WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

TIMBER NOTICE OF SALE

***SALE NAME**: Q BUCK MTN* ***AGREEMENT NO**: 30-100613*

AUCTION: November 17, 2020 starting at 10:00 a.m., Northeast Region Office, Colville, WA **COUNTY:** Okanogan

SALE LOCATION: Sale located approximately 19 miles west of Okanogan, WA

PRODUCTS SOLD AND SALE AREA: All green conifer species except for leave trees banded with blue paint and leave trees bounded by yellow leave tree area tags in Units 1, 2, 3, 4, 5, 6, 7, 8 and 9 bounded by white timber sale boundary tags

All forest products above located on part(s) of Sections 4, 5, 8 and 9 all in Township 33 North, Range 24 East, Sections 20, 29, 30 and 32 all in Township 34 North, Range 24 East, W.M., containing 467 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:

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade P	SM	1S	2S	3S	4S	5S	6S	UT
Douglas fir	16		3,423				1,593	1,423	407			
Ponderosa pine	15.8		1,064						270	794		
Larch	17.1		468				216	213	39			
Lodgepole	11.4		148				12	101	35			
Spruce	17.1		5				4		1			
Sale Total			5,108									

MINIMUM BID: $783,000.00 **BID METHOD:** Sealed Bids

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

EXPIRATION DATE: November 30, 2022 **ALLOCATION:** Export Restricted

BID DEPOSIT: $78,300.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Ground based equipment, Rubber tired skidder, and Track skidder. Falling and Yarding will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator due to spring breakup.

ROADS: 1.25 stations of required construction. 435.44 stations of required prehaul maintenance. Road construction will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator due to spring breakup. The hauling of forest products will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator due to spring breakup.

ACREAGE DETERMINATION

TIMBER NOTICE OF SALE

CRUISE METHOD: Acreage determined using GPS methods. Acreage shown above is net harvest acres in harvest units. Ponderosa pine: 8.0 - 17.5 inches dbh has a minimum top of 5.6 inch dib. All other species: 7.0 - 17.5 inches dbh has minimum top of 4.6 inch dib. All species 17.6 inches and greater dbh have a minimum top dib of 40% of dob at 16 feet or a 6 inch top whichever is greater.

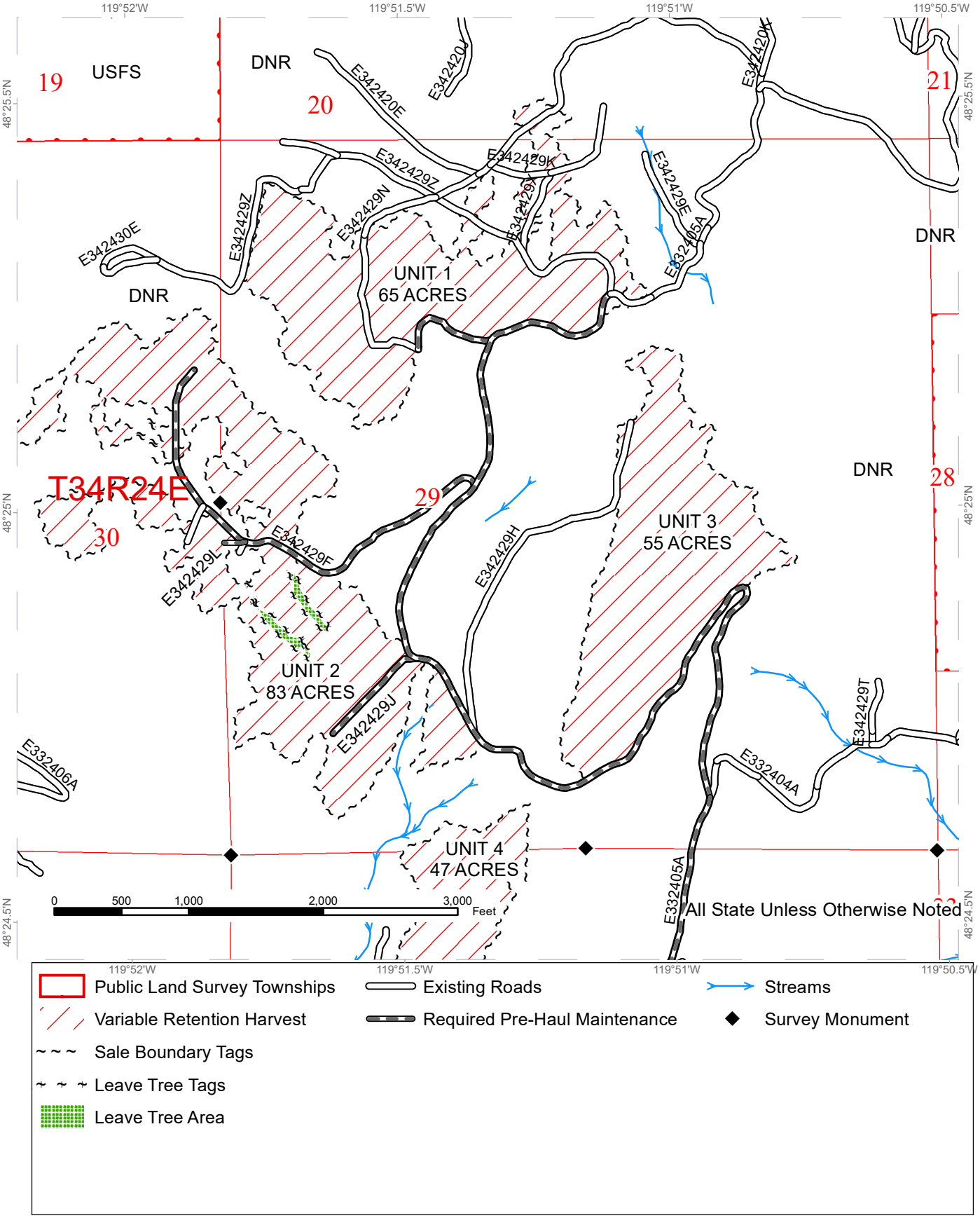
FEES: $86,836.00 is due on day of sale. $9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: None

