9	26.7
WH	5.5	342.9	73.1	87.9	49.7	35.1	484	346.5	81.1
RC	6.7	469.0	100.0	34.3	11.3	6.5	229	469.2	100.2
ALL	305.3	46.7	10.0	185.5	35.2	4.9	56,637	58.4	11.1

Unit Summary: SCHWEITZER U3

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	38	ALL	24.6	101	128	49,332	2.1	72.1	237.9	48.0	6,456.3	986.6
RA	LIVE	CUT	9	ALL	17.5	72	89	6,593	14.5	33.0	55.2	13.2	972.9	131.9
RC	LIVE	CUT	3	ALL	14.1	26	55	229	8.4	6.2	6.7	1.8	55.2	4.6
WH	LIVE	CUT	2	ALL	15.8	55	68	484	4.0	4.0	5.5	1.4	109.6	9.7
ALL	LIVE	CUT	52	ALL	22.0	87	111	56,638	3.7	115.3	305.3	64.4	7,594.0	1,132.8
ALL	ALL	ALL	52	ALL	22.0	87	111	56,638	3.7	115.3	305.3	64.4	7,594.0	1,132.8

Unit Stand Table: SCHWEITZER U3

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	18	LIVE	CUT	2	17.0	74	94	1,499	3.1	7.8	12.2	3.0	254.2	30.0
DF	20	LIVE	CUT	4	19.5	97	123	4,150	3.4	11.0	22.8	5.2	594.2	83.0
DF	22	LIVE	CUT	6	21.6	100	128	6,670	1.9	13.5	34.6	7.4	928.2	133.4
DF	24	LIVE	CUT	5	23.8	97	124	5,459	3.0	9.6	29.6	6.1	768.8	109.2
DF	26	LIVE	CUT	4	25.7	104	132	4,916	2.0	6.6	24.0	4.7	653.4	98.3
DF	28	LIVE	CUT	8	27.4	109	140	10,579	0.8	11.5	46.9	9.0	1,345.6	211.6
DF	30	LIVE	CUT	5	29.2	116	149	8,680	5.0	7.7	35.8	6.6	1,014.9	173.6
DF	34	LIVE	CUT	1	33.0	125	161	1,554	5.2	1.0	6.0	1.0	190.9	31.1
DF	36	LIVE	CUT	2	36.0	103	132	4,121	0.0	2.8	19.8	3.3	518.4	82.4
DF	40	LIVE	CUT	1	39.0	120	154	1,704	0.0	0.7	6.1	1.0	187.6	34.1
RA	14	LIVE	CUT	2	13.4	66	82	1,164	18.8	11.4	11.2	3.1	177.0	23.3
RA	16	LIVE	CUT	1	15.0	78	97	793	2.2	4.2	5.1	1.3	120.0	15.9
RA	18	LIVE	CUT	2	17.0	82	102	1,609	7.3	6.7	10.5	2.5	246.8	32.2
RA	20	LIVE	CUT	2	20.0	74	92	1,458	14.9	4.8	10.5	2.3	204.6	29.2
RA	24	LIVE	CUT	2	23.0	67	82	1,568	36.8	6.2	17.9	3.7	224.5	31.4
RC	12	LIVE	CUT	1	11.0	22	59	59	9.1	3.0	2.0	0.6	9.5	1.2
RC	16	LIVE	CUT	1	16.0	31	42	73	0.0	1.5	2.1	0.5	18.8	1.5

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
RC	18	LIVE	CUT	1	17.0	30	58	97	14.3	1.6	2.6	0.6	26.9	1.9
WH	16	LIVE	CUT	1	15.0	50	61	237	11.4	3.0	3.7	0.9	64.7	4.7
WH	18	LIVE	CUT	1	18.0	70	87	247	0.0	1.0	1.8	0.4	44.9	4.9

Unit Log Grade Summary: SCHWEITZER U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	15.6	39.0	28,147	2.2	3,592.3	562.9
DF	LIVE	3 SAW	9.8	36.0	6,631	1.3	1,061.5	132.6
DF	LIVE	4 SAW	7.1	21.0	1,675	0.8	324.6	33.5
DF	LIVE	CULL	15.2	6.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	18.8	40.0	12,879	0.2	1,477.9	257.6
RA	LIVE	1 SAW	16.4	30.0	655	0.0	85.0	13.1
RA	LIVE	2 SAW	13.4	30.0	2,156	1.6	291.9	43.1
RA	LIVE	3 SAW	11.5	28.0	1,283	1.4	190.0	25.7
RA	LIVE	4 SAW	8.5	31.0	1,321	4.7	222.9	26.4
RA	LIVE	CULL	7.3	17.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	9.0	20.0	1,178	41.7	183.1	23.6
RC	LIVE	3 SAW	8.0	29.0	170	8.7	45.7	3.4
RC	LIVE	4 SAW	5.0	21.0	59	9.1	9.5	1.2
WH	LIVE	3 SAW	8.4	40.0	449	1.5	101.2	9.0
WH	LIVE	4 SAW	5.6	28.0	35	0.0	8.4	0.7
WH	LIVE	CULL	5.0	7.0	0	100.0	0.0	0.0

Unit Log Sort Summary: SCHWEITZER U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	15.2	6.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	10.1	29.0	16,428	2.8	2,359.2	328.6
DF	LIVE	HQ-A	17.9	40.0	17,707	0.1	2,068.5	354.1
DF	LIVE	HQ-B	13.2	39.0	15,197	1.6	2,028.6	303.9
RA	LIVE	Cull	7.3	17.0	0	100.0	0.0	0.0
RA	LIVE	Domestic	11.0	30.0	5,415	2.1	789.8	108.3
RA	LIVE	Pulp	9.0	20.0	1,178	41.7	183.1	23.6
RC	LIVE	Domestic	6.6	25.0	229	8.8	55.2	4.6
WH	LIVE	Cull	5.0	7.0	0	100.0	0.0	0.0
WH	LIVE	Domestic	7.8	38.0	484	1.4	109.6	9.7

Unit Log Grade x Sort Summary: SCHWEITZER U3

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	16.2	39.0	11,244	3.5	1,452.5	224.9
DF	LIVE	2 SAW	HQ-A	16.4	40.0	4,828	0.0	590.5	96.6
DF	LIVE	2 SAW	HQ-B	15.0	39.0	12,075	1.8	1,549.3	241.5
DF	LIVE	3 SAW	Domestic	9.5	34.0	3,509	1.8	582.1	70.2
DF	LIVE	3 SAW	HQ-B	10.2	39.0	3,122	0.8	479.3	62.4
DF	LIVE	4 SAW	Domestic	7.1	21.0	1,675	0.8	324.6	33.5
DF	LIVE	CULL	Cull	15.2	6.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	18.8	40.0	12,879	0.2	1,477.9	257.6
RA	LIVE	1 SAW	Domestic	16.4	30.0	655	0.0	85.0	13.1
RA	LIVE	2 SAW	Domestic	13.4	30.0	2,156	1.6	291.9	43.1
RA	LIVE	3 SAW	Domestic	11.5	28.0	1,283	1.4	190.0	25.7
RA	LIVE	4 SAW	Domestic	8.5	31.0	1,321	4.7	222.9	26.4
RA	LIVE	CULL	Cull	7.3	17.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	9.0	20.0	1,178	41.7	183.1	23.6
RC	LIVE	3 SAW	Domestic	8.0	29.0	170	8.7	45.7	3.4
RC	LIVE	4 SAW	Domestic	5.0	21.0	59	9.1	9.5	1.2
WH	LIVE	3 SAW	Domestic	8.4	40.0	449	1.5	101.2	9.0
WH	LIVE	4 SAW	Domestic	5.6	28.0	35	0.0	8.4	0.7
WH	LIVE	CULL	Cull	5.0	7.0	0	100.0	0.0	0.0

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U3

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	CULL	6.6	7.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	4 SAW	6.7	20.0	1,170	1.2	220.3	23.4
DF	8 - 11	LIVE	4 SAW	8.7	22.0	506	0.0	104.3	10.1
DF	8 - 11	LIVE	3 SAW	9.8	36.0	6,631	1.3	1,061.5	132.6
DF	8 - 11	LIVE	CULL	10.4	1.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	2 SAW	14.0	39.0	14,647	2.2	1,984.3	292.9
DF	16 - 19	LIVE	2 SAW	17.9	39.0	7,494	3.2	915.4	149.9
DF	16 - 19	LIVE	SPECIAL MILL	18.2	40.0	9,259	0.2	1,106.9	185.2
DF	20+	LIVE	SPECIAL MILL	20.6	40.0	3,621	0.0	371.1	72.4
DF	20+	LIVE	2 SAW	23.4	39.0	6,006	0.8	692.5	120.1
DF	20+	LIVE	CULL	25.2	6.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	UTILITY	5.2	19.0	271	0.0	38.2	5.4
RA	5 - 7	LIVE	CULL	6.0	18.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	4 SAW	7.2	19.0	68	0.0	12.0	1.4

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	8 - 11	LIVE	4 SAW	8.7	33.0	1,254	4.9	210.9	25.1
RA	8 - 11	LIVE	UTILITY	9.8	22.0	907	0.0	144.9	18.1
RA	8 - 11	LIVE	3 SAW	11.5	28.0	1,283	1.4	190.0	25.7
RA	12 - 15	LIVE	2 SAW	13.4	30.0	2,156	1.6	291.9	43.1
RA	16 - 19	LIVE	1 SAW	16.4	30.0	655	0.0	85.0	13.1
RA	16 - 19	LIVE	UTILITY	17.4	16.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	CULL	18.2	6.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	4 SAW	5.0	21.0	59	9.1	9.5	1.2
RC	5 - 7	LIVE	3 SAW	7.0	30.0	73	0.0	18.8	1.5
RC	8 - 11	LIVE	3 SAW	9.0	29.0	97	14.3	26.9	1.9
WH	5 - 7	LIVE	CULL	5.0	7.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	4 SAW	5.6	28.0	35	0.0	8.4	0.7
WH	5 - 7	LIVE	3 SAW	7.4	40.0	237	2.8	64.7	4.7
WH	8 - 11	LIVE	3 SAW	11.2	40.0	212	0.0	36.5	4.2

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U3

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Cull	6.6	7.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Domestic	6.7	20.0	1,170	1.2	220.3	23.4
DF	8 - 11	LIVE	Domestic	9.3	31.0	4,015	1.6	686.4	80.3
DF	8 - 11	LIVE	HQ-B	10.2	39.0	3,122	0.8	479.3	62.4
DF	8 - 11	LIVE	Cull	10.4	1.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	Domestic	13.8	39.0	4,249	5.8	617.5	85.0
DF	12 - 15	LIVE	HQ-B	13.8	39.0	7,344	0.9	978.0	146.9
DF	12 - 15	LIVE	HQ-A	15.3	40.0	3,054	0.0	388.8	61.1
DF	16 - 19	LIVE	Domestic	17.2	38.0	2,800	4.8	351.2	56.0
DF	16 - 19	LIVE	HQ-A	18.3	40.0	10,120	0.2	1,204.8	202.4
DF	16 - 19	LIVE	HQ-B	18.4	40.0	3,832	2.8	466.3	76.6
DF	20+	LIVE	HQ-A	20.6	40.0	4,533	0.0	474.9	90.7
DF	20+	LIVE	HQ-B	23.7	40.0	899	5.0	105.0	18.0
DF	20+	LIVE	Domestic	24.2	38.0	4,195	0.0	483.7	83.9
DF	20+	LIVE	Cull	25.2	6.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Pulp	5.2	19.0	271	0.0	38.2	5.4
RA	5 - 7	LIVE	Cull	6.0	18.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Domestic	7.2	19.0	68	0.0	12.0	1.4
RA	8 - 11	LIVE	Domestic	9.8	31.0	2,537	3.2	400.9	50.7
RA	8 - 11	LIVE	Pulp	9.8	22.0	907	0.0	144.9	18.1

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	12 - 15	LIVE	Domestic	13.4	30.0	2,156	1.6	291.9	43.1
RA	16 - 19	LIVE	Domestic	16.4	30.0	655	0.0	85.0	13.1
RA	16 - 19	LIVE	Pulp	17.4	16.0	0	100.0	0.0	0.0
RA	16 - 19	LIVE	Cull	18.2	6.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Domestic	5.7	24.0	132	4.3	28.3	2.6
RC	8 - 11	LIVE	Domestic	9.0	29.0	97	14.3	26.9	1.9
WH	5 - 7	LIVE	Cull	5.0	7.0	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	6.9	37.0	272	2.4	73.1	5.4
WH	8 - 11	LIVE	Domestic	11.2	40.0	212	0.0	36.5	4.2

DRAFT

Cruise Unit Report SCHWEITZER U4

Unit Sale Notice Volume (MBF): SCHWEITZER U4

Sp	QMD	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	19.7	6.0	75	969.7	40.6	723.1	145.5	36.6	23.9
RA	14.3			152.6		65.5	9.9	54.3	22.8
MA	13.7			26.5					26.5
WH	10.2			7.2				7.2	
RC	26.6			6.6			5.9	0.7	
ALL	16.7	6.0	75	1,162.6	40.6	788.6	161.4	98.9	73.2

Unit Sale Notice Weight (tons): SCHWEITZER U4

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	6,190.1	262.9	4,120.9	1,273.8	320.1	212.4
RA	1,397.7		503.0	88.0	540.6	266.0
MA	289.1					289.1
WH	87.7				87.7	
RC	75.7			69.0	6.7	
ALL	8,040.3	262.9	4,623.9	1,430.8	955.1	767.5

Unit Cruise Design: SCHWEITZER U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (46.94, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	27.0	32.2	27	15	0

Unit Cruise Summary: SCHWEITZER U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	30	70	2.6	1
RA	17	43	1.6	0
MA	6	10	0.4	0
WH	2	2	0.1	0
RC	2	2	0.1	0
ALL	57	127	4.7	1

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	175.4	105.7	20.3	204.8	42.7	7.8	35,916	114.0	21.8
RA	66.3	106.3	20.5	85.3	28.5	6.9	5,653	110.1	21.6
MA	17.4	227.5	43.8	56.2	66.3	27.1	980	237.0	51.5
WH	5.1	360.3	69.3	52.3	17.6	12.4	267	360.7	70.4
RC	3.8	360.6	69.4	64.1	1.0	0.7	244	360.6	69.4
ALL	268.1	66.8	12.8	160.6	57.8	7.7	43,061	88.3	15.0

Unit Summary: SCHWEITZER U4

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	30	ALL	19.7	69	87	35,916	3.1	82.9	175.4	39.5	6,190.1	969.7
MA	LIVE	CUT	6	ALL	13.7	37	43	980	0.0	17.0	17.4	4.7	289.1	26.5
RA	LIVE	CUT	17	ALL	14.6	47	57	5,653	3.4	57.0	66.3	17.3	1,397.7	152.6
RC	LIVE	CUT	2	ALL	26.6	55	69	244	10.9	1.0	3.8	0.7	75.7	6.6
WH	LIVE	CUT	2	ALL	10.2	37	43	267	5.2	9.0	5.1	1.6	87.7	7.2
ALL	LIVE	CUT	57	ALL	17.2	56	70	43,060	3.1	166.9	268.0	63.8	8,040.3	1,162.6
ALL	ALL	ALL	57	ALL	17.2	56	70	43,060	3.1	166.9	268.0	63.8	8,040.3	1,162.6

Unit Stand Table: SCHWEITZER U4

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	1	7.5	32	37	420	0.0	20.6	6.3	2.3	64.3	11.3
DF	12	LIVE	CUT	1	11.0	44	54	380	0.0	10.1	6.7	2.0	117.9	10.3
DF	14	LIVE	CUT	2	13.0	66	82	1,083	0.6	12.6	11.6	3.2	287.0	29.3
DF	16	LIVE	CUT	1	15.0	58	72	478	0.0	4.8	5.9	1.5	130.7	12.9
DF	18	LIVE	CUT	3	17.6	58	77	1,621	5.1	10.6	18.1	4.3	425.6	43.8
DF	24	LIVE	CUT	2	23.5	111	143	2,439	1.0	3.7	11.2	2.3	439.0	65.8
DF	26	LIVE	CUT	2	25.0	98	125	2,085	2.2	3.3	11.3	2.3	398.1	56.3
DF	28	LIVE	CUT	1	27.0	127	163	1,412	6.3	1.4	5.5	1.1	238.2	38.1
DF	30	LIVE	CUT	4	30.0	130	168	6,262	2.3	4.6	22.7	4.1	996.0	169.1
DF	32	LIVE	CUT	2	32.0	117	150	2,752	2.6	2.0	11.3	2.0	457.1	74.3
DF	34	LIVE	CUT	3	33.3	123	159	4,147	8.6	3.2	19.1	3.3	690.6	112.0
DF	36	LIVE	CUT	2	35.5	121	156	3,108	0.7	1.6	11.1	1.9	464.8	83.9
DF	38	LIVE	CUT	1	38.0	124	160	1,617	0.0	0.7	5.9	1.0	246.0	43.7
DF	40	LIVE	CUT	4	39.5	123	159	6,314	3.5	2.7	23.0	3.7	966.8	170.5
DF	48	LIVE	CUT	1	48.0	140	181	1,800	5.0	0.5	5.7	0.8	268.1	48.6
MA	10	LIVE	CUT	1	9.0	35	41	181	0.0	6.9	3.0	1.0	39.8	4.9