TIMBER SALE MAP

SALE NAME: Q BUCK MTN
AGREEMENT #: 30-100613
TOWNSHIP(S): T33R24E, T34R24E
TRUST(S): Common School and Indemnity (3)

REGION: Northeast Region
COUNTY(S): Okanogan
ELEVATION RGE: 3320-5120



Public Land Survey Townships
Variable Retention Harvest
Sale Boundary Tags
Leave Tree Tags
Leave Tree Area
Existing Roads
Required Pre-Haul Maintenance
Streams
Survey Monument

N

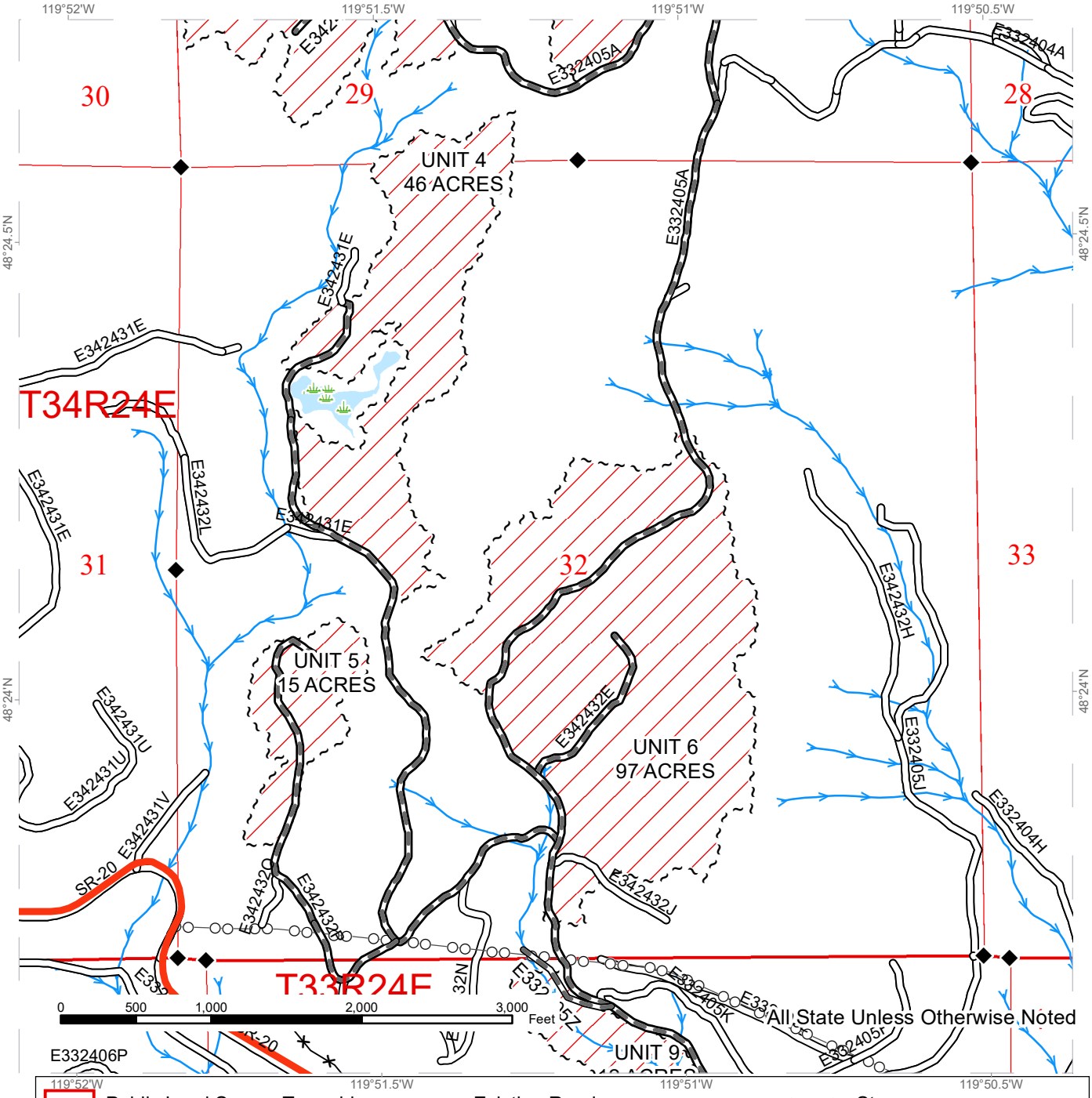
Prepared By: mlou490

Modification Date: mlou490 7/22/2020

TIMBER SALE MAP

SALE NAME: Q BUCK MTN
AGREEMENT #: 30-100613
TOWNSHIP(S): T33R24E, T34R24E
TRUST(S): Common School and Indemnity (3)

REGION: Northeast Region
COUNTY(S): Okanogan
ELEVATION RGE: 3320-5120



Public Land Survey Townships
Variable Retention Harvest
Sale Boundary Tags
Wetlands - Non-forested
Existing Roads
Required Pre-Haul Maintenance
Streams
Survey Monument
Fence
Power Lines

N

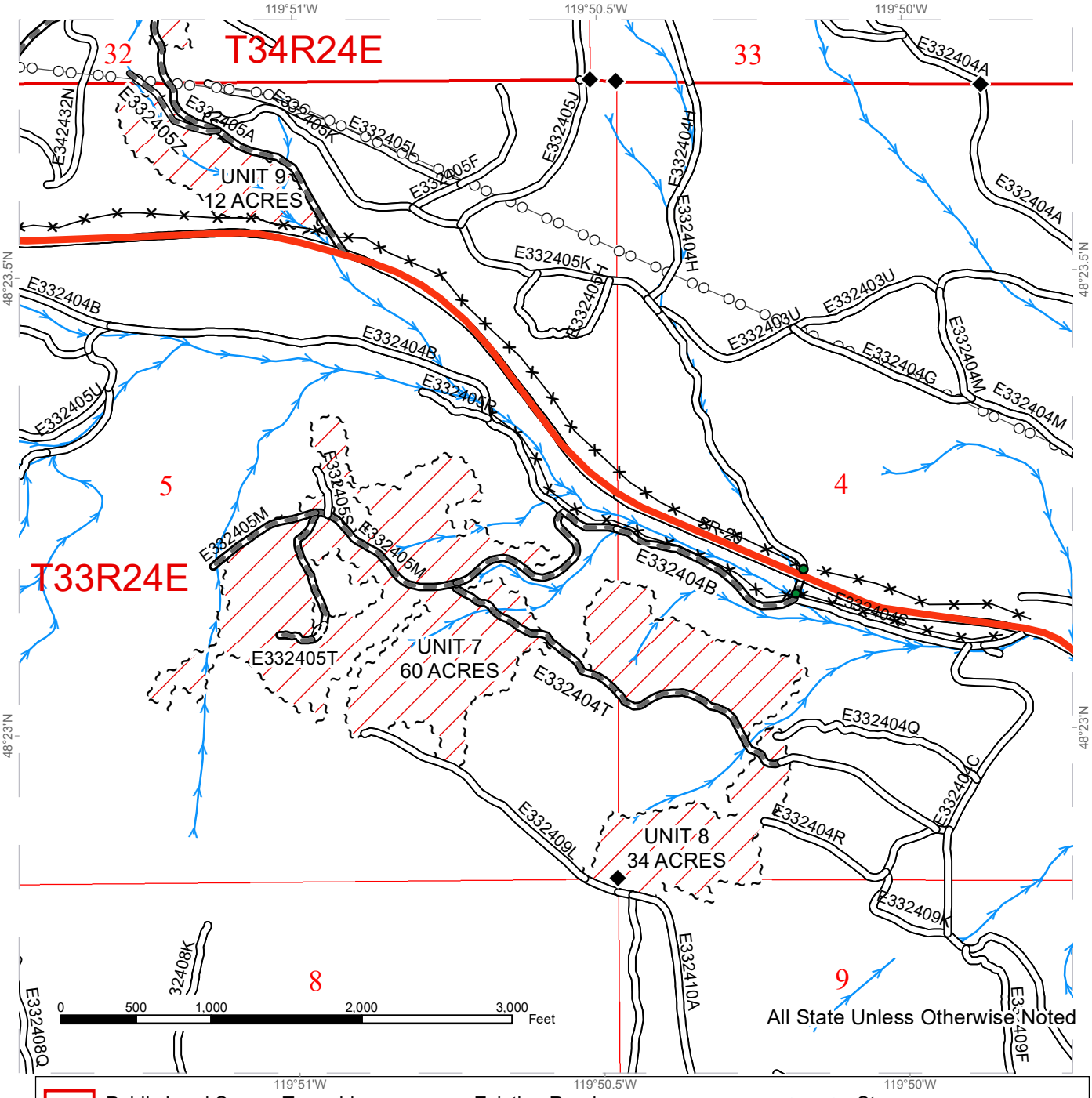
Prepared By: mlou490

Modification Date: mlou490 7/22/2020

TIMBER SALE MAP

SALE NAME: Q BUCK MTN
AGREEMENT #: 30-100613
TOWNSHIP(S): T33R24E, T34R24E
TRUST(S): Common School and Indemnity (3)