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
MA	12	LIVE	CUT	1	11.0	35	41	139	0.0	4.6	3.0	0.9	43.3	3.8
MA	16	LIVE	CUT	1	15.0	30	34	75	0.0	2.5	3.0	0.8	37.6	2.0
MA	18	LIVE	CUT	1	18.5	45	54	178	0.0	1.5	2.7	0.6	48.8	4.8
MA	22	LIVE	CUT	1	22.0	36	42	58	0.0	1.0	2.7	0.6	40.5	1.6
MA	30	LIVE	CUT	1	30.0	75	93	350	0.0	0.6	2.8	0.5	79.0	9.4
RA	8	LIVE	CUT	1	8.0	37	43	290	3.7	10.5	3.7	1.3	49.7	7.8
RA	10	LIVE	CUT	2	9.2	41	48	528	3.1	15.7	7.3	2.4	117.6	14.2
RA	12	LIVE	CUT	1	12.0	45	54	203	4.7	4.7	3.7	1.1	73.6	5.5
RA	14	LIVE	CUT	2	14.0	47	56	474	1.5	6.8	7.3	2.0	146.1	12.8
RA	18	LIVE	CUT	1	17.0	70	86	442	2.2	2.3	3.7	0.9	108.2	11.9
RA	20	LIVE	CUT	7	19.4	55	68	2,017	4.1	12.6	25.9	5.9	492.8	54.4
RA	22	LIVE	CUT	1	22.0	54	65	339	0.0	1.5	4.0	0.9	92.0	9.2
RA	24	LIVE	CUT	2	23.5	72	89	919	2.3	2.4	7.2	1.5	217.3	24.8
RA	28	LIVE	CUT	1	28.0	68	84	440	7.3	0.8	3.6	0.7	100.3	11.9
RC	22	LIVE	CUT	1	22.0	54	67	116	7.7	0.7	1.8	0.4	34.7	3.1
RC	36	LIVE	CUT	1	35.0	58	72	128	13.8	0.3	2.0	0.3	41.0	3.5
WH	10	LIVE	CUT	1	9.0	35	41	152	7.1	5.8	2.6	0.9	40.5	4.1
WH	12	LIVE	CUT	1	12.0	40	48	115	2.7	3.2	2.5	0.7	47.2	3.1

Unit Log Grade Summary: SCHWEITZER U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	19.5	40.0	26,782	2.7	4,120.9	723.1
DF	LIVE	3 SAW	10.0	37.0	5,390	1.4	1,273.8	145.5
DF	LIVE	4 SAW	5.3	24.0	1,357	1.4	320.1	36.6
DF	LIVE	CULL	10.2	5.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	17.0	40.0	1,503	0.0	262.9	40.6
DF	LIVE	UTILITY	7.6	29.0	884	0.0	212.4	23.9
MA	LIVE	UTILITY	6.2	26.0	980	0.0	289.1	26.5
RA	LIVE	2 SAW	14.1	31.0	2,426	2.3	503.0	65.5
RA	LIVE	3 SAW	10.6	40.0	368	2.6	88.0	9.9
RA	LIVE	4 SAW	5.8	29.0	2,013	3.1	540.6	54.3
RA	LIVE	CULL	13.5	3.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	7.3	30.0	846	0.0	266.0	22.8
RC	LIVE	3 SAW	13.2	37.0	219	12.1	69.0	5.9
RC	LIVE	4 SAW	7.3	16.0	25	0.0	6.7	0.7
WH	LIVE	4 SAW	5.1	29.0	267	5.3	87.7	7.2

Unit Log Sort Summary: SCHWEITZER U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	10.2	5.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	10.0	32.0	21,482	2.8	3,826.8	580.0
DF	LIVE	HQ-A	17.0	40.0	1,503	0.0	262.9	40.6
DF	LIVE	HQ-B	17.1	40.0	12,047	1.7	1,888.0	325.3
DF	LIVE	Pulp	7.6	29.0	884	0.0	212.4	23.9
MA	LIVE	Pulp	6.2	26.0	980	0.0	289.1	26.5
RA	LIVE	Cull	13.5	3.0	0	100.0	0.0	0.0
RA	LIVE	Domestic	7.4	30.0	4,807	2.6	1,131.7	129.8
RA	LIVE	Pulp	7.3	30.0	846	0.0	266.0	22.8
RC	LIVE	Domestic	10.3	27.0	244	11.0	75.7	6.6
WH	LIVE	Domestic	5.1	29.0	267	5.3	87.7	7.2

Unit Log Grade x Sort Summary: SCHWEITZER U4

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	19.1	39.0	15,279	3.4	2,360.9	412.5
DF	LIVE	2 SAW	HQ-B	20.2	40.0	11,503	1.8	1,760.0	310.6
DF	LIVE	3 SAW	Domestic	10.2	37.0	4,845	1.5	1,145.9	130.8
DF	LIVE	3 SAW	HQ-B	8.7	40.0	544	0.0	127.9	14.7
DF	LIVE	4 SAW	Domestic	5.3	24.0	1,357	1.4	320.1	36.6
DF	LIVE	CULL	Cull	10.2	5.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	17.0	40.0	1,503	0.0	262.9	40.6
DF	LIVE	UTILITY	Pulp	7.6	29.0	884	0.0	212.4	23.9
MA	LIVE	UTILITY	Pulp	6.2	26.0	980	0.0	289.1	26.5
RA	LIVE	2 SAW	Domestic	14.1	31.0	2,426	2.3	503.0	65.5
RA	LIVE	3 SAW	Domestic	10.6	40.0	368	2.6	88.0	9.9
RA	LIVE	4 SAW	Domestic	5.8	29.0	2,013	3.1	540.6	54.3
RA	LIVE	CULL	Cull	13.5	3.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	7.3	30.0	846	0.0	266.0	22.8
RC	LIVE	3 SAW	Domestic	13.2	37.0	219	12.1	69.0	5.9
RC	LIVE	4 SAW	Domestic	7.3	16.0	25	0.0	6.7	0.7
WH	LIVE	4 SAW	Domestic	5.1	29.0	267	5.3	87.7	7.2

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U4

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	UTILITY	5.0	35.0	380	0.0	117.9	10.3
DF	5 - 7	LIVE	4 SAW	5.3	24.0	1,357	1.4	320.1	36.6

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	CULL	7.6	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	CULL	9.1	5.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	UTILITY	9.3	12.0	61	0.0	13.5	1.6
DF	8 - 11	LIVE	3 SAW	9.9	37.0	5,201	1.0	1,234.8	140.4
DF	12 - 15	LIVE	CULL	12.1	6.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	3 SAW	12.4	32.0	189	10.2	39.0	5.1
DF	12 - 15	LIVE	2 SAW	14.4	38.0	2,462	2.1	451.7	66.5
DF	12 - 15	LIVE	UTILITY	14.8	16.0	53	0.0	9.2	1.4
DF	16 - 19	LIVE	SPECIAL MILL	17.0	40.0	1,503	0.0	262.9	40.6
DF	16 - 19	LIVE	2 SAW	17.6	40.0	6,727	4.3	1,063.9	181.6
DF	20+	LIVE	CULL	21.0	10.0	0	100.0	0.0	0.0
DF	20+	LIVE	UTILITY	22.0	14.0	391	0.0	71.8	10.6
DF	20+	LIVE	2 SAW	23.6	40.0	17,593	2.1	2,605.3	475.0
MA	5 - 7	LIVE	UTILITY	5.3	25.0	473	0.0	166.5	12.8
MA	8 - 11	LIVE	UTILITY	10.2	31.0	199	0.0	58.8	5.4
MA	16 - 19	LIVE	UTILITY	18.3	40.0	307	0.0	63.7	8.3
RA	5 - 7	LIVE	4 SAW	5.3	29.0	1,476	2.7	390.1	39.9
RA	5 - 7	LIVE	UTILITY	5.7	28.0	284	0.0	115.4	7.7
RA	8 - 11	LIVE	4 SAW	9.8	30.0	536	4.1	150.5	14.5
RA	8 - 11	LIVE	UTILITY	10.0	39.0	266	0.0	75.6	7.2
RA	8 - 11	LIVE	3 SAW	10.6	40.0	368	2.6	88.0	9.9
RA	12 - 15	LIVE	CULL	13.5	3.0	0	100.0	0.0	0.0
RA	12 - 15	LIVE	UTILITY	13.6	30.0	295	0.0	75.1	8.0
RA	12 - 15	LIVE	2 SAW	13.8	31.0	2,036	1.1	425.2	55.0
RA	16 - 19	LIVE	2 SAW	18.4	36.0	390	8.2	77.9	10.5
RC	5 - 7	LIVE	4 SAW	6.3	16.0	14	0.0	3.5	0.4
RC	8 - 11	LIVE	4 SAW	9.6	16.0	12	0.0	3.2	0.3
RC	8 - 11	LIVE	3 SAW	11.6	36.0	102	8.6	31.2	2.8
RC	16 - 19	LIVE	3 SAW	17.0	40.0	116	15.0	37.8	3.1
WH	5 - 7	LIVE	4 SAW	5.1	29.0	267	5.3	87.7	7.2

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U4

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Pulp	5.0	35.0	380	0.0	117.9	10.3
DF	5 - 7	LIVE	Domestic	5.3	24.0	1,357	1.4	320.1	36.6
DF	5 - 7	LIVE	Cull	7.6	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	HQ-B	8.7	40.0	544	0.0	127.9	14.7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	8 - 11	LIVE	Cull	9.1	5.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	Pulp	9.3	12.0	61	0.0	13.5	1.6
DF	8 - 11	LIVE	Domestic	10.1	37.0	4,657	1.1	1,106.9	125.7
DF	12 - 15	LIVE	Cull	12.1	6.0	0	100.0	0.0	0.0
DF	12 - 15	LIVE	Domestic	13.8	35.0	1,522	3.5	286.7	41.1
DF	12 - 15	LIVE	HQ-B	14.6	40.0	1,129	1.6	203.9	30.5
DF	12 - 15	LIVE	Pulp	14.8	16.0	53	0.0	9.2	1.4
DF	16 - 19	LIVE	HQ-A	17.0	40.0	1,503	0.0	262.9	40.6
DF	16 - 19	LIVE	HQ-B	17.4	40.0	1,444	5.1	216.5	39.0
DF	16 - 19	LIVE	Domestic	17.7	40.0	5,282	4.1	847.4	142.6
DF	20+	LIVE	Cull	21.0	10.0	0	100.0	0.0	0.0
DF	20+	LIVE	Pulp	22.0	14.0	391	0.0	71.8	10.6
DF	20+	LIVE	HQ-B	23.5	40.0	8,929	1.2	1,339.6	241.1
DF	20+	LIVE	Domestic	23.8	40.0	8,663	3.1	1,265.7	233.9
MA	5 - 7	LIVE	Pulp	5.3	25.0	473	0.0	166.5	12.8
MA	8 - 11	LIVE	Pulp	10.2	31.0	199	0.0	58.8	5.4
MA	16 - 19	LIVE	Pulp	18.3	40.0	307	0.0	63.7	8.3
RA	5 - 7	LIVE	Domestic	5.3	29.0	1,476	2.7	390.1	39.9
RA	5 - 7	LIVE	Pulp	5.7	28.0	284	0.0	115.4	7.7
RA	8 - 11	LIVE	Domestic	10.0	33.0	905	3.5	238.5	24.4
RA	8 - 11	LIVE	Pulp	10.0	39.0	266	0.0	75.6	7.2
RA	12 - 15	LIVE	Cull	13.5	3.0	0	100.0	0.0	0.0
RA	12 - 15	LIVE	Pulp	13.6	30.0	295	0.0	75.1	8.0
RA	12 - 15	LIVE	Domestic	13.8	31.0	2,036	1.1	425.2	55.0
RA	16 - 19	LIVE	Domestic	18.4	36.0	390	8.2	77.9	10.5
RC	5 - 7	LIVE	Domestic	6.3	16.0	14	0.0	3.5	0.4
RC	8 - 11	LIVE	Domestic	11.0	30.0	114	7.8	34.4	3.1
RC	16 - 19	LIVE	Domestic	17.0	40.0	116	15.0	37.8	3.1
WH	5 - 7	LIVE	Domestic	5.1	29.0	267	5.3	87.7	7.2

Cruise Unit Report SCHWEITZER U5

Unit Sale Notice Volume (MBF): SCHWEITZER U5

Sp	QMD	Rings/In	Age	MBF Volume by Grade						
				All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	23.5	6.0	75	1,058.5	218.3		611.9	194.9	33.4	
RA	17.9			32.2			11.5	14.3	4.2	2.3
RC	18.4			22.1				21.3	0.8	
MA	24.1			13.7		2.7	7.5			3.4
ALL	22.4	6.0	75	1,126.5	218.3	2.7	630.9	230.5	38.3	5.7

Unit Sale Notice Weight (tons): SCHWEITZER U5

Sp	Tons by Grade						
	All	Spec Mill	1 Saw	2 Saw	3 Saw	4 Saw	Utility
DF	6,517.4	1,220.8		3,578.6	1,458.5	259.5	
RA	278.7			108.0	102.9	42.7	25.1
RC	172.4				166.3	6.1	
MA	98.8		20.5	59.1			19.2
ALL	7,067.3	1,220.8	20.5	3,745.6	1,727.7	308.4	44.3

Unit Cruise Design: SCHWEITZER U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 27.78 for some species) Measure/Count Plots, Sighting Ht = 16 ft	17.0	18.3	16	10	0

Unit Cruise Summary: SCHWEITZER U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	26	54	3.4	1
RA	4	7	0.4	0
RC	4	5	0.3	0
MA	3	3	0.2	0
ALL	37	69	4.3	1

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U5

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	252.8	62.1	15.5	246.3	18.8	3.7	62,265	64.9	16.0
RA	18.2	165.1	41.3	103.9	23.4	11.7	1,896	166.8	42.9
RC	14.3	225.3	56.3	91.0	32.0	16.0	1,299	227.6	58.6
MA	8.4	286.9	71.7	96.2	25.0	14.4	803	288.0	73.2
ALL	293.7	44.7	11.2	225.6	35.5	5.8	66,263	57.1	12.6

Unit Summary: SCHWEITZER U5

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	26	ALL	23.5	109	144	61,114	2.0	82.4	248.1	51.2	6,396.9	1,038.9
DF	LIVE	POLE	0	ALL				1,152	2.0		4.7		120.5	19.6
MA	LIVE	CUT	3	ALL	24.1	64	79	803	19.7	2.6	8.4	1.7	98.8	13.7
RA	LIVE	CUT	4	ALL	17.9	65	80	1,896	3.4	10.4	18.2	4.3	278.7	32.2
RC	LIVE	CUT	4	ALL	18.4	56	70	1,299	8.1	7.7	14.3	3.3	172.4	22.1
ALL	LIVE	POLE	0	ALL				1,152	2.0		4.7		120.5	19.6
ALL	LIVE	CUT	37	ALL	22.7	99	130	65,112	2.4	103.1	289.0	60.5	6,946.8	1,106.9
ALL	ALL	ALL	37	ALL	22.7	99	130	66,264	2.4	103.1	293.7	60.5	7,067.3	1,126.5

Unit Stand Table: SCHWEITZER U5

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	12	LIVE	CUT	1	12.0	71	119	1,442	9.9	12.2	9.6	2.8	177.7	24.5
DF	16	LIVE	CUT	2	15.5	90	115	3,119	1.6	14.7	19.2	4.9	398.3	53.0
DF	20	LIVE	CUT	3	19.3	112	144	5,683	1.8	13.4	27.2	6.2	682.6	96.6
DF	22	LIVE	CUT	3	21.3	117	150	6,445	0.4	10.9	27.0	5.9	705.0	109.6
DF	26	LIVE	CUT	1	26.0	127	163	2,255	4.9	2.6	9.6	1.9	257.4	38.3
DF	28	LIVE	CUT	4	28.0	129	166	10,355	0.8	8.9	37.9	7.2	1,038.3	176.0
DF	30	LIVE	CUT	1	29.0	128	165	2,547	3.5	2.0	9.1	1.7	252.6	43.3
DF	32	LIVE	CUT	7	31.3	128	165	18,464	2.4	12.4	66.2	11.8	1,795.9	313.9
DF	36	LIVE	CUT	1	36.0	121	156	2,669	0.0	1.4	9.8	1.6	253.5	45.4
DF	38	LIVE	CUT	2	37.5	127	164	5,326	2.1	2.7	21.0	3.4	547.2	90.6
DF	40	LIVE	CUT	1	39.0	128	165	2,809	0.7	1.4	11.4	1.8	288.4	47.7
MA	20	LIVE	CUT	1	20.0	60	73	195	27.3	1.3	2.7	0.6	29.2	3.3
MA	26	LIVE	CUT	1	25.0	70	86	325	13.2	0.8	2.7	0.5	38.8	5.5
MA	30	LIVE	CUT	1	30.0	66	81	283	21.0	0.6	2.9	0.5	30.7	4.8
RA	16	LIVE	CUT	1	16.0	65	80	504	1.3	3.1	4.4	1.1	68.3	8.6

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
RA	18	LIVE	CUT	2	17.5	71	88	1,030	3.8	5.1	8.6	2.1	141.6	17.5
RA	22	LIVE	CUT	1	21.0	53	64	362	5.8	2.2	5.2	1.1	68.9	6.2
RC	14	LIVE	CUT	1	14.0	49	60	210	6.0	3.3	3.6	1.0	38.7	3.6
RC	16	LIVE	CUT	1	16.0	53	66	286	0.0	2.6	3.6	0.9	40.8	4.9
RC	24	LIVE	CUT	1	23.0	71	90	346	16.9	1.2	3.6	0.7	40.0	5.9
RC	34	LIVE	CUT	1	34.0	79	100	456	6.4	0.6	3.6	0.6	52.9	7.8

Unit Log Grade Summary: SCHWEITZER U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	17.0	39.0	35,995	1.8	3,578.6	611.9
DF	LIVE	3 SAW	9.6	38.0	11,467	1.2	1,458.5	194.9
DF	LIVE	4 SAW	6.3	28.0	1,962	8.2	259.5	33.4
DF	LIVE	CULL	10.2	3.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	20.6	39.0	12,842	0.0	1,220.8	218.3
MA	LIVE	1 SAW	21.5	18.0	159	22.2	20.5	2.7
MA	LIVE	2 SAW	14.6	30.0	442	11.5	59.1	7.5
MA	LIVE	CULL	7.2	24.0	0	100.0	0.0	0.0
MA	LIVE	UTILITY	15.0	19.0	202	0.0	19.2	3.4
RA	LIVE	2 SAW	12.8	30.0	677	3.2	108.0	11.5
RA	LIVE	3 SAW	11.1	33.0	840	0.0	102.9	14.3
RA	LIVE	4 SAW	7.2	30.0	245	0.0	42.7	4.2
RA	LIVE	CULL	5.4	8.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	5.8	24.0	134	0.0	25.1	2.3
RC	LIVE	3 SAW	9.5	35.0	1,250	1.9	166.3	21.3
RC	LIVE	4 SAW	5.0	18.0	49	0.0	6.1	0.8
RC	LIVE	CULL	9.6	4.0	0	100.0	0.0	0.0

Unit Log Sort Summary: SCHWEITZER U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	10.2	3.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	10.4	35.0	23,452	1.8	2,570.4	398.7
DF	LIVE	HQ-A	17.4	40.0	17,711	0.0	1,762.9	301.1
DF	LIVE	HQ-B	13.0	39.0	21,103	2.5	2,184.1	358.8
MA	LIVE	Cull	7.2	24.0	0	100.0	0.0	0.0
MA	LIVE	Domestic	16.2	27.0	601	14.6	79.6	10.2
MA	LIVE	Pulp	15.0	19.0	202	0.0	19.2	3.4
RA	LIVE	Cull	5.4	8.0	0	100.0	0.0	0.0

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
RA	LIVE	Domestic	10.2	31.0	1,762	1.2	253.6	30.0
RA	LIVE	Pulp	5.8	24.0	134	0.0	25.1	2.3
RC	LIVE	Cull	9.6	4.0	0	100.0	0.0	0.0
RC	LIVE	Domestic	8.6	32.0	1,299	1.8	172.4	22.1

Unit Log Grade x Sort Summary: SCHWEITZER U5

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	17.2	39.0	15,654	1.4	1,542.2	266.1
DF	LIVE	2 SAW	HQ-A	14.1	40.0	4,869	0.0	542.1	82.8
DF	LIVE	2 SAW	HQ-B	18.5	39.0	15,472	2.7	1,494.3	263.0
DF	LIVE	3 SAW	Domestic	9.7	38.0	5,836	0.5	768.7	99.2
DF	LIVE	3 SAW	HQ-B	9.5	39.0	5,631	2.0	689.8	95.7
DF	LIVE	4 SAW	Domestic	6.3	28.0	1,962	8.2	259.5	33.4
DF	LIVE	CULL	Cull	10.2	3.0	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	20.6	39.0	12,842	0.0	1,220.8	218.3
MA	LIVE	1 SAW	Domestic	21.5	18.0	159	22.2	20.5	2.7
MA	LIVE	2 SAW	Domestic	14.6	30.0	442	11.5	59.1	7.5
MA	LIVE	CULL	Cull	7.2	24.0	0	100.0	0.0	0.0
MA	LIVE	UTILITY	Pulp	15.0	19.0	202	0.0	19.2	3.4
RA	LIVE	2 SAW	Domestic	12.8	30.0	677	3.2	108.0	11.5
RA	LIVE	3 SAW	Domestic	11.1	33.0	840	0.0	102.9	14.3
RA	LIVE	4 SAW	Domestic	7.2	30.0	245	0.0	42.7	4.2
RA	LIVE	CULL	Cull	5.4	8.0	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	5.8	24.0	134	0.0	25.1	2.3
RC	LIVE	3 SAW	Domestic	9.5	35.0	1,250	1.9	166.3	21.3
RC	LIVE	4 SAW	Domestic	5.0	18.0	49	0.0	6.1	0.8
RC	LIVE	CULL	Cull	9.6	4.0	0	100.0	0.0	0.0

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U5

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	4 SAW	5.7	29.0	1,361	11.5	176.3	23.1
DF	5 - 7	LIVE	3 SAW	6.6	36.0	449	0.0	64.7	7.6
DF	5 - 7	LIVE	CULL	7.2	5.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	4 SAW	9.4	25.0	602	0.0	83.2	10.2
DF	8 - 11	LIVE	CULL	9.6	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	3 SAW	9.7	39.0	9,754	1.5	1,270.4	165.8
DF	12 - 15	LIVE	3 SAW	12.0	36.0	403	0.0	46.5	6.8

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	2 SAW	14.1	39.0	10,945	0.2	1,213.6	186.1
DF	16 - 19	LIVE	3 SAW	17.1	40.0	861	0.0	76.9	14.6
DF	16 - 19	LIVE	SPECIAL MILL	17.8	40.0	2,725	0.0	277.8	46.3
DF	16 - 19	LIVE	2 SAW	17.9	39.0	10,769	1.7	991.4	183.1
DF	20+	LIVE	SPECIAL MILL	21.8	39.0	10,117	0.0	943.0	172.0
DF	20+	LIVE	CULL	22.0	3.0	0	100.0	0.0	0.0
DF	20+	LIVE	2 SAW	22.6	39.0	14,281	3.0	1,373.5	242.8
MA	5 - 7	LIVE	CULL	6.7	24.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	CULL	8.8	27.0	0	100.0	0.0	0.0
MA	12 - 15	LIVE	UTILITY	12.9	20.0	78	0.0	9.0	1.3
MA	12 - 15	LIVE	2 SAW	13.1	30.0	195	13.3	29.2	3.3
MA	16 - 19	LIVE	2 SAW	17.0	30.0	247	10.1	29.8	4.2
MA	16 - 19	LIVE	UTILITY	17.9	18.0	124	0.0	10.2	2.1
MA	20+	LIVE	1 SAW	21.5	18.0	159	22.2	20.5	2.7
RA	5 - 7	LIVE	CULL	5.4	8.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	UTILITY	5.8	24.0	134	0.0	25.1	2.3
RA	5 - 7	LIVE	4 SAW	5.9	30.0	103	0.0	19.3	1.7
RA	8 - 11	LIVE	4 SAW	8.9	30.0	142	0.0	23.5	2.4
RA	8 - 11	LIVE	3 SAW	11.1	33.0	840	0.0	102.9	14.3
RA	12 - 15	LIVE	2 SAW	12.8	30.0	677	3.2	108.0	11.5
RC	5 - 7	LIVE	4 SAW	5.0	18.0	49	0.0	6.1	0.8
RC	5 - 7	LIVE	CULL	5.0	4.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	3 SAW	6.4	38.0	275	0.0	49.5	4.7
RC	8 - 11	LIVE	3 SAW	9.9	33.0	340	0.0	50.5	5.8
RC	8 - 11	LIVE	CULL	10.1	4.0	0	100.0	0.0	0.0
RC	12 - 15	LIVE	3 SAW	14.2	32.0	282	0.0	29.2	4.8
RC	20+	LIVE	CULL	21.9	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	3 SAW	22.4	32.0	354	6.3	37.1	6.0

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U5

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.9	30.0	1,810	8.9	241.0	30.8
DF	5 - 7	LIVE	Cull	7.2	5.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	HQ-B	9.5	39.0	5,631	2.0	689.8	95.7
DF	8 - 11	LIVE	Cull	9.6	3.0	0	100.0	0.0	0.0
DF	8 - 11	LIVE	Domestic	9.8	36.0	4,725	0.6	663.8	80.3
DF	12 - 15	LIVE	Domestic	13.9	38.0	4,550	0.5	504.1	77.3

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	12 - 15	LIVE	HQ-B	14.0	40.0	1,928	0.0	214.0	32.8
DF	12 - 15	LIVE	HQ-A	14.1	40.0	4,869	0.0	542.1	82.8
DF	16 - 19	LIVE	HQ-B	17.6	38.0	4,737	2.2	452.9	80.5
DF	16 - 19	LIVE	HQ-A	17.8	40.0	2,725	0.0	277.8	46.3
DF	16 - 19	LIVE	Domestic	18.0	39.0	6,893	1.1	615.4	117.2
DF	20+	LIVE	HQ-A	21.8	39.0	10,117	0.0	943.0	172.0
DF	20+	LIVE	Cull	22.0	3.0	0	100.0	0.0	0.0
DF	20+	LIVE	HQ-B	22.3	39.0	8,807	3.5	827.4	149.7
DF	20+	LIVE	Domestic	23.1	40.0	5,474	2.1	546.1	93.1
MA	5 - 7	LIVE	Cull	6.7	24.0	0	100.0	0.0	0.0
MA	8 - 11	LIVE	Cull	8.8	27.0	0	100.0	0.0	0.0
MA	12 - 15	LIVE	Pulp	12.9	20.0	78	0.0	9.0	1.3
MA	12 - 15	LIVE	Domestic	13.1	30.0	195	13.3	29.2	3.3
MA	16 - 19	LIVE	Domestic	17.0	30.0	247	10.1	29.8	4.2
MA	16 - 19	LIVE	Pulp	17.9	18.0	124	0.0	10.2	2.1
MA	20+	LIVE	Domestic	21.5	18.0	159	22.2	20.5	2.7
RA	5 - 7	LIVE	Cull	5.4	8.0	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Pulp	5.8	24.0	134	0.0	25.1	2.3
RA	5 - 7	LIVE	Domestic	5.9	30.0	103	0.0	19.3	1.7
RA	8 - 11	LIVE	Domestic	10.5	32.0	982	0.0	126.3	16.7
RA	12 - 15	LIVE	Domestic	12.8	30.0	677	3.2	108.0	11.5
RC	5 - 7	LIVE	Cull	5.0	4.0	0	100.0	0.0	0.0
RC	5 - 7	LIVE	Domestic	5.9	31.0	323	0.0	55.7	5.5
RC	8 - 11	LIVE	Domestic	9.9	33.0	340	0.0	50.5	5.8
RC	8 - 11	LIVE	Cull	10.1	4.0	0	100.0	0.0	0.0
RC	12 - 15	LIVE	Domestic	14.2	32.0	282	0.0	29.2	4.8
RC	20+	LIVE	Cull	21.9	3.0	0	100.0	0.0	0.0
RC	20+	LIVE	Domestic	22.4	32.0	354	6.3	37.1	6.0

Cruise Unit Report SCHWEITZER U6 ROW

Unit Sale Notice Volume (MBF): SCHWEITZER U6 ROW

Sp	QMD	Rings/In	Age	MBF Volume by Grade		
				All	4 Saw	Utility
DF	9.2		25	53.2	47.8	5.3
ALL	9.2		25	53.2	47.8	5.3

Unit Sale Notice Weight (tons): SCHWEITZER U6 ROW

Sp	Tons by Grade		
	All	4 Saw	Utility
DF	468.1	414.4	53.7
ALL	468.1	414.4	53.7

Unit Cruise Design: SCHWEITZER U6 ROW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	4.0	3.6	4	2	0

Unit Cruise Summary: SCHWEITZER U6 ROW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	17	4.3	0
ALL	9	17	4.3	0

Unit Cruise Statistics (Cut + Leave Trees): SCHWEITZER U6 ROW

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	170.0	29.6	14.8	78.2	19.4	6.5	13,294	35.4	16.2
ALL	170.0	29.6	14.8	78.2	19.4	6.5	13,294	35.4	16.2

Unit Summary: SCHWEITZER U6 ROW

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	9	ALL	9.2	48	64	13,294	5.3	368.3	170.0	56.0	468.1	53.2
ALL	LIVE	CUT	9	ALL	9.2	48	64	13,294	5.3	368.3	170.0	56.0	468.1	53.2

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
ALL	ALL	ALL	9	ALL	9.2	48	64	13,294	5.3	368.3	170.0	56.0	468.1	53.2

Unit Stand Table: SCHWEITZER U6 ROW

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	3	7.6	41	61	4,719	7.0	178.9	56.7	20.5	130.9	18.9
DF	10	LIVE	CUT	2	9.2	55	68	3,288	3.6	81.1	37.8	12.4	111.0	13.2
DF	12	LIVE	CUT	3	11.0	53	65	3,606	6.7	85.9	56.7	17.1	163.1	14.4
DF	14	LIVE	CUT	1	13.0	59	73	1,681	0.0	20.5	18.9	5.2	63.1	6.7

Unit Log Grade Summary: SCHWEITZER U6 ROW

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	4 SAW	5.1	32.0	11,962	4.5	414.4	47.8
DF	LIVE	CULL	5.1	3.0	0	100.0	0.0	0.0
DF	LIVE	UTILITY	7.8	36.0	1,332	0.0	53.7	5.3

Unit Log Sort Summary: SCHWEITZER U6 ROW

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	5.1	3.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	5.1	32.0	11,962	4.5	414.4	47.8
DF	LIVE	Pulp	7.8	36.0	1,332	0.0	53.7	5.3

Unit Log Grade x Sort Summary: SCHWEITZER U6 ROW

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	4 SAW	Domestic	5.1	32.0	11,962	4.5	414.4	47.8
DF	LIVE	CULL	Cull	5.1	3.0	0	100.0	0.0	0.0
DF	LIVE	UTILITY	Pulp	7.8	36.0	1,332	0.0	53.7	5.3

Unit Log Grade x Diameter Bin Summary: SCHWEITZER U6 ROW

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5-7	LIVE	4 SAW	5.1	32.0	11,962	4.5	414.4	47.8
DF	5-7	LIVE	CULL	5.1	3.0	0	100.0	0.0	0.0
DF	5-7	LIVE	UTILITY	7.8	36.0	1,332	0.0	53.7	5.3

Unit Log Sort x Diameter Bin Summary: SCHWEITZER U6 ROW

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Cull	5.1	3.0	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Domestic	5.1	32.0	11,962	4.5	414.4	47.8
DF	5 - 7	LIVE	Pulp	7.8	36.0	1,332	0.0	53.7	5.3

DRAFT



Forest Practices Application/Notification
Notice of Decision

FPA/N No: 2937846

Effective Date: 7/15/2020

Expiration Date: 7/15/2023

Shut Down Zone 651 N

EARR Tax Credit: Eligible Non-eligible
19,20,30-13-5W; 24-13-6W

Reference: Schweitzer

Decision

- Notification Accepted Operations shall not begin before the effective date.
- Approved This Forest Practices Application is subject to the conditions listed below.
- Disapproved This Forest Practices Application is disapproved for the reasons listed below.
- Closed Applicant has withdrawn the FPA/N.

FPA/N Classification

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

Number of Years Granted on Multi-Year Request

- 4 years
- 5 years

Conditions on Approval/Reasons for Disapproval

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 Region

Title: Forest Practices Forester

Date: 7/15/2020

Copies to: Landowner, Timber Owner and Operator

Issued in person: Landowner Timber Owner Operator

By: Tonya Johnston 

Appeal Information

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

You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources Pacific Cascade Region
<u>Physical Address</u> 1111 Israel Road, SW Suite 301 Tumwater, WA 98501	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504	<u>Physical Address</u> 601 Bond Rd Castle Rock WA 98611
<u>Mailing address</u> PO Box 40903 Olympia, WA 98504-0903	<u>Mailing Address</u> PO Box 40100 Olympia, WA 98504-0100	<u>Mailing Address</u> PO Box 280 Castle Rock WA 98611

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

Other Applicable Laws

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

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

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices website: <http://www.dnr.wa.gov/businesspermits/forestpractices>. Notify DNR of new Operators within 48 hours.

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

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

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

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

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

DNR affidavit of mailing:

On this day ~~7/15/2020~~, I placed in the United States mail at Castle Rock, WA, postage paid, a true and accurate copy of this document. Notice of Decision FPA #.

(Printed Name)

(Signature)

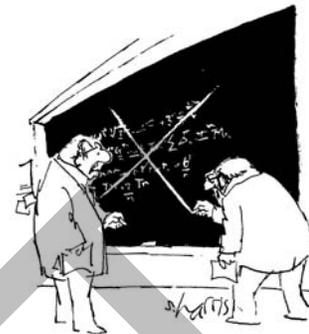
FPHP NEEDED (Y/N) N

Is abandonment of existing road required? (Y/N) N

PACIFIC CASCADE REGION - ENGINEERING

ROAD PLAN PEER REVIEW CHECKLIST

PROJECT: SCHWEITZER



"That's it? That's peer review?"

This project has been reviewed for the following:

Initials:

- OC **CONTRACT CLAUSES** – Selection of proper clauses. Clauses adequately describe desired work. Clauses do not conflict with maps, details, pit plans, etc. Punctuation, syntax, grammar and organization is correct.
- OC **TYPICAL SECTION SHEET, ROCK LIST, & CULVERT LIST** – Sheets match clauses and maps. Requirements and quantities make sense. Rock List adds up correctly.
- OC **MAPS** – All roads listed in Section 1 are shown on maps. Maps identify locations of all culverts, landings, waste areas, endhaul/overhaul areas, etc. Legend, north arrow and scale are shown. Line types are easy to identify. Map is at a legible scale.
- OC **DETAIL SHEETS** – All detail sheets referred to in the clauses are included. Detail sheets have been edited as necessary.
- OC **PIT PLANS** – Selection of proper clauses. Map clearly shows all areas of development, wasting, stockpiling, reclamation, etc. Development plan appears logical for long term use of pit. Development plan allows for safe operation in the pit.
- OC **ROAD COST SPREADSHEET** –All cost elements captured. Material costs used are current. Summary cells are adding correctly. No conflicts exist between pages. Stationing, culverts and rock volume match the road plan.
- OC **EXCISE TAX SHEET** – Totals match road plan.
- OC **LOGGING PLAN** – Plan matches road plan clauses and maps.

I certify that I have reviewed this project for the elements initialed above and have found that it meets or exceeds Department and Regional Standards to the best of my knowledge.