REGION: Northeast Region
COUNTY(S): Okanogan
ELEVATION RGE: 3320-5120



Public Land Survey Townships
Variable Retention Harvest
Sale Boundary Tags
Existing Roads
Required Pre-Haul Maintenance
Required Construction
Streams
Survey Monument
Fence
Power Lines

N

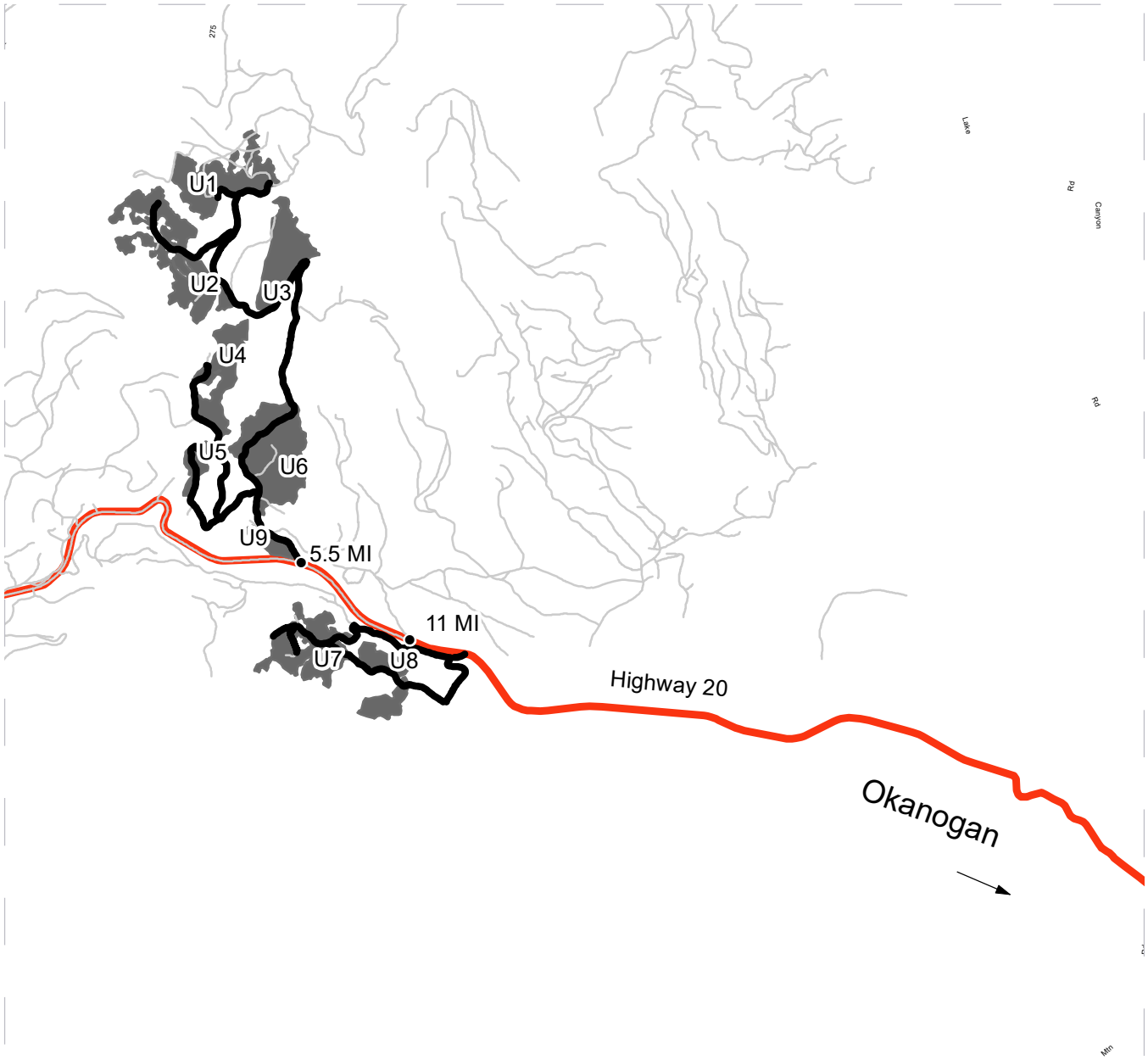
Prepared By: mlou490

Modification Date: mlou490 7/27/2020

DRIVING MAP

SALE NAME: Q BUCK MTN
AGREEMENT#: 30-100613
TOWNSHIP(S): T33R24E, T34R24E
TRUST(S): Common School and Indemnity (3)

REGION: Northeast Region
COUNTY(S): Okanogan
ELEVATION RGE: 3320-5120



Map may not be to scale

Timber Sale Unit
Haul Route
Distance Indicator

DRIVING DIRECTIONS:

Driving Directions - From the south bridge in Okanogan take State Highway 20 west toward Twisp. After approximately 11 miles turn left onto the E332404B road and go through the green gate on the south side of the highway to access units 7 and 8. Access to the remainder of the sale is approxiamtely 5.5 miles further west on State Highway 20. Turn right off the highway onto Buck Mtn Lookout Rd and head up on the North side of Highway 20.