CHRIS WERNER
Originator of Project

07/18/2019
Date

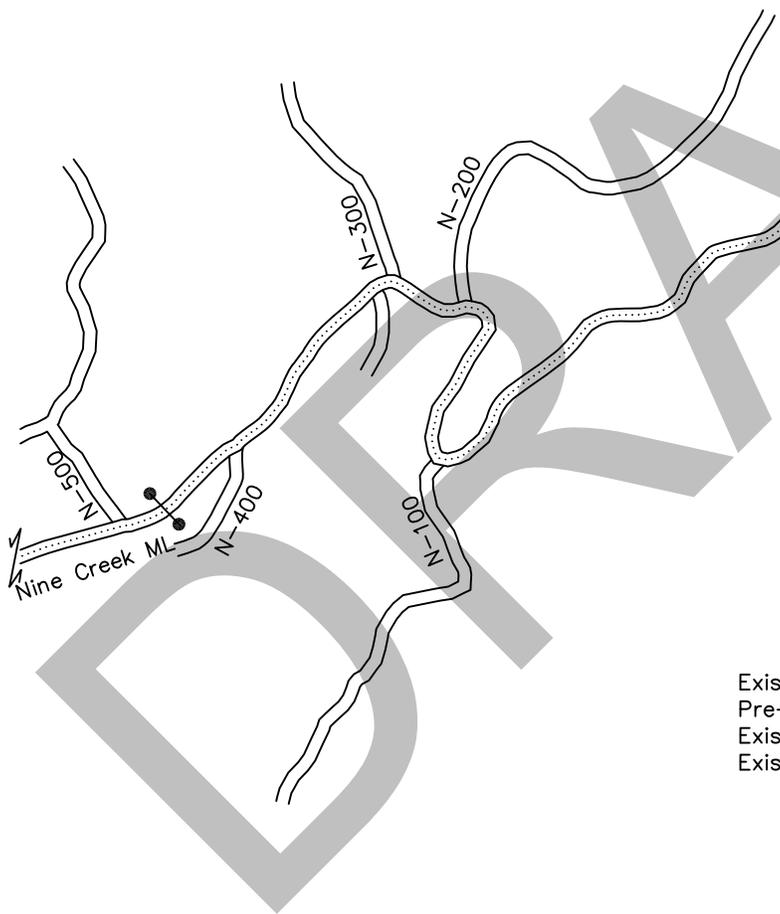
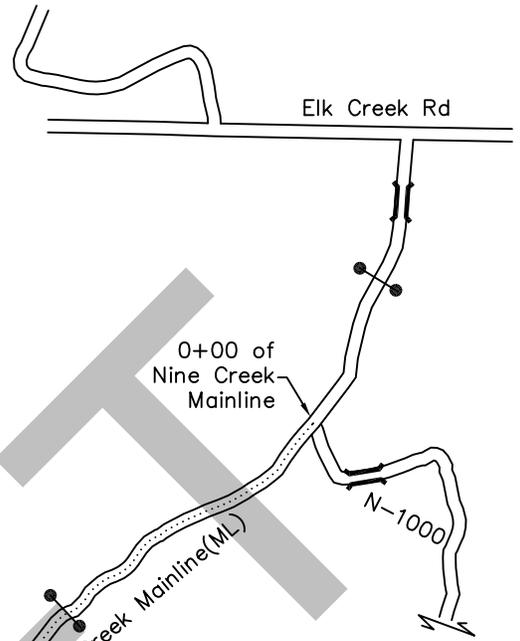
REVIEWED
By Olivia Cantwell at 5:01 pm, Aug 07, 2019

Peer Reviewer

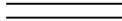
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Comments:

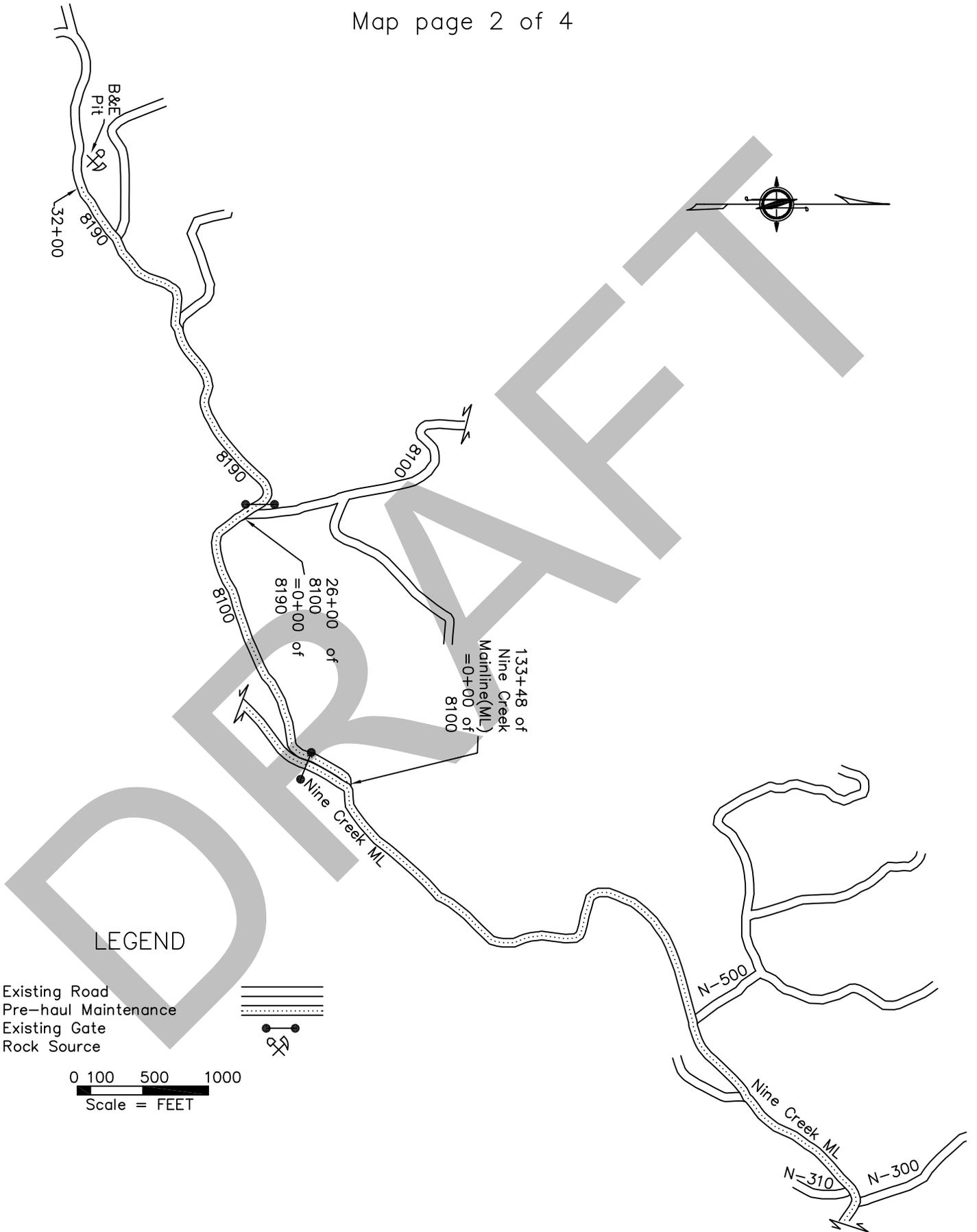
SCHWEITZER
ROAD PLAN MAP
Map page 1 of 4



LEGEND

- Existing Road 
 - Pre-haul Maintenance 
 - Existing Gate 
 - Existing Bridge 
- 0 100 500 1000
Scale = FEET

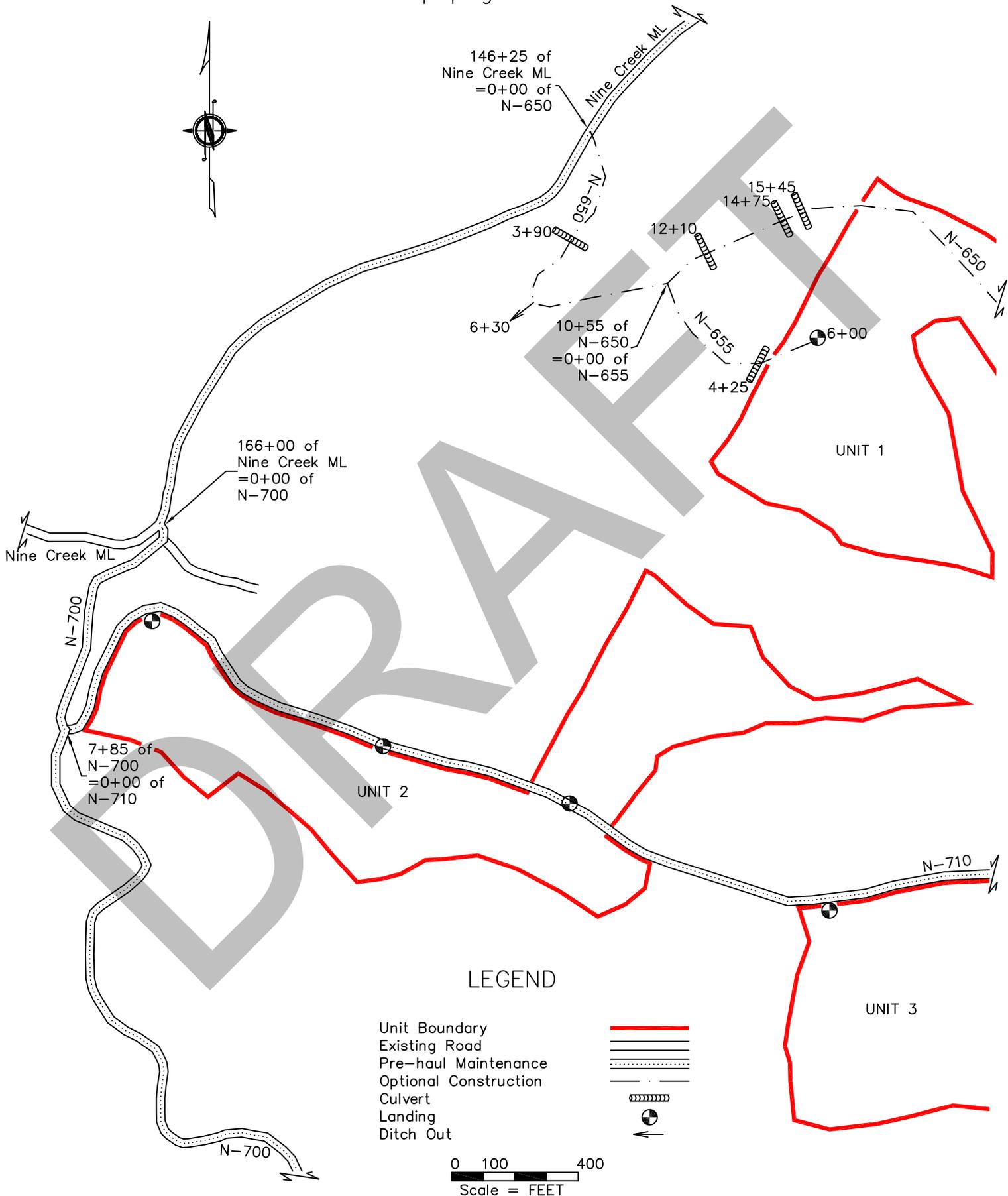
SCHWEITZER ROAD PLAN MAP Map page 2 of 4



SCHWEITZER

ROAD PLAN MAP

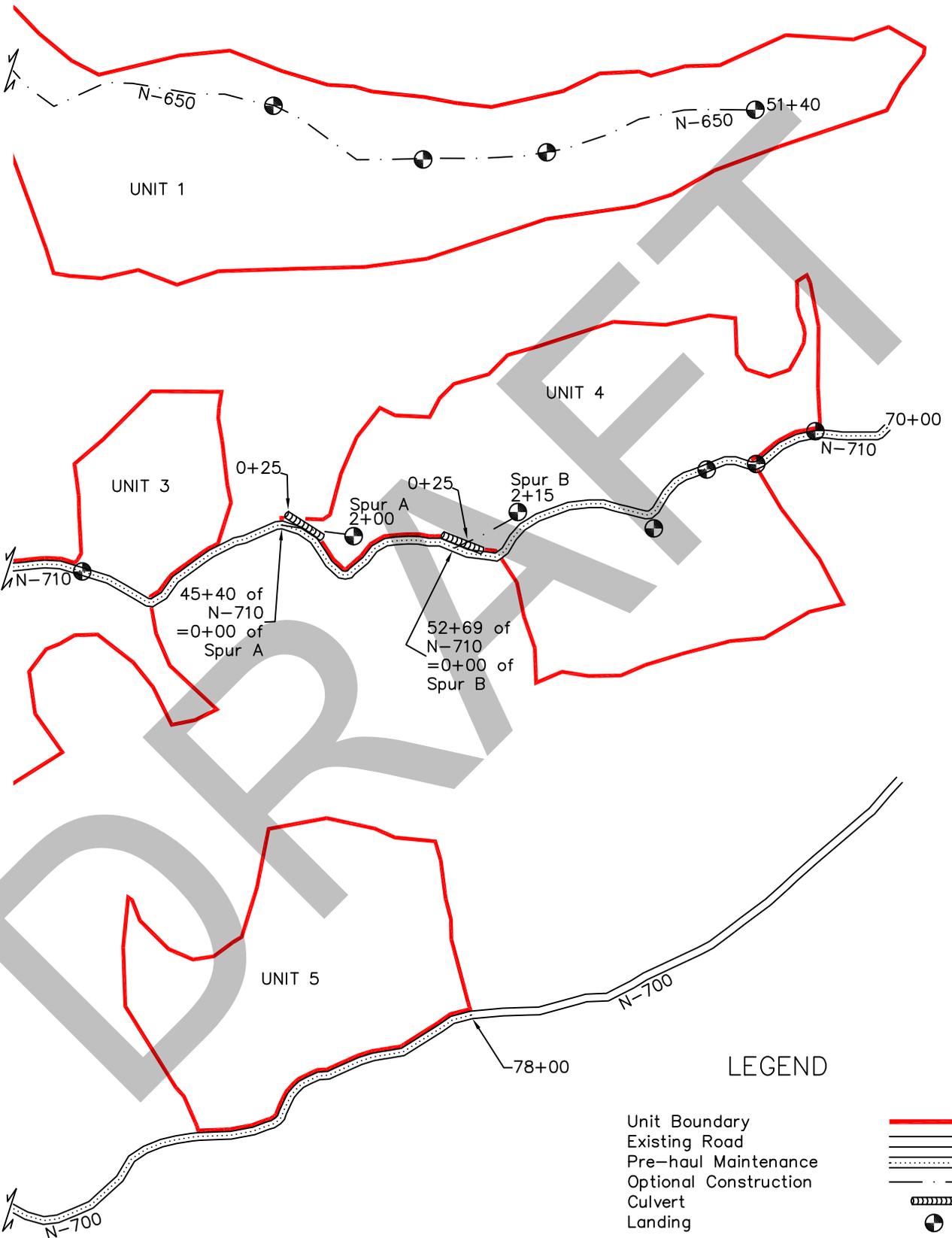
Map page 3 of 4



SCHWEITZER

ROAD PLAN MAP

Map page 4 of 4



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

SCHWEITZER TIMBER SALE ROAD PLAN
LEWIS COUNTY
LEWIS DISTRICT
PACIFIC CASCADE REGION

AGREEMENT NO.: 30-100724

STAFF ENGINEER: CHRIS WERNER

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>
Nine Creek Mainline	0+00 to 166+00	Prehaul Maintenance
N-700	0+00 to 78+00	Prehaul Maintenance
N-710	0+00 to 70+00	Prehaul Maintenance
8100	0+00 to 26+00	Prehaul Maintenance
8190	0+00 to 32+00	Prehaul 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>
N-650	0+00 to 51+40	Construction
N-655	0+00 to 6+00	Construction
Spur A	0+00 to 2+00	Construction
Spur B	0+00 to 2+15	Construction

0-4 CONSTRUCTION

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

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>
Nine Creek Mainline	0+00 to 166+00	Grade and shape road. Apply SPOT ROCK per the ROCK LIST and compact.
N-700	0+00 to 78+00	Grade and shape road. Apply SPOT ROCK per the ROCK LIST and compact.
N-710	0+00 to 70+00	Grade and shape road. Apply SPOT ROCK per the ROCK LIST and compact.
8100	0+00 to 26+00	Grade and shape road. Apply SPOT ROCK per the ROCK LIST and compact.
8190	0+00 to 32+00	Grade and shape road. Apply SPOT ROCK per the ROCK LIST and compact.

0-7 POST-HAUL MAINTENANCE

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

0-12 DEVELOP ROCK SOURCE

Purchaser shall develop an existing rock source. Development will involve stripping and removing overburden, drilling and shooting, and manufacturing rock as required per ROCK LIST. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

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

1-2 UNFORESEEN CONDITIONS

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

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan.

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 5 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:

- Road centerline marked with wooden stakes, orange flagging, orange paint and RP’s for Construction.
- Pre-haul maintenance marked with wooden stakes, orange flagging and orange paint.

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 5 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 construction
- Rock application

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure period(s) 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	November 1 to April 30

1-26 OPERATING DURING CLOSURE PERIOD

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

1-29 SEDIMENT RESTRICTION

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

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 pit run roads.
- Wheel track rutting exceeds 4 inches on crushed rock 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, and perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION

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

If tracked equipment is used on bridge or 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 bridge or asphalt surface(s) and have surface(s) evaluated for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

Purchaser shall have bridges load rated by a Registered Professional Engineer licensed in the State of Washington. All load rating reports, calculations, or drawings must be stamped by the licensed engineer and submitted to the Contract Administrator prior to allowing any work to continue. All damage to the bridge from transporting equipment will be repaired at the Purchaser's expense.

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. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

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

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

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

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

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

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

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

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

2-4 PASSAGE OF LIGHT VEHICLES

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

2-5 MAINTENANCE GRADING – EXISTING ROAD

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.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-5 CLEARING

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

3-7 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. 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 24 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 or as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps must be positioned upright, with root wads in contact with the forest floor on stable locations.

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 as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, except by burning, before timber haul.

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 or at areas approved in writing by the Contract Administrator.

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 in natural openings or 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.

3-30 EXCLUSION OF DOZER BLADES

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

3-31 PILING

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

3-32 END HAULING ORGANIC DEBRIS

On 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.

SECTION 4 – EXCAVATION

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:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 6% in 100 feet.
- Maximum grade change for crest vertical curves is 6% in 100 feet.