N

Prepared By: mlou490

Modification Date: mlou490 5/27/2020

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

BILL OF SALE AND CONTRACT FOR FOREST PRODUCTS

Export Restricted Lump Sum AGREEMENT NO. 30-0100613

SALE NAME: Q BUCK MTN

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 November 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 green conifer species except for leave trees banded with blue paint and leave trees bounded by yellow leave tree area tags in Units 1, 2, 3, 4, 5, 6, 7, 8 and 9 bounded by white timber sale boundary tags

All forest products above located on approximately 467 acres on part(s) of Sections 4, 5, 8, and 9 all in Township 33 North, Range 24 East, Sections 20, 29, 30, and 32 all in Township 34 North, Range 24 East W.M. in Okanogan 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 November 30, 2022.

G-040 Contract Term Adjustment - No Payment

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

a. Road and bridge failures which deny access.

b. Access road closures imposed by road owner.

c. Excessive suspensions as provided in clause G-220.

d. Regulatory actions not arising from Purchaser's failure to comply with this contract which will prevent timber harvest for a period less than 6 months.

G-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 $261.00 per acre per annum for the acres on which an operating release has not been issued .

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-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-102 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 shall become a part of this contract and the Scribner log scale volume, as defined by the Northwest Log Rules Eastside, 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-106 Adding Naturally Damaged Forest Products

Any forest products not designated for removal that are seriously damaged by disease, insects or wind, or that may contribute seriously to the spread of insect or disease damage may be added to this sale by the State's Contract Administrator. Additions must be in unlogged areas of the sale and added volume shall not exceed an amount equal to 10 percent of the original advertised volume. Added forest products become a part of this contract and shall be paid for at the rate set forth in clause G-101, G-102 or G-103.

G-111 Title and Risk of Loss

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

G-116 Sustainable Forestry Initiative® (SFI) Certification

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

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

G-120 Responsibility for Work

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

G-121 Exceptions

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

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

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

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

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction completed to the point that authorization to haul has been issued;

2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and

3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

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

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

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

G-140 Indemnity

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

required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

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

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

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

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

2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

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

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

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

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

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

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

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

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

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

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

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

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

G-160 Agents

The State's rights and duties will be exercised by the Region Manager at Colville, 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; E332404B, E332404T, E332405A, E332405M, E332405T, E332405Z, E342429F, E342429J, E342429L, E342429M, E342431E, E342432E and E342432P. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-320 Erosion Control

Purchaser shall deliver 300 pounds of grass seed to a location designated by the Contract Administrator. Seed provided shall meet the following specifications.

40% Sherman Big Bluegrass, 40% Hard Fescue, 20% Intermediate Wheatgrass

Seed shall be certified weed free, premixed and delivered to the Omak Work Center in 50 pound bags clearly labeled with the timber sale name on each bag.

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 E332404B, E332404T, E332405A, E332405M, E332405T, E332405Z, E342429F, E342429J, E342429L, E342429M, E342431E, E342432E and E342432P, unless authority is granted in writing by the Contract Administrator.

G-430 Open Fires

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

G-450 Encumbrances

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

Lease, including the terms and provisions thereof,
For: Range Permit
In Favor of: Gebbers Farm Inc.
Disclosed by Application No.: 11-C69448
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Range Permit
In Favor of: Sonya Gebbers Taylor
Disclosed by Application No.: 11-C69450
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Range Permit
In Favor of: Gebbers Farm Inc.
Disclosed by Application No.: 11-C69451
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Range Permit
In Favor of: Chiliwist Grazing Association
Disclosed by Application No.: 11-D69449
Granted: 1/1/2014
Expires: 12/31/2023

Easement, including the terms and provisions thereof,
For: Overhead Power Lines, Fiber Optic Cable, & Road
In Favor of: PUD # 1 of Okanogan County
Disclosed by Application No.: 50-087167
Granted: 5/17/2013
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: State Road
In Favor of: Washington State Department of Transportation
Disclosed by Application No.: 50-SR0752
Granted: 12/22/1948
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: State Road
In Favor of: Washington State Department of Transportation
Disclosed by Application No.: 50-SR1064
Granted: 9/7/1967
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: State Road
In Favor of: Washington State Department of Transportation
Disclosed by Application No.: 50-SR1124
Granted: 6/16/1971
Expires: Indefinite

Lease, including the terms and provisions thereof,
For: Land Use License
In Favor of: Washington Department of Fish & Wildlife

Disclosed by Application No.: 60-094981
Granted: 12/29/2016
Expires: 6/30/2022

Water Right, including the terms and provisions thereof,
For: Stream
In Favor of: DNR
Disclosed by Application No.: 78-002824
Granted: 1/23/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-002825
Granted: 1/23/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Stream
In Favor of: DNR
Disclosed by Application No.: 78-002827
Granted: 1/23/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003433
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003434
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003472
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003473
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003474
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003475
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003476
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003477
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003478
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Pond
In Favor of: DNR
Disclosed by Application No.: 78-003481

Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Pothole
In Favor of: DNR
Disclosed by Application No.: 78-003737
Granted: 10/17/1973
Expires: Indefinite

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 $132,808.00. The total contract price consists of a $0.00 contract bid price plus $132,808.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

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

P-045 Guarantee of Payment

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

P-050 Billing Procedure

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

P-080 Payment Account Refund

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

P-090 Performance Security

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

P-100 Performance Security Reduction

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

Section H: Harvesting Operations

H-001 Operations Outside the Sale Boundaries

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

H-010 Cutting and Yarding Schedule

Falling and Yarding will not be permitted from March 1 to May 1 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-015 Skid Trail Requirements

A skid trail is defined as an area that is used for more than three passes by any equipment.

Purchaser shall comply with the following during the yarding operation:

a. Skid trails will not exceed 12 feet in width, including rub trees.

b. Skid trails shall not cover more than 10 percent of the total acreage on one unit.

c. Skid trail location will be pre-approved by the Contract Administrator.

d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.

e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.

f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.

g. Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

Purchaser shall not deviate from the requirements set forth in this clause without prior written approval from the Contract Administrator.

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 10 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-050 Rub Trees

Trees designated for cutting along skid trails and cable corridors shall be left standing as rub trees until all timber that is tributary to the skid trail or cable corridor has been removed.

H-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-060 Skid Trail Locations

Locations of skid trails must be marked by Purchaser and approved by the Contract Administrator prior to the felling of timber.

H-080 Snags Not to be Felled

Snags not required to be felled for safety reasons may be left standing. Snags felled for safety reasons shall not be removed and must remain where felled.

H-110 Stump Height

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

H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using D6 equivalent or smaller ground skidding equipment and ground based harvesting equipment. 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 on all roads from March 1 to May 1 unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. Whole tree yarding is required in all units.

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

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-210 Log Length Hauling Restrictions

The maximum log length hauled from the sale area shall not exceed 42 feet unless otherwise approved 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-260 Fall Leaners

Trees within the units that have been pushed over in falling or skidding operations shall be felled.

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 3/25/2020 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on E332404B, E332404T, E332405A, E332405M, E332405T, E332405Z, E342429F, E342429J, E342429L, E342429M, E342431E, E342432E and E342432P roads. All work shall be completed to the specifications detailed in the Road Plan.

C-080 Landing Locations Approved Prior to Construction

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

C-130 Dust Abatement

Purchaser shall abate dust on the E332404B, E332404T, E332405A, E332405M, E332405T, E332405Z, E342429F, E342429J, E342429L, E342429M, E342431E, E342432E and E342432P roads used for hauling from May 1 to November 31.

C-140 Water Bars

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

Section S: Site Preparation and Protection

S-001 Emergency Response Plan

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

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

S-010 Fire Hazardous Conditions

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

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

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

S-030 Landing Debris Clean Up

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

S-040 Noxious Weed Control

Purchaser shall notify the Contract Administrator in advance of moving equipment onto State lands. Purchaser shall thoroughly clean all off road equipment prior to entry onto

State land to remove contaminated soils and noxious weed seed. If equipment is moved from one DNR project area to another, the Contract Administrator reserves the right to require the cleaning of equipment. Equipment shall be cleaned at a location approved by the Contract Administrator.

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 1000 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 any stream as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-120 Stream Protection

No timber shall be felled into, across, or yarded through any stream.

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.

S-140 Fence Repair

Purchaser shall immediately repair all fence damage resulting from operations on this sale to an equal or better condition than existed at the time of sale.

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

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

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

D-041 Reserve Tree Excessive Damage

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

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

STATE OF _____)
)
COUNTY OF _____)

On this _____ day of _____, 20___, before me personally appeared _____
_____ to me known to be the _____ of the corporation that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of the corporation, for the uses and purposes therein mentioned, and on oath stated that (he/she was) (they were) authorized to execute said instrument.

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

_____
Notary Public in and for the State of

_____

My appointment expires _____

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: Northeast

Timber Sale Name: Q BUCK MTN

Application Number: 30- 100613

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 125 **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: 43,544 **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

Temporary Reconstruction: 0 **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 contact. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.
(Revised 9/18)

PRE-CRUISE NARRATIVE

Sale Name: Q Buck Mtn	Region: **Northeast**
Agreement #: 30-100613	District: South Okanogan
Contact Forester:Jake Townsend Phone / Location: 509-429-0545	County(s): Choose a county, Okanogan
Alternate Contact:Steven Hanson Phone / Location: 509-322-8437	Other information: Click here to enter text.

Type of Sale: Lump Sum	
Harvest System: Ground based Click here to enter text.	100
Harvest System: Select harvest system Click here to enter text. Enter % of sale acres	Click here to enter percent sale acres.
Harvest System: Select harvest system Click here to enter text.	Click here to enter percent sale acres.

UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit # Harvest R/W or RMZ WMZ	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination (List method and error of closure if applicable)
				RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1	29 T34 R24E	03	66.07	0.0	0.0	1.47	0.0	64.6	Choose an item.
2	29, 30 T34 R24E	03	85.94	0.0	1.67	0.84	0.0	83.43	Choose an item.
3	29 T34 R24E	03	55.08	0.0	0.0	0.20	0.0	54.88	Choose an item.
4	29, 32 T34 R24E	03	46.77	0.0	0.0	0.25	0.0	46.52	Choose an item.
5	32 T34 R24E	03	15.08	0.0	0.0	0.41	0.0	14.67	Choose an item.
6	32 T34 R24E	03	98.17	0.0	0.0	1.56	0.0	96.61	Choose an item.
7	5 T33 R24E	03	60.50	0.0	0.0	0.90	0.0	59.60	Choose an item.
8	4, 5 T33 R24E	03	34.17	0.0	0.0	0.08	0.0	34.09	
9	T34 R24E	03	12.42	0.0	0.0	0.13	0.0	12.29	
TOTAL ACRES			474.20	0.0	1.67	5.84	0.0	466.69	

Revised 03/15/2010 (FRCD)

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Marked leave with blue paint		Leaving 6 TPA
2	Marked leave with blue paint	Includes Leave Tree Area	Leaving 6 TPA
3	Marked leave with blue paint		Leaving 6 TPA
4	Marked leave with blue paint		Leaving 6 TPA
5	Marked leave with blue paint		Leaving 6 TPA
6	Marked leave with blue paint		Leaving 6 TPA
7	Marked leave with blue paint		Leaving 6 TPA
8	Marked leave with blue paint		Leaving 6 TPA
9	Marked leave with blue paint		Leaving 6 TPA

OTHER PRE-CRUISE INFORMATION:

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	DF, PP, WL 420 MBF	No access issues, May want Quad or Snowmachine	
2	DF, PP, WL 542 MBF	No access issues, May want Quad or Snowmachine	
3	DF, PP, WL 384 MBF	No access issues, May want Quad or Snowmachine	
4	DF, PP, WL 302 MBF	No access issues, May want Quad or Snowmachine	
5	DF, PP, WL 73 MBF	No access issues, May want Quad or Snowmachine	
6	DF, PP, WL 773 MBF	No access issues, May want Quad or Snowmachine	
7	DF, PP, WL 417 MBF	No access issues, May want Quad or Snowmachine	
8	DF, PP, WL 238 MBF	No access issues, May want Quad or Snowmachine	

9	DF, PP, WL 73 MBF	No access issues, May want Quad or Snowmachine	
TOTAL MBF	3,222 MBF		

REMARKS:

Prepared By: Steven Hanson Date: 12/24/2019	Title: NRS 2	CC:

Timber Sale Cruise Report
Buck Mtn

Sale Name: Q BUCK MTN

Sale Type: LUMP SUM

Region: NORTHEAST

District: SO OKANOGAN

Lead Cruiser: Dylan Worlock

Other Cruisers: Kevin Parkinson

Cruise Narrative:
Location:
-Legal - T 34 N, R 24 E, Sections 20, 29, 30, and 32. W.M.; and T 33 N, R 24 E, Sections 4, 5, 8, and 9. W.M.
-General - This sale is located in Okanogan county, near Loup Loup Pass. The sale is approximately 15 miles West of Omak, Wa.
-Access - The units are located off HWY 20. Units 1-6 and 9 are located off Buck Lookout Rd. and units 7 & 8 are located off the E332404B rd, through a DNR gate.

Cruise Design:
-This sale was cruised using the cruise-count method. The walk-through method was used on plots near boundaries.
-Minor species cruise intensity: We grade the first tree of all minor species encountered; then follow the set cruise design.
-Min. DBH - 8" DBH for ponderosa pine, 7" DBH for all other species
-Log Length - 32' logs where possible, minimum of 12' lengths
-Top DIB - Trees less than 17.5" DBH have a minimum top of 5.6" for ponderosa pine and 4.6" DIB for all other species; Trees 17.6" and greater DBH have a minimum top DIB of 40% of DOB at 16' or a 6" top, whichever is greater.
-Take/Leave Prescription - Remove all green conifers not banded with blue paint. Leave tree areas are bound with yellow "Leave Tree Area" tags, unit boundaries are bound with white "Timber Sale Boundary" tags with orange flashers and pink ribbon.
-Cruise Acres determination - FMA unit acreages with existing road acreages and leave tree area acres subtracted.

Stand composition:
-The stands are second growth Douglas-fir, ponderosa pine, western larch, and lodgepole pine with larger residual trees.

Timber quality:
-Timber to be harvested is comprised of domestic quality Douglas-fir (67%), ponderosa pine (21%), western larch (9%), lodgepole pine (3%), and Engelmann spruce (less than 1%).

Stand health/defect:
-Units are mostly healthy, with areas of root rot and bug damage. Noted defect also includes spike knots, forked tops, sweep, mistletoe. Areas of the sale show signs of defoliators. Timber in open ground areas of the sale tends to keep branches towards ground level.