4-5 CUT SLOPE RATIO

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

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

4-21 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. Locations changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

Turnarounds must be no larger than 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 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.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified on the CULVERT LIST and as directed by the Contract Administrator. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. Locations may not be changed without written approval from the Contract Administrator.

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 areas identified or approved by the Contract Administrator. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- 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.
- Outside the clearing limits.

4-47 NATIVE MATERIAL

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

4-55 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.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed subgrades 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 meet the specifications in Clauses 10-17 through 10-22.

5-6 CULVERT TYPE

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

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”. Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer’s recommendations.

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.

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock. Energy dissipater installation is subject to approval by the Contract Administrator.

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. Rock must be set in place by machine. Placement must with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed.

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.

SECTION 6 – ROCK AND SURFACING

6-2 ROCK SOURCE ON STATE LAND

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

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
B&E Pit	Sec. 24 T13R06W	SEE ROCK LIST

6-5 ROCK FROM COMMERCIAL SOURCE

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

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Purchaser shall conduct rock source development in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before starting any operations in the rock source.

6-12 ROCK SOURCE SPECIFICATIONS

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

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

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

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- All vehicle access to the top of the pit faces must be blocked.

6-14 DRILL AND SHOOT

Rock drilling and shooting must meet the following specifications:

- Oversize material remaining in the rock source at the conclusion of the timber sale may not exceed 5% of the total volume mined in that source.
- Oversize material is defined as rock fragments larger than two feet in any dimension.
- Purchaser shall notify the Contract Administrator a minimum of 5 working days before blasting operations.
- Purchaser shall submit an informational drilling and shooting plan to the Contract Administrator 5 working days before any drilling.
- All operations must be carried out in compliance with the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and the Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- Purchaser shall block access roads and trails before blasting operations.

6-23 ROCK GRADATION TYPES

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

6-32 2 ½-INCH MINUS CRUSHED ROCK

% Passing 2 ½" square sieve	100%
% Passing 1 ¼" square sieve	55 - 75%
% Passing U.S. #4 sieve	20 - 45%

Of the fraction passing the No. 4 sieve, 40% to 60% must pass the No. 10 sieve.

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.

6-41 SELECT PIT RUN ROCK

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

6-43 QUARRY SPALLS

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

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

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are 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.

6-56 ROCK MEASUREMENT BY TRUCK VOLUME

Measurement of SPOT ROCK, QUARRY SPALLS and LANDING ROCK is on a cubic yard truck measure basis. The Contract Administrator will measure each truck box before rock hauling. An average of such volumes for each truck will be used to tally the volume hauled. The Contract Administrator may periodically require that a load be flattened off and its volume calculated. Purchaser shall maintain load tally sheets for each truck as shown in ROCK ACCOUNTABILITY DETAIL and shall give them to the Contract Administrator on a weekly basis during rocking operations.

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for 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.

6-76 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

7-5 STRUCTURE DEBRIS

Purchaser shall not allow debris from the installation or removal of structures to enter any stream.

SECTION 8 – EROSION CONTROL

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 3-inch layer of straw to all exposed soils at culvert installations. 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>Location</u>	<u>Qty (lbs)*</u>	<u>Type</u>
N-650	0+00 to 51+40	142	Grass Seed
N-655	0+00 to 6+00	20	Grass Seed
Spur A	0+00 to 2+00	6	Grass Seed
Spur B	0+00 to 2+15	7	Grass Seed

*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 during the first available opportunity 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.

8-19 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 inside the grubbing limits 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

9-5 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

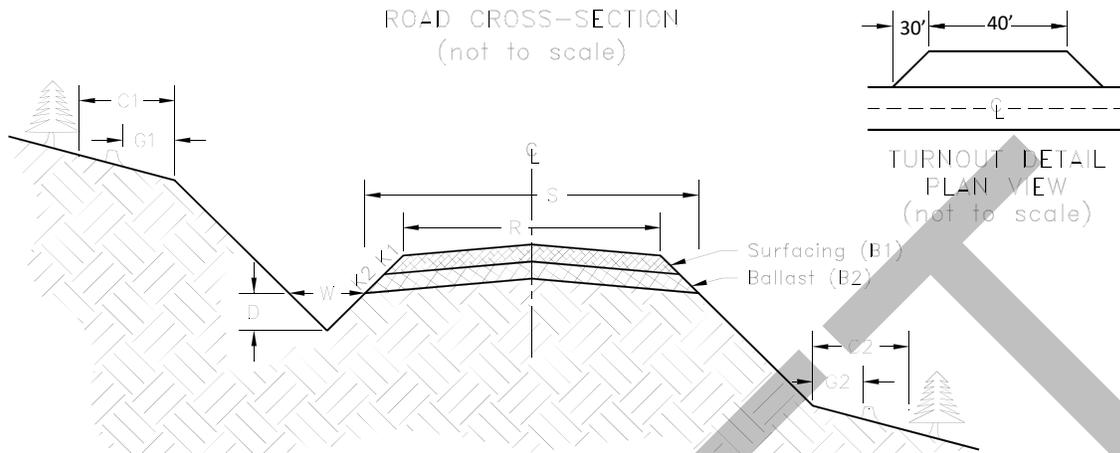
Polyethylene culverts must meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culverts must be Type S – double walled with a corrugated exterior and smooth interior.

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.

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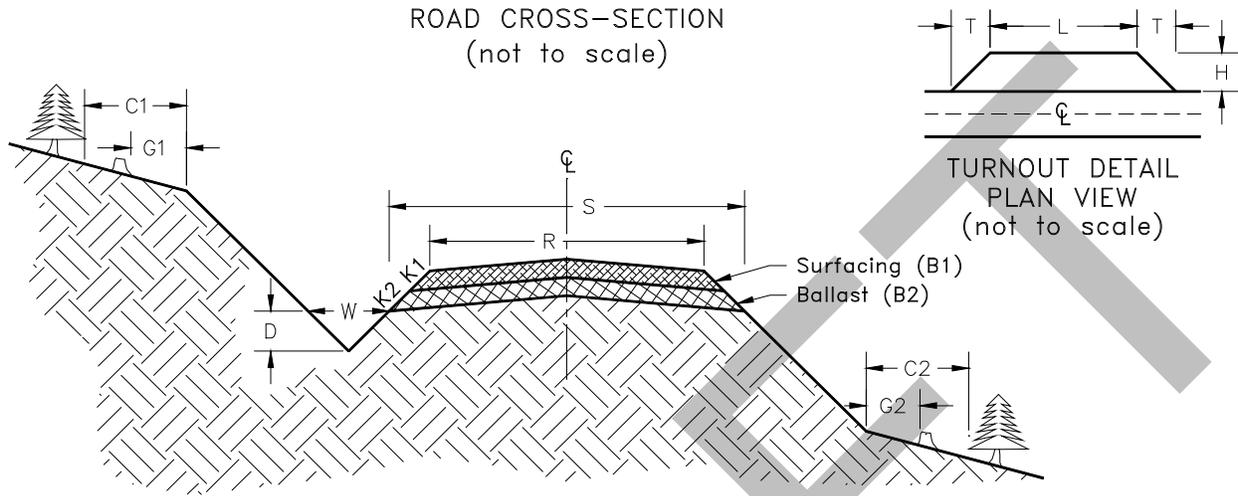
TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width	Road Width	Ditch		Crown in. @ CL	Grubbing Limits		Clearing Limits	
						Width	Depth		G1	G2	C1	C2
				S	R	W	D					
Nine Creek Mainline	0+00	166+00	A	17'	12'	3'	1'	4"				
N-700	0+00	78+00	A	16'	12'	3'	1'	4"				
N-710	0+00	70+00	A	16'	12'	3'	1'	4"				
8100	0+00	26+00	A	16'	12'	3'	1'	4"				
8190	0+00	32+00	A	16'	12'	3'	1'	4"				
*N-650	0+00	51+40	B	16'	12'	3'	1'	4"	5'	5'	10'	10'
*N-655	0+00	6+00	C	16'	12'	3'	1'	4"	5'	5'	10'	10'
*Spur A	0+00	2+00	C	16'	12'	3'	1'	4"	5'	5'	10'	10'
*Spur B	0+00	2+15	C	16'	12'	3'	1'	4"	5'	5'	10'	10'

* Optional Construction - If roads are built then ROCK is REQUIRED per the ROCK LIST.

ROCK LIST
(Page 1 of 2)

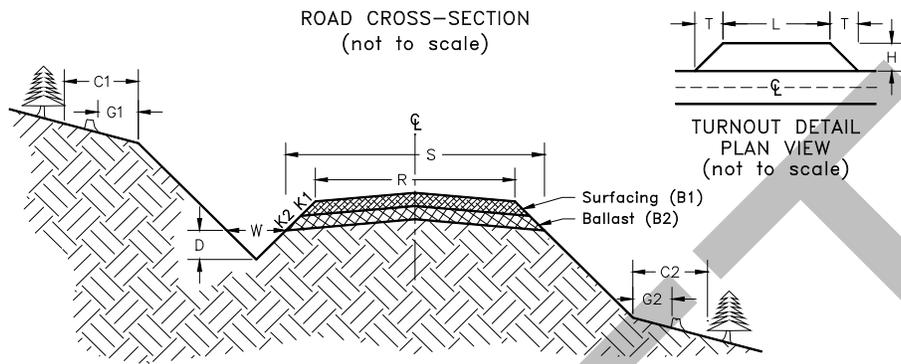


BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source
			K2	B2	SELECT PIT RUN (SPR)			
N-650	0+00	51+40	1 ½ : 1	15"	81	51.40	4165	B&E Pit
N-655	0+00	6+00	1 ½ : 1	15"	81	6.00	485	B&E Pit
Spur A	0+00	2+00	1 ½ : 1	15"	81	2.00	160	B&E Pit
Spur B	0+00	2+15	1 ½ : 1	15"	81	2.15	175	B&E Pit
LANDINGS			1 ½ : 1	15"	50	7	350	B&E Pit
TURNOUTS			1 ½ : 1	15"	50	6	300	B&E Pit
TURNAROUNDS			1 ½ : 1	15"	50	5	250	B&E Pit
INTERSECTIONS			1 ½ : 1	15"	50	4	200	B&E Pit

SPR BALLAST TOTAL **6,085** Cubic Yards

ROCK LIST (Page 2 of 2)



SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y./ Station	# of Stations	C.Y. Total	Rock Source
			K1	B1	2 ½ INCH MINUS CRUSHED			
Nine Creek Mainline	0+00	166+00	1 ½ : 1		500 yds ³ SPOT ROCK			B&E Pit
N-700	0+00	78+00	1 ½ : 1		500 yds ³ SPOT ROCK			B&E Pit
N-710	0+00	70+00	1 ½ : 1		500 yds ³ SPOT ROCK			B&E Pit
8100	0+00	26+00	1 ½ : 1		250 yds ³ SPOT ROCK			B&E Pit
8190	0+00	32+00	1 ½ : 1		250 yds ³ SPOT ROCK			B&E Pit

SURFACE TOTAL **2,000** Cubic Yards

QUARRY SPALLS

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y./ Station	# of Stations	C.Y. Total	Rock Source
			K1	B1	QUARRY SPALLS			
CULVERTS					1	7	7	B&E Pit

QUARRY SPALLS TOTAL **7** Cubic Yards

CULVERT LIST

Road Number	Location	Culvert		Length (ft)			Riprap (C.Y.)			Backfill Material	Placement Method
		Dia.	Gauge	Culvert	Downspt	Flume	Inlet	Outlet	Type		
N-650	3+90	18"		30			.5	.5	QS	NT	ZDH
N-650	6+30	DOR									
N-650	12+10	18"		30			.5	.5	QS	NT	ZDH
N-650	14+75	18"		30			.5	.5	QS	NT	ZDH
N-650	15+45	24"		40			.5	.5	QS	NT	ZDH
N-655	4+25	18"		30			.5	.5	QS	NT	ZDH
Spur A	0+25	18"		40			.5	.5	QS	NT	ZDH
Spur B	0+25	18"		40			.5	.5	QS	NT	ZDH

Key:

- QS - Quarry Spalls
- NT - Native (bank run)
- SL - Select Fill
- ZDH - Zero Drop Height
- DOR - Ditchout Right

COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
ALL ROADS	ALL STATIONS		Pre-haul Surface		Vibratory Smooth Drum	20000	4	5
ALL ROADS	ALL STATIONS		Subgrade/Rock	8"	Vibratory Smooth Drum	20000	4	5
WASTE AREAS AND EMBANKMENTS				24"	Vibratory Smooth Drum	20000	4	5

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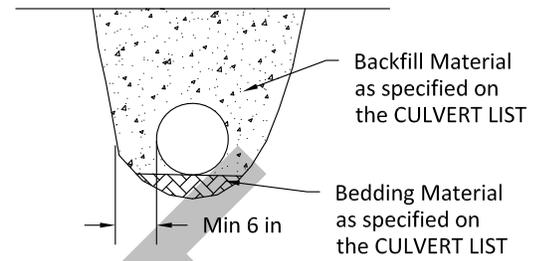
CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 1 OF 2

INSTALLATION REQUIREMENTS:

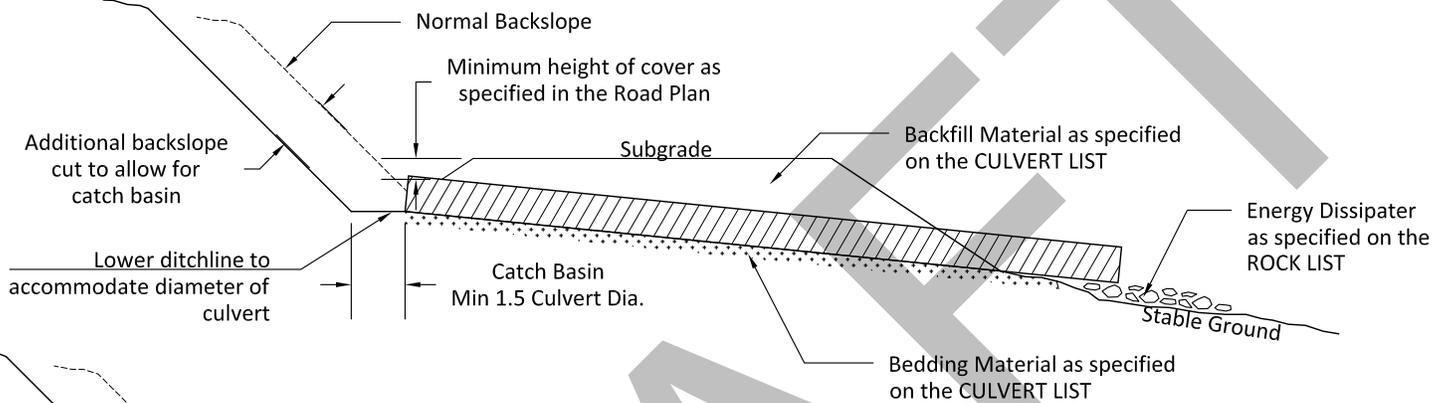
1. Proper preparation of foundation and placement of any required bedding material shall precede the installation of all culverts. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform, dense, unyielding base. The pipe must be uniformly 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

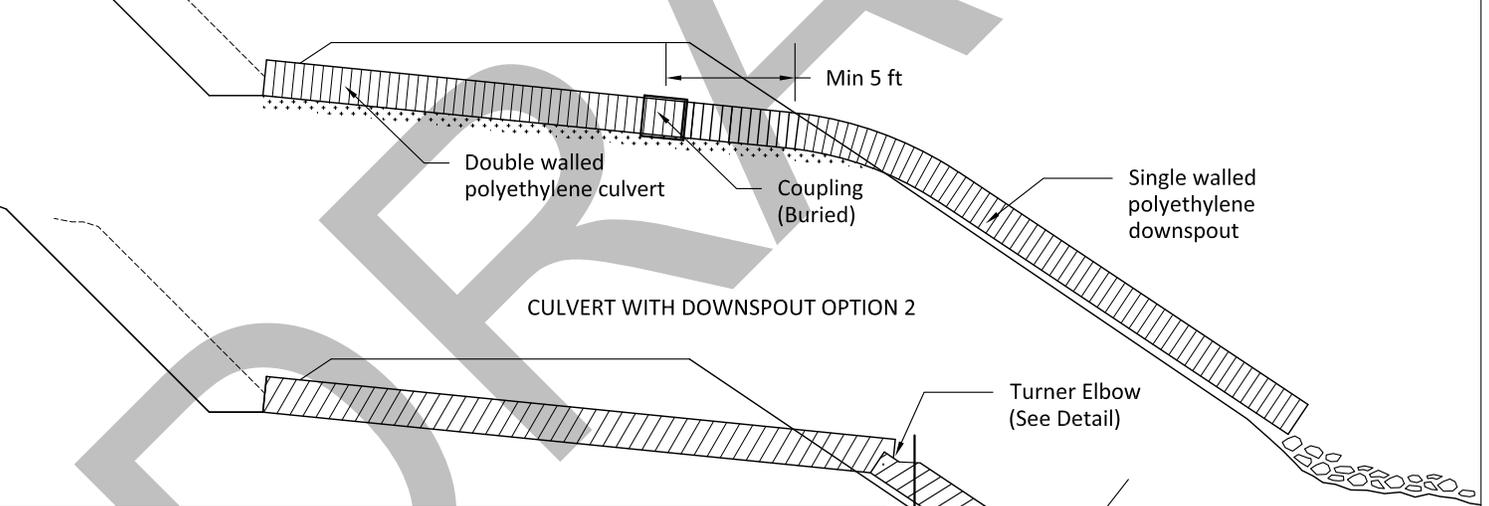
CROSS SECTION



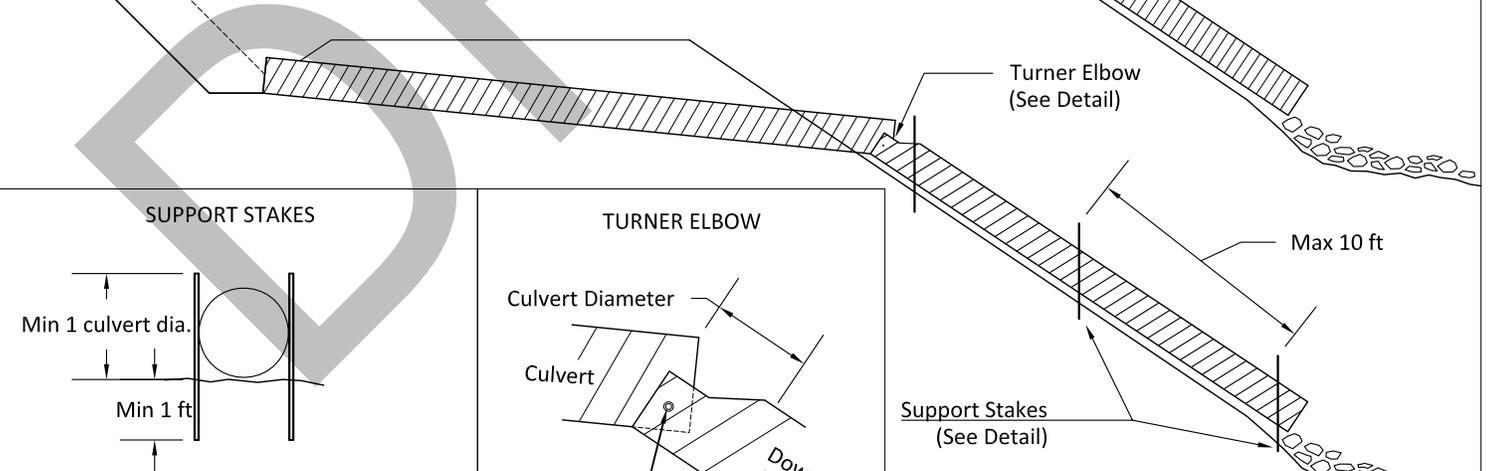
CULVERT PROFILE (TYPICAL)



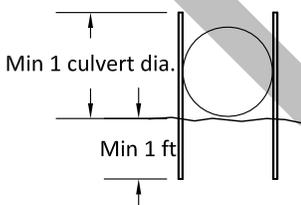
CULVERT WITH DOWNSPOUT OPTION 1



CULVERT WITH DOWNSPOUT OPTION 2

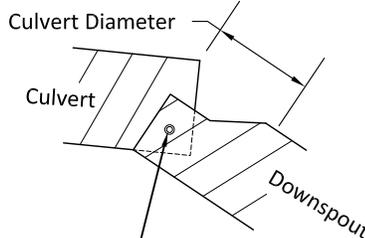


SUPPORT STAKES



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.

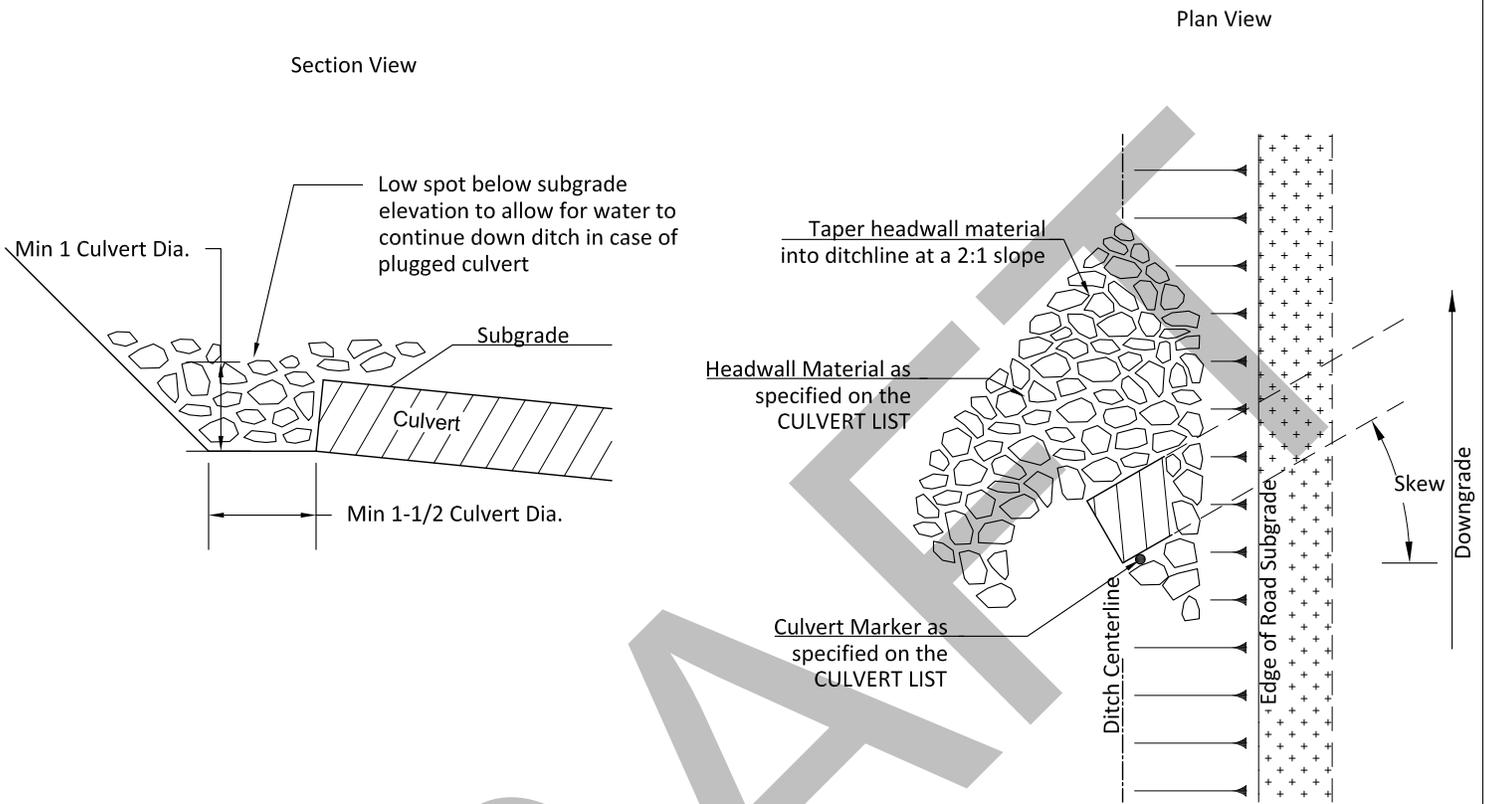
TURNER ELBOW



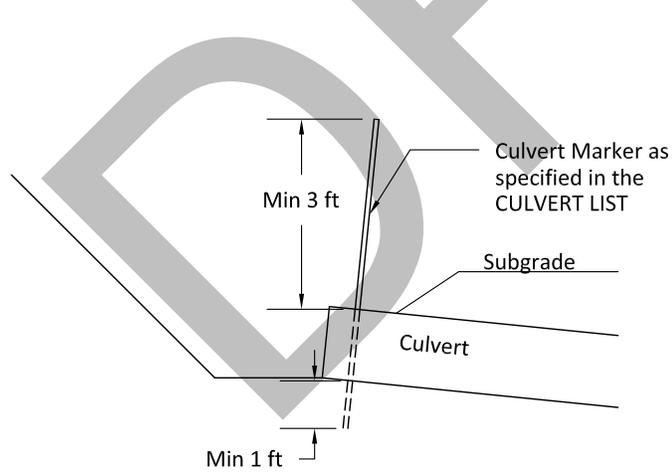
Bolted with $\frac{5}{8}$ " galvanized bolts and washers (both sides)
Downspout must be 6 inches larger in diameter than the culvert.

CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 2 OF 2

HEADWALLS

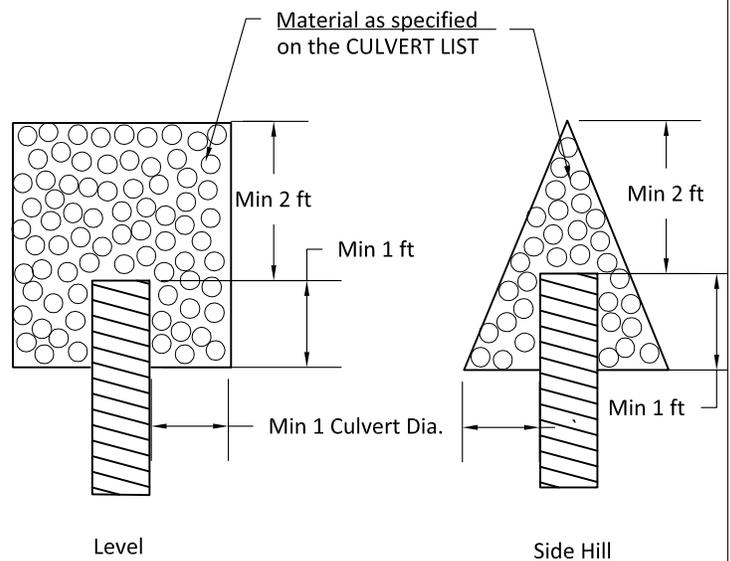


CULVERT MARKERS



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.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 1 of 2

Cuts and Fills

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

Surface

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

Drainage

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

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 2 of 2

Preventative Maintenance

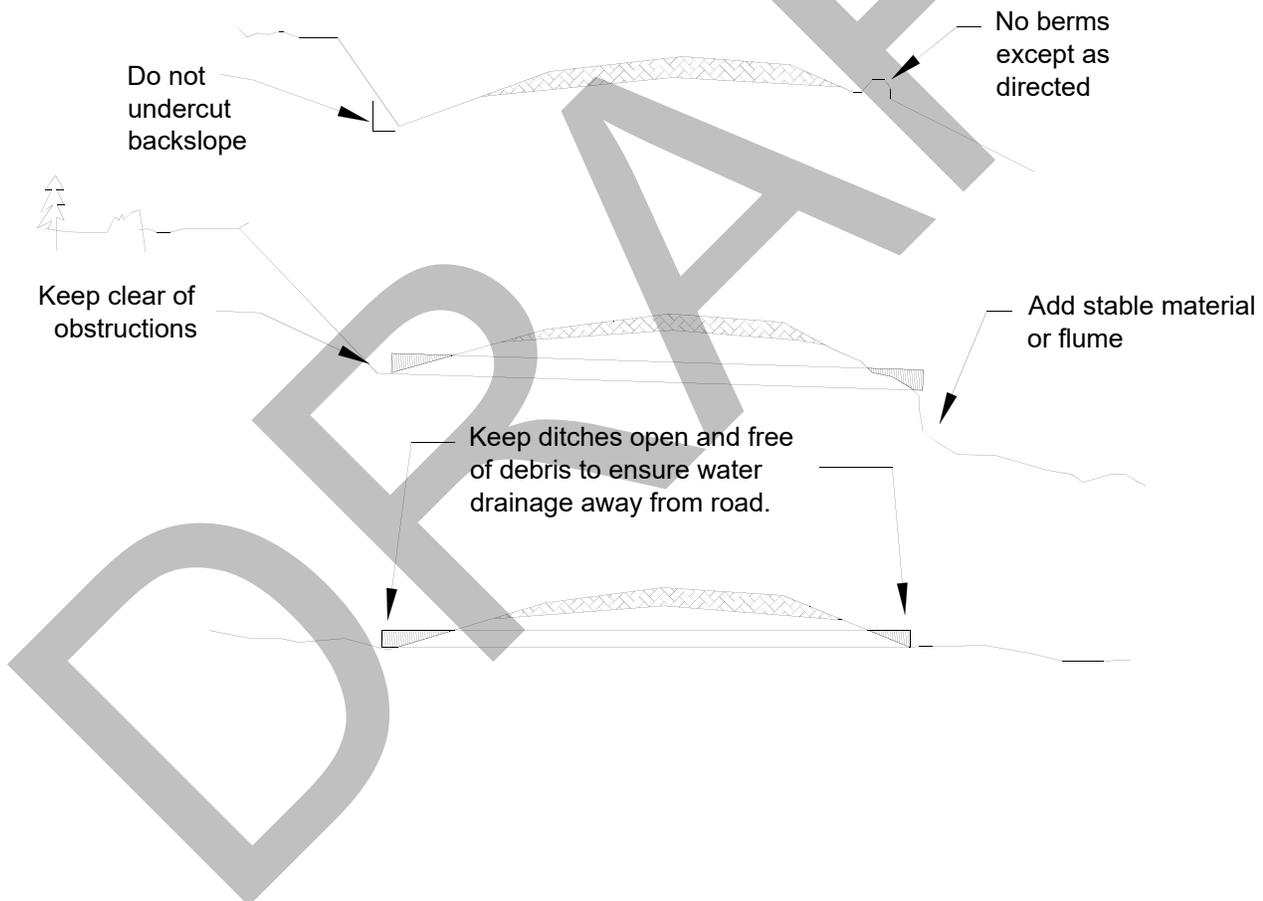
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

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

Debris

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



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PACIFIC CASCADE REGION

B&E PIT DEVELOPMENT PLAN

SW ¼, NE ¼, Section 24, Township 13 North, Range 06 West, W.M.
(Page 1 of 3)

1. Mining shall begin in Area A and development shall continue into Area B if needed.
2. All vegetation including stumps shall be cleared a minimum of 20 feet beyond the top of all working faces. Trees shall be cleared to a minimum of ¾ of the height of the tallest tree adjacent to the pit. The Contractor shall maintain a minimum of 15 foot wide stripped area from the pit face at all times.
3. Overburden shall be end hauled to the designated waste area and compacted. Minimal acceptable compaction is achieved by placing waste material in 2 foot or shallower lifts and routing excavation equipment over entire width of the lifts.
4. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled in the designated waste area.
5. Pit faces shall not exceed 20 feet in height and shall be sloped no steeper than 1/2:1.
6. Working bench width shall be a minimum of 25 feet.
7. The pit floor shall have continuity of slope be left in a smooth and neat condition, providing drainage to the west at a minimum of 2 percent. All knobs, bumps, or extrusions shall be removed to the designated floor level by excavation.
8. Oversize material is defined as rock fragments larger than two feet in any direction. At the conclusion of operations, oversize material shall be placed as directed by the Contract Administrator.
9. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed or access blocked to highway vehicles. Upon completion of operations in the pit, the area will be left in a condition that will not endanger public safety, damage property, or be hazardous to animal or human life.
10. All operations shall be carried out in compliance with all regulations of:
 - a. Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
 - b. "Safety Standards for Construction Work" (296-155 WAC), Washington Department of Labor and Industries.

B&E PIT DEVELOPMENT PLAN

SW ¼, NE ¼, Section 24, Township 13 North, Range 06 West, W.M.
(Page 2 of 3)

11. The pit area shall be worked and left in a condition that future operations may proceed in an orderly manner.
12. Upon completion of operations, the site shall be cleared of all temporary structures, equipment and rubbish, and shall be left in a neat and presentable condition.

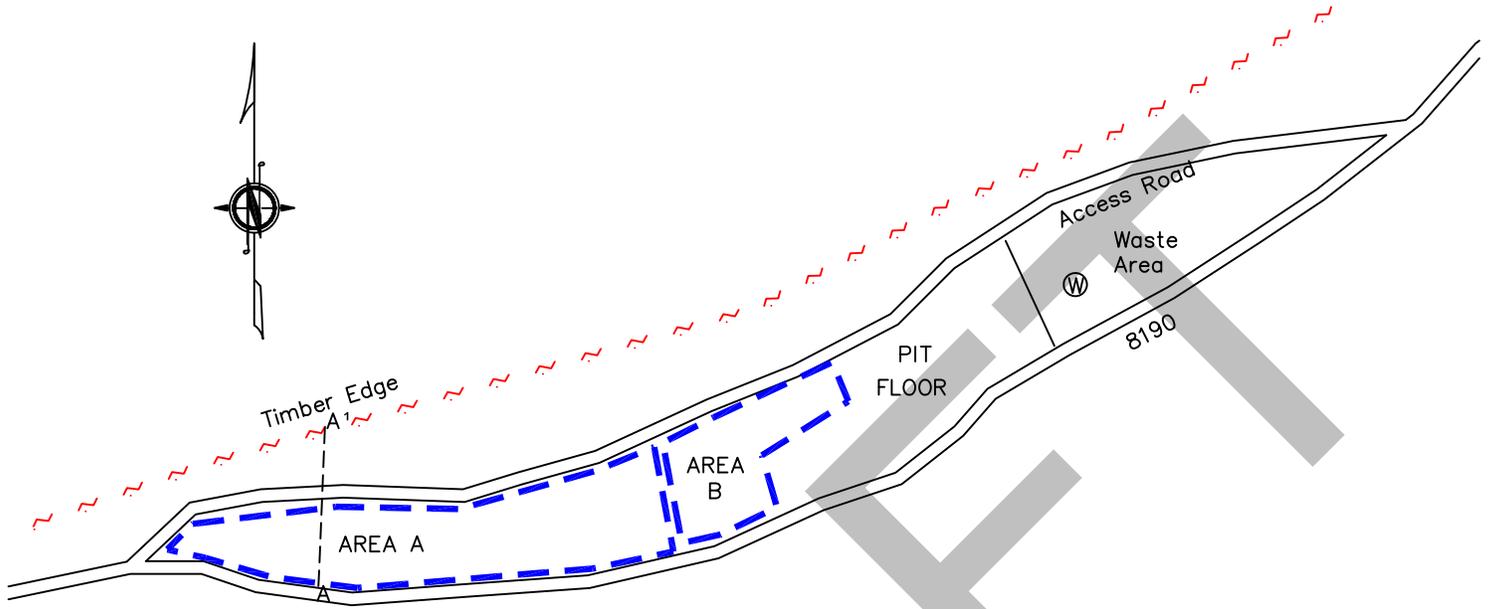
Date of update 5/21/2020 C.W.

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B&E PIT PLAN

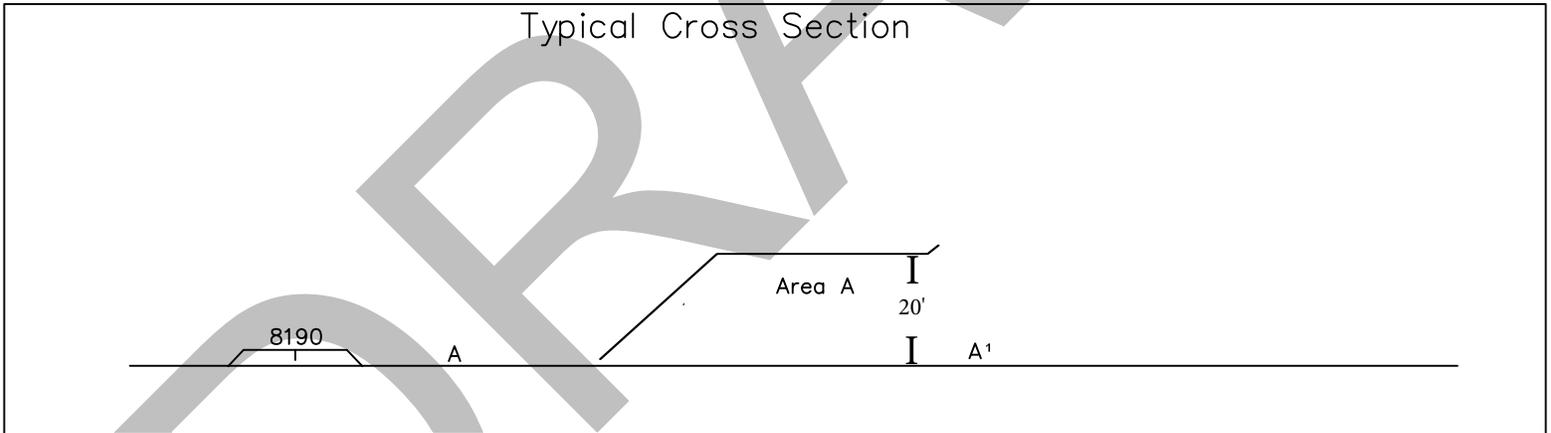
SW 1/4, NE 1/4, SEC. 24, T13N, R06W, W.M.

Page 3 of 3



Not to Scale

Typical Cross Section



DEPARTMENT OF NATURAL RESOURCES

SUMMARY - Road Development Costs

REGION: PACIFIC CASCADE

DISTRICT: LEWIS

SALE/PROJECT NAME: Schweitzer TBS

CONTRACT NUMBER: 30-100724

LEGAL DESCRIPTION: Sec 19,20,24 & 30 T13R05W

ROAD NUMBER:

Required: Nine Creek Mainline, N-700, N-710, 8100, 8190

Optional: N-650, N-655, Spur A, Spur B

ROAD STANDARD:	Construction	Reconstruction	Pre-haul maintenance
NUMBER OF STATIONS:	<u>61.55</u>	<u>0.00</u>	<u>372.00</u>
SIDESLOPE:	<u>25%</u>	<u>20%</u>	<u>20%</u>
CLEARING AND GRUBBING:	<u>\$8,484</u>	<u>\$0</u>	
EXCAVATION AND FILL:	<u>\$15,069</u>	<u>\$0</u>	
MISC. MAINTENANCE:	<u>\$525</u>	<u>\$0</u>	<u>\$3,906</u>
ROCK TOTALS:			
Required:	<u>\$83,090</u>	<u>\$0</u>	<u>\$35,921</u>
Optional:	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total:	<u>\$83,090</u>	<u>\$0</u>	<u>\$35,921</u>
CULVERTS AND FLUMES:	<u>\$6,275</u>	<u>\$0</u>	<u>\$0</u>
	<u>\$0</u>	<u>\$0</u>	<u>\$ -</u>
GENERAL EXPENSES:	<u>\$10,210</u>	<u>\$0</u>	<u>\$3,584</u>
MOBILIZATION:	<u>\$3,993</u>	<u>\$0</u>	<u>\$3,993</u>
TOTAL COSTS:	<u>\$127,645</u>	<u>\$0</u>	<u>\$47,404</u>
COST PER STATION:	<u>\$2,074</u>		<u>\$127</u>

ROAD DEACTIVATION AND ABANDONMENT COSTS: \$0

TOTAL (All Roads) = \$175,049
 TOTAL w/o Optional Rock (All Roads) = \$175,049
 SALE VOLUME MBF = 7,234
 TOTAL COST PER MBF = \$24.20
 TOTAL COST PER MBF w/o Optional Rock = \$24.20

Compiled by: Chris Werner

Date: _____

SALE NAME: Schweitzer TBS

CONTRACT NUMBER: 30-100724

Road No. 0

Stations: 61.6

Date:

I. CLEARING AND GRUBBING:

Flat Rate -	% Side Slope	MBF/ac	Disposal Factor	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
N-650	25	30.0	1.20	2.44	\$45	1.00	51.40	\$6,772
N-655	25	30.0	1.20	2.44	\$45	1.00	6.00	\$791
Spur A	30	30.0	1.20	4.11	\$45	1.00	2.00	\$444
Spur B	30	30.0	1.20	4.11	\$45	1.00	2.15	\$477

Total Stations= 61.55

Required Stations= 0.00
 Optional Stations= 61.55
 Total Stations = 61.55
 Required Clear and Grub Sub-total= \$ -
 Optional Clear and Grub Sub-total= \$8,484
 Clear and Grub TOTAL = \$ 8,484.08

Flat Rate -	% Side Slope	Exc. Type Fact.	Production Factor	Cost/ Station	Width Factor	Total Stations	Sub Total
N-650	25	1.2	2.25	\$90	1.00	51.40	\$12,490
N-655	25	1.2	2.25	\$90	1.00	6.00	\$1,458
Spur A	30	1.2	2.50	\$90	1.00	2.00	\$540
Spur B	30	1.2	2.50	\$90	1.00	2.15	\$581

Total Stations=

IV. CULVERTS AND FLUMES:

*End Haul, Over Haul, Large Fills/Cuts

End Haul/ Over Haul Large Fills/ Cuts	Estimated Vol. (cy)	No. of Equip. Days	Cost/day	Sub Total
				\$0

Required Stations= 0.00
 Optional Stations= 0.00
 Required Excavation Sub-total= \$ -
 Optional Excavation Sub-total= \$15,069
 Excavation TOTAL = \$ 15,068.70

Required						
Description	Qty.	Gauge	Diameter	No/Length	Installed Cost/ft	Sub-total
CPP	4		18	30	\$25.00	\$3,000
	2		18	40	\$25.00	\$2,000
	1		24	40	\$30.00	\$1,200
Bands & Gaskets	3				\$25.00	\$75

Required Culvert Subtotal = \$6,275

Optional						
Description	Qty.	Gauge	Diameter	No/Length	Installed Cost/ft	Sub-total
CPP			18	30	\$18.00	\$0
Bands & Gaskets						\$0

Optional Culvert Subtotal = \$0

Culvert Total = \$6,275

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

Structure Total = \$0

Required		
Pounds	\$/lb	Sub-total
175	\$3.00	\$525

Optional		
Pounds	\$/lb	Sub-total
	\$3.00	\$0

Grass Seeding Total = \$525

III. BALLAST AND SURFACING :

Required Rock					
UNIT COSTS	Ballast	Surfacing	Landing	Culvert	Riprap
Drill & Shoot	\$3.00	\$2.25	\$3.00	\$3.00	
Dig and load	\$1.00	\$1.50	\$1.00	\$1.00	
Crushing		\$4.50			
Purchase					
Haul *	\$4.63	\$4.63	\$4.63	\$4.63	\$4.63
Spread	\$1.00	\$1.00	\$1.00	\$1.00	
Compact	\$1.00	\$1.50	\$1.00	\$1.00	
Strip	\$2.00		\$2.00	\$2.00	
Reclamation					
Use tax	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08
TOTAL (\$/cy)	\$13.64	\$16.61	\$13.64	\$12.56	\$5.00

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

Item	Description	Cubic Yards	Ballast	Surfacing	Landing	Culvert	Riprap
Ballast	SPR	4985	4985 Cu. yds @	\$13.64 /cu. yd =			\$67,997
Surfacing			0 Cu. yds @	\$16.61 /cu. yd =			\$0
Landings	SPR	350	350 Cu. yds @	\$13.64 /cu. yd =			\$4,774
Culverts	Quarry Spalls	7	7 Cu. yds @	\$12.56 /cu. yd =			\$88
TO/TA/Inter	SPR	750	750 Cu. yds @	\$13.64 /cu. yd =			\$10,230
Stockpile			0 Cu. yds @	\$16.61 /cu. yd =			\$0

Total Rock = 6,092 Required Rock total = \$83,090

Optional Rock					
UNIT COSTS	Ballast	Surfacing	Landing	Culvert	Riprap
Drill & Shoot	\$2.50		\$2.50	\$3.00	
Dig and load					
Crushing					
Purchase					
Haul *	\$3.46		\$3.46	\$3.46	
Spread	\$2.00		\$2.00	\$2.00	
Compact	\$1.50		\$1.50		
Strip	\$1.00		\$1.00		
Reclamation					
Use tax					
TOTAL (\$/cy)	\$10.46	\$0.00	\$10.46	\$8.46	\$0.00

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

Item	Description	Cubic Yards	Ballast	Surfacing	Landing	Culvert	Riprap
Ballast			0 Cu. yds @	\$10.46 /cu. yd =			\$0
Surfacing			0 Cu. yds @	\$0.00 /cu. yd =			\$0
Landings			0 Cu. yds @	\$10.46 /cu. yd =			\$0
Culverts			0.0 Cu. yds @	\$8.46 /cu. yd =			\$0.00
Turn Arouds			0 Cu. yds @	\$10.46 /cu. yd =			\$0
Stockpile			0 Cu. yds @	\$0.00 /cu. yd =			\$0

Total Rock = 0 Optional Rock total = \$0

Rock Total = \$83,090

Required Construction= \$ 6,800.00
 Optional Construction= \$ 23,552.78
 Required Rock= \$83,090
 Optional Rock= \$0
 Required Sub-total= \$ 89,889.76
 Optiona Sub-total= \$ 23,552.78
 Sub-TOTAL = \$113,443

Overhead & General Exp. Add 9% \$10,210

VI. GENERAL EXPENSES:

VII. MOBILIZATION:

Total Mobilization = \$7,985 Mobilization sub-total = \$3,992.50

SHEET TOTAL = \$127,645

SALE NAME: Schweitzer TBS

CONTRACT NUMBER: 30-100724

Total stations Pre-Haul Maintenance = 372.00

I. MISC. MAINTENANCE ITEMS:

	Cost/ Station	Total Stations	Sub Total
mechanical brushing (\$/sta) =	25.00		\$0
hand brushing =			\$0
ditch cleaning (\$/sta) =	55.00		\$0
Sediment Traps (ea.) =	60.00		\$0
grading (\$/sta) =	8.00	372.00	\$2,976
compacting (\$/sta) =	2.50	372.00	\$930
Misc TOTAL =			\$3,906

III. BALLAST AND SURFACING :

Ballast source: B&E Pit
 Surface source:
 Riprap source :

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

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

R.T. Miles = 5.0
 Ave. Speed = 19
 Delay (Hrs.) = 0.2
 Cost / Hour = \$100.00
 CY / Load = 10

Ballast (4" Jaw Run) Cu. yds @ \$0.00 /cu. yd = \$0
 Surfacing (2 1/2"-) 2000 Cu. yds @ \$17.96 /cu. yd = \$35,921
 Quarry Spalls Cu. yds @ \$0.00 /cu. yd = \$0

UNIT COSTS	Ballast	Surfacing	Quarry Spalls
Drill & Shoot		\$3.00	
Dig and load		\$1.50	
Crushing		\$5.00	
Purchase			
Haul *		\$4.63	
Spread		\$1.50	
Compact		\$1.00	
Strip			
Reclamation			
Use tax	\$0.08	\$0.08	\$0.08
TOTAL (\$/cy)	\$0.00	\$17.96	\$0.00

Rock total = \$35,921

IV. CULVERTS AND FLUMES:

Description	Qty.	Gauge	Diameter (in.)	No/Length (ft)	Installed Cost/ft	Sub-total
CPP			18	30	\$20.00	\$0
Bands & Gaskets						\$0

Culvert total = \$0

V. STRUCTURES

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

Sub-TOTAL = \$39,827

VI. GENERAL EXPENSES:

Overhead & General Exp. Add 9% \$3,584

VII. MOBILIZATION:

Total Mobilization = \$7,985 Mobilization sub-total = \$3,992.50

Road No. 0
 Standard: Pre-haul maintenance
 Stations: 372.00

SHEET TOTAL = \$47,404

By: Chris Werner

Sheet 3 of 4

Date: 01/00/00

VII. MOBILIZATION:	Description	\$ per Move	# of Moves	Sub-total
	Dump Trucks	100	3	\$300
* Move in costs are averaged over all three sheets.	Grader	160	1	\$160
	Compactor	450	1	\$450
	Excavator	450	2	\$900
	Dozer (D8)	450	1	\$450
	Front end loader	450	1	\$450
	Rock crusher	\$4,000	1	\$4,000
	Drill	\$1,000	1	\$1,000
	Dozer (D5)	\$275	1	\$275
	Construction Mobilization sub-total =		\$3,992.50	
	Reconstruction Mobilization sub-total =			
	Pre-haul Mobilization sub-total =		\$3,992.50	
	Total Mobilization =			<u>\$7,985</u>



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

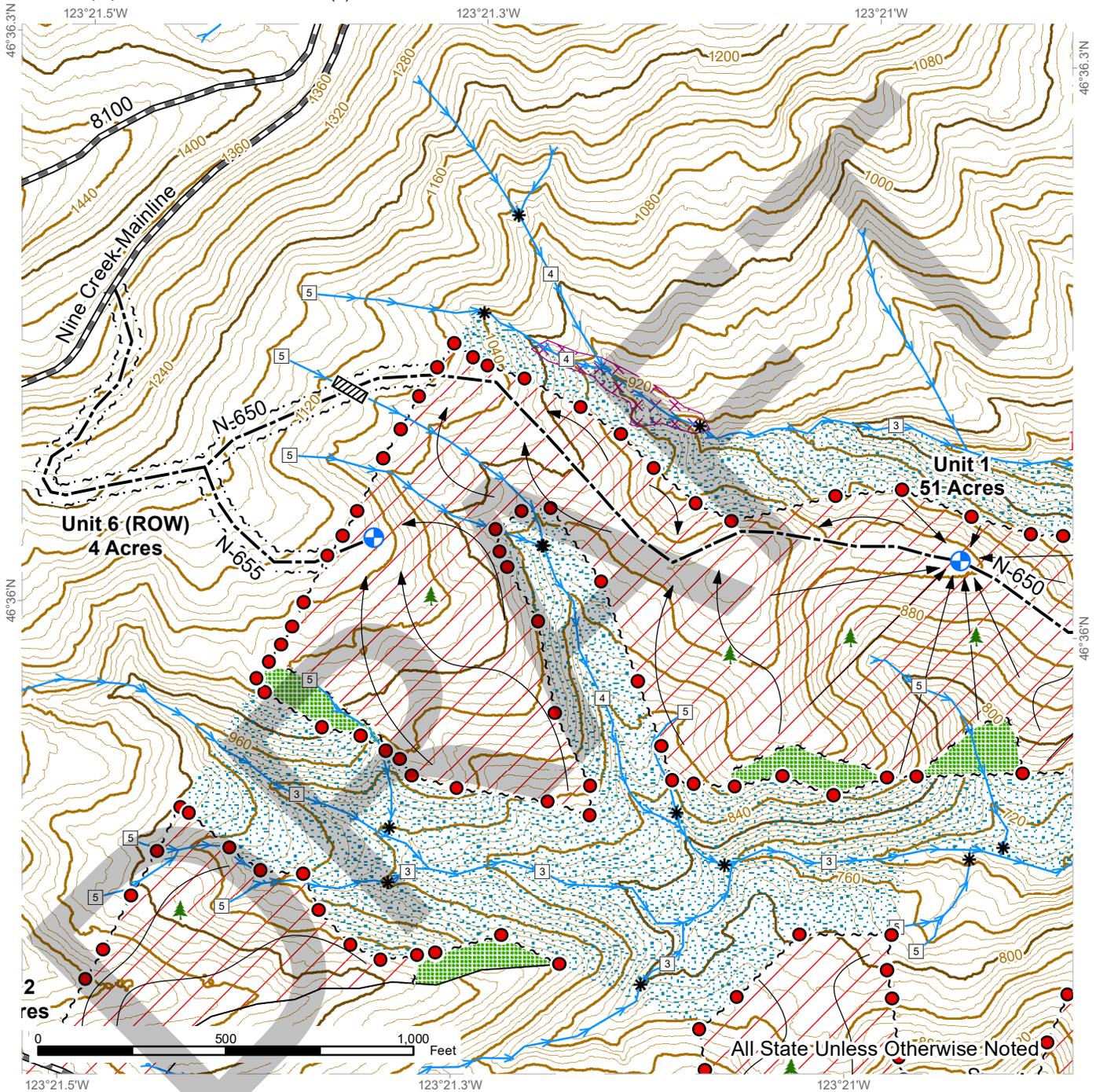
Temporary Reconstruction: linear feet
Roads to be reconstructed (optional and required) and then abandoned

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: SCHWEITZER
 AGREEMENT#: 30-100724
 TOWNSHIP(S): T13R5W
 TRUST(S): State Forest Transfer (1)

REGION: Pacific Cascade Region
 COUNTY(S): Lewis
 ELEVATION RGE: 640-1200



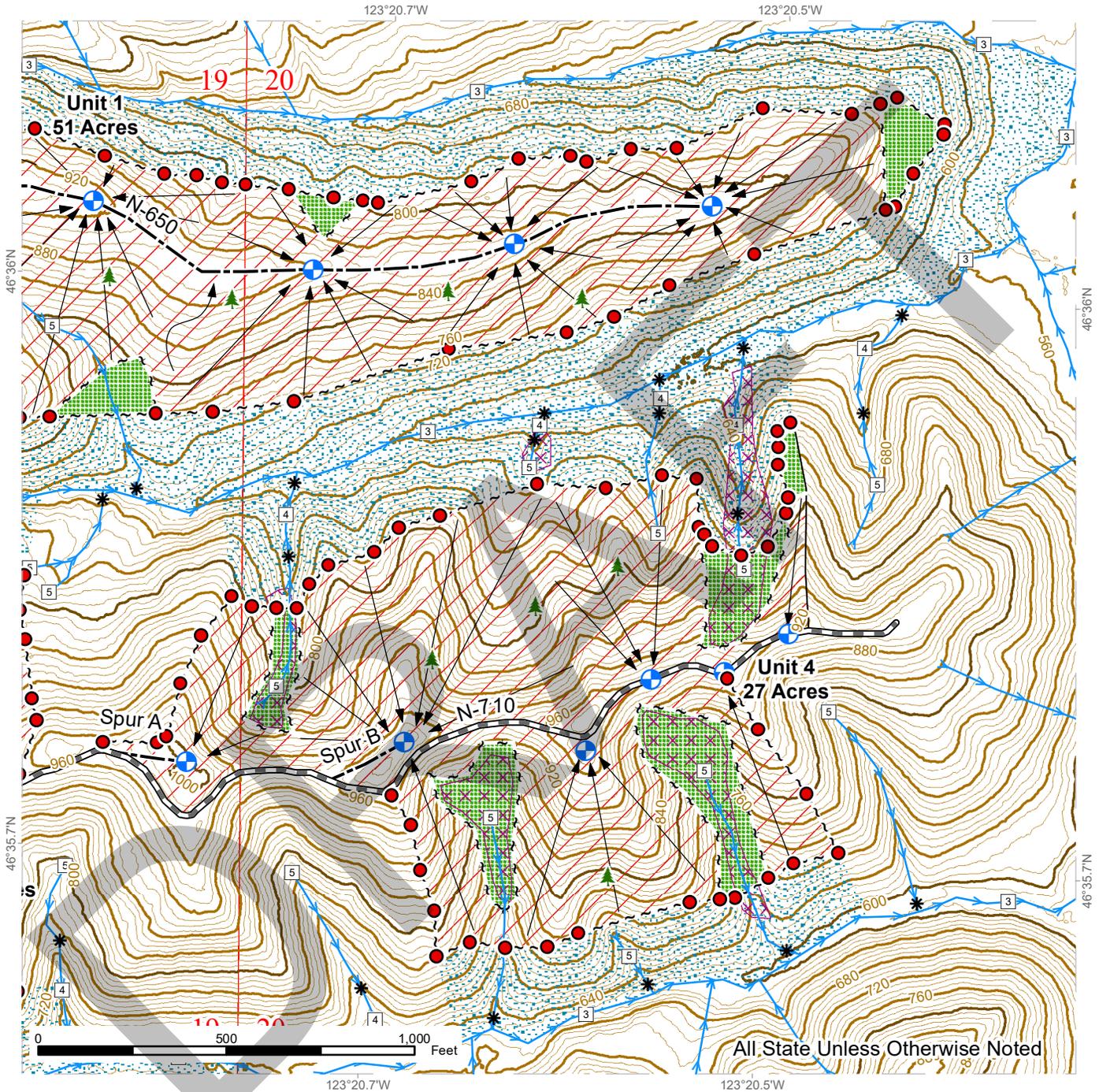
	Sale Area		Required Pre-Haul Maintenance		Streams
	Ground Harvest		Optional Construction		Stream Type
	Cable Harvest		Sale Boundary Tags		Stream Type Break
	Leave Tree Area		Timber Type Change		Culvert
	Riparian Mgt Zone		Leave Tree Tags		Landing - Proposed
	Potentially Unstable Slopes		Right of Way Tags		Leave Tree Area <1/4-acre
			Contours 10 ft		Traverse Point



LOGGING PLAN MAP

SALE NAME: SCHWEITZER
 AGREEMENT#: 30-100724
 TOWNSHIP(S): T13R5W
 TRUST(S): State Forest Transfer (1)

REGION: Pacific Cascade Region
 COUNTY(S): Lewis
 ELEVATION RGE: 640-1200



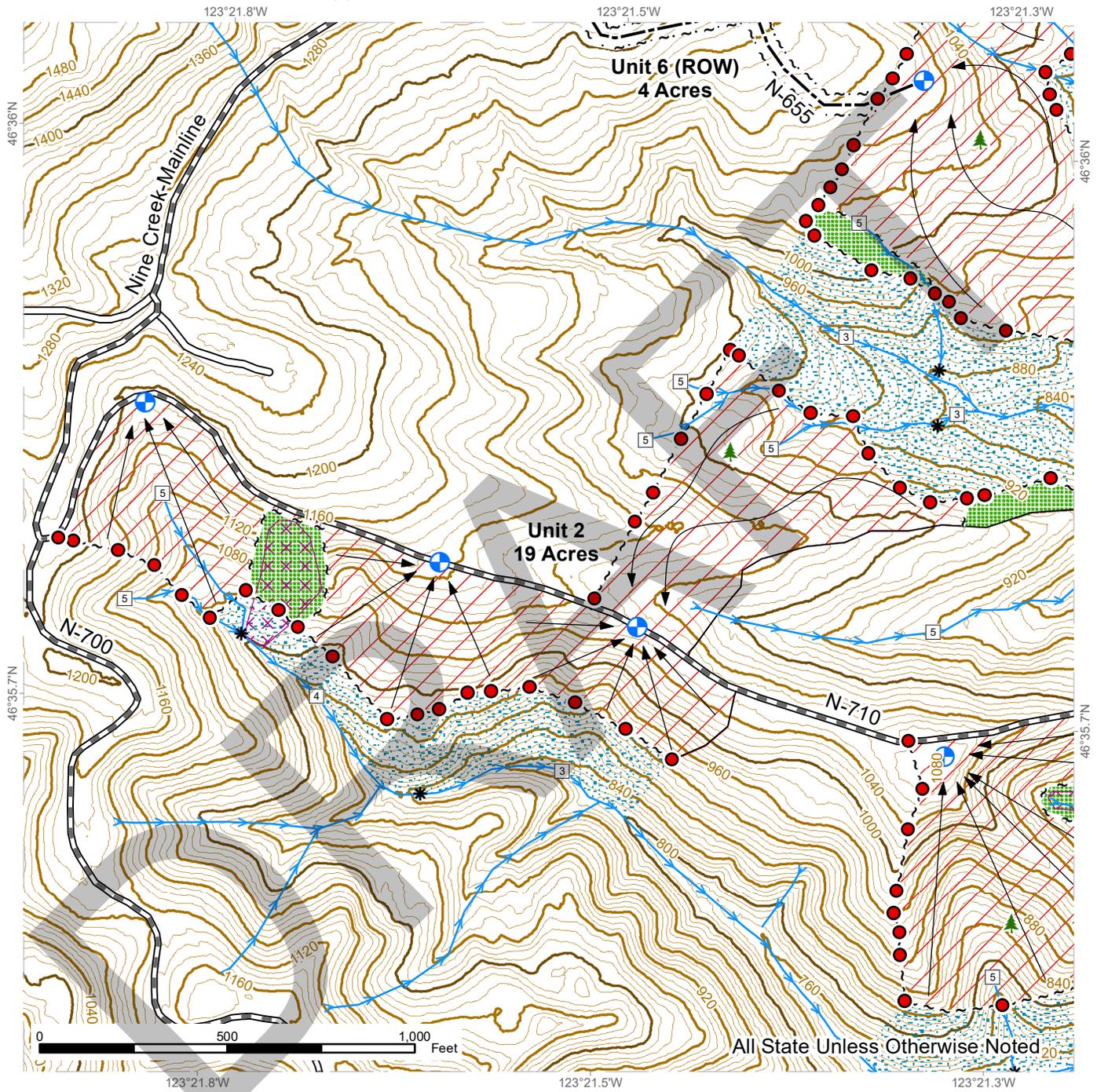
Sale Area	Required Pre-Haul Maintenance	Streams
Ground Harvest	Optional Construction	Stream Type
Cable Harvest	Sale Boundary Tags	Stream Type Break
Leave Tree Area	Timber Type Change	Landing - Proposed
Riparian Mgt Zone	Leave Tree Tags	Leave Tree Area <1/4-acre
Potentially Unstable Slopes	Right of Way Tags	Traverse Point
	Contours 10 ft	



LOGGING PLAN MAP

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 AGREEMENT#: 30-100724
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REGION: Pacific Cascade Region
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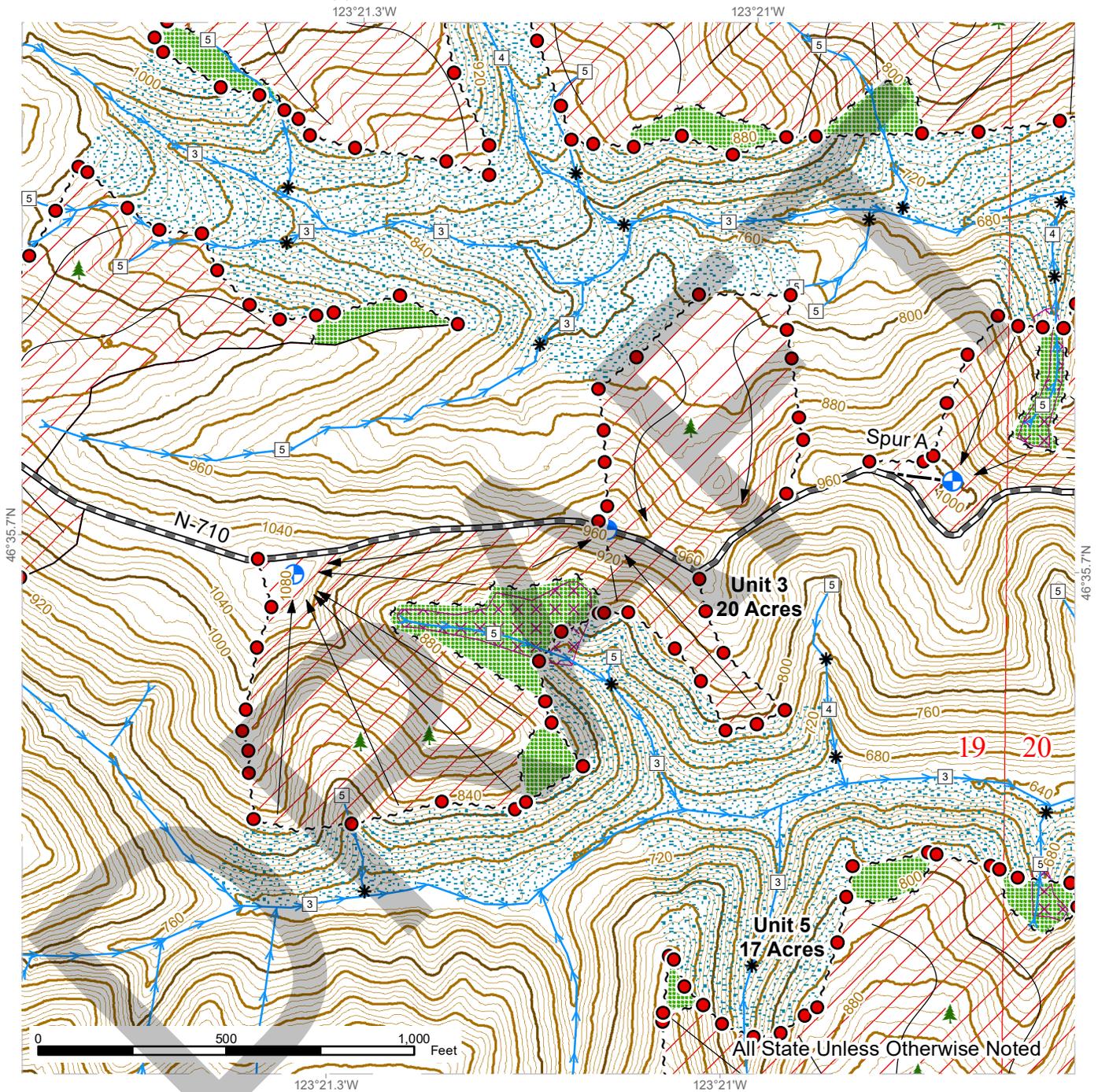
Sale Area	Existing Roads	Streams
Ground Harvest	Required Pre-Haul Maintenance	Stream Type
Cable Harvest	Optional Construction	Stream Type Break
Leave Tree Area	Sale Boundary Tags	Landing - Proposed
Riparian Mgt Zone	Timber Type Change	Leave Tree Area <1/4-acre
Potentially Unstable Slopes	Leave Tree Tags	Traverse Point
	Right of Way Tags	
	Contours 10 ft	



LOGGING PLAN MAP

SALE NAME: SCHWEITZER
 AGREEMENT#: 30-100724
 TOWNSHIP(S): T13R5W
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REGION: Pacific Cascade Region
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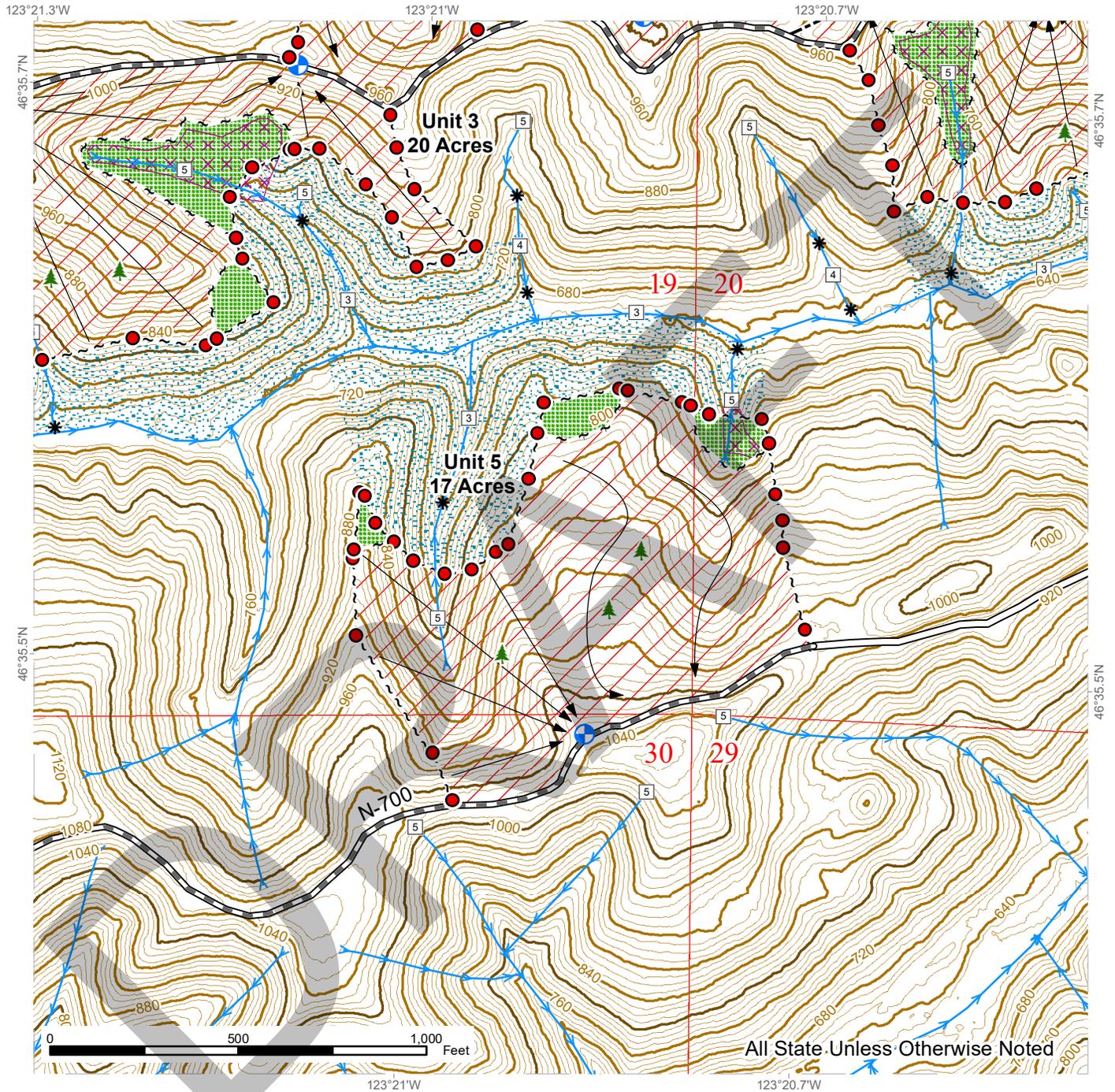
Sale Area	Required Pre-Haul Maintenance	Streams
Ground Harvest	Optional Construction	Stream Type
Cable Harvest	Sale Boundary Tags	Stream Type Break
Leave Tree Area	Timber Type Change	Landing - Proposed
Riparian Mgt Zone	Leave Tree Tags	Leave Tree Area <1/4-acre
Potentially Unstable Slopes	Right of Way Tags	Traverse Point
	Contours 10 ft	



LOGGING PLAN MAP

SALE NAME: SCHWEITZER
AGREEMENT#: 30-100724
TOWNSHIP(S): T13R5W
TRUST(S): State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Lewis
ELEVATION RGE: 640-1200



All State Unless Otherwise Noted

Sale Area	Existing Roads	Streams
Ground Harvest	Required Pre-Haul Maintenance	Stream Type
Cable Harvest	Optional Construction	Stream Type Break
Leave Tree Area	Sale Boundary Tags	Landing - Proposed
Riparian Mgt Zone	Timber Type Change	Leave Tree Area <1/4-acre
Potentially Unstable Slopes	Leave Tree Tags	Traverse Point
	Right of Way Tags	
	Contours 10 ft	