Aspect: North, East, South and West
Elevation: 3200' to 5200'

Harvesting methods:
-100% Ground-based

Slope:
Unit 1- 0-45%
Unit 2- 0-45%
Unit 3- 0-40%
Unit 4- 0-50%
Unit 5- 0-20%
Unit 6- 0-40%
Unit 7- 0-30%
Unit 8- 0-60%
Unit 9- 0-60%

Other considerations:
-While the majority of the sale occurs on gentle terrain, there are areas within units that contain short pitches of steep slope. There are some rocky areas, and wet areas as well.
-Diameter of harvest trees varies greatly within the sale, with some trees having a diameter greater than 30" DHB. Average DBH for the sale is 15.6".
-The general area receives fairly heavy recreational use.

Entire sale is located within Trust 03.

Timber Sale Notice Volume (MBF)

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	16.0			3,422.8	1,593.2	1,422.4	407.2	
PP	15.8			1,063.7			269.4	794.1
WL	17.1			468.4	216.3	212.8	39.4	
LP	11.4			147.6	11.3	101.2	35.2	
ES	17.1			5.5	4.5		1.0	
ALL	15.6			5,108.0	1,825.3	1,736.1	752.4	794.1

Timber Sale Notice Weight (tons)

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	22,470.7	9,694.9	9,804.7	2,971.1	
PP	6,443.7			1,505.3	4,938.4
WL	2,747.1	1,192.0	1,294.6	260.5	
LP	885.3	54.9	624.6	205.8	
ES	32.2	24.2		8.1	
ALL	32,579.0	10,966.0	11,723.8	4,950.7	4,938.4

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 (%)
107.7	3.2	122.0	2.1	13,119	3.9

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
Q BUCK MTN U1	B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	64.6	66.1	46	12	3
Q BUCK MTN U2	B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	83.4	85.9	51	14	2
Q BUCK MTN U3	B1C: VR, 1 BAF (27.78) Measure/ Count Plots, Sighting Ht = 4.5 ft	54.9	55.1	27	10	1
Q BUCK MTN U4	B1C: VR, 1 BAF (27.78) Measure/ Count Plots, Sighting Ht = 4.5 ft	46.5	46.8	34	12	0
Q BUCK MTN U5	B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	14.7	15.1	13	7	0
Q BUCK MTN U6	B1C: VR, 1 BAF (27.78) Measure/ Count Plots, Sighting Ht = 4.5 ft	96.6	98.2	66	19	1
Q BUCK MTN U7	B1C: VR, 1 BAF (27.78) Measure/ Count Plots, Sighting Ht = 4.5 ft	59.6	60.5	44	12	2
Q BUCK MTN U8	B1C: VR, 1 BAF (27.78) Measure/ Count Plots, Sighting Ht = 4.5 ft	34.5	34.6	26	10	3
Q BUCK MTN U9	B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	12.3	12.4	10	5	0
All		467.1	474.6	317	101	12

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	14.4	32.0	3,411	1.5	9,694.9	1,593.2
DF	LIVE	3 SAW	Domestic	8.3	31.0	3,045	1.8	9,804.7	1,422.3
DF	LIVE	4 SAW	Domestic	5.4	21.0	872	0.9	2,971.0	407.2
DF	LIVE	CULL	Cull	8.6	7.0	0	100.0	0.0	0.0
ES	LIVE	2 SAW	Domestic	11.9	32.0	10	2.1	24.2	4.5
ES	LIVE	4 SAW	Domestic	5.3	28.0	2	0.0	8.1	1.0
LP	LIVE	2 SAW	Domestic	13.4	32.0	24	0.0	54.9	11.3
LP	LIVE	3 SAW	Domestic	7.5	32.0	217	2.6	624.6	101.2
LP	LIVE	4 SAW	Domestic	5.3	19.0	75	2.7	205.8	35.2
LP	LIVE	CULL	Cull	5.0	10.0	0	100.0	0.0	0.0

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
PP	LIVE	4 SAW	Domestic	13.2	32.0	577	0.3	1,505.3	269.4
PP	LIVE	5 SAW	Domestic	7.2	27.0	1,700	1.1	4,938.4	794.2
PP	LIVE	CULL	Cull	10.6	6.0	0	100.0	0.0	0.0
WL	LIVE	2 SAW	Domestic	14.2	32.0	463	0.8	1,191.9	216.2
WL	LIVE	3 SAW	Domestic	8.0	31.0	455	2.4	1,294.7	212.7
WL	LIVE	4 SAW	Domestic	5.4	21.0	84	1.7	260.5	39.5

Timber Sale Log Grade x Diameter Bin Summary

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.3	20.0	862	0.9	2,938.9	402.6
DF	5 - 8	LIVE	CULL	5.8	6.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	3 SAW	7.1	32.0	1,316	1.4	4,333.7	614.6
DF	9 - 11	LIVE	4 SAW	9.2	15.0	10	4.2	32.1	4.6
DF	9 - 11	LIVE	CULL	9.4	32.0	0	100.0	0.0	0.0
DF	9 - 11	LIVE	3 SAW	9.9	31.0	1,729	2.1	5,471.0	807.6
DF	9 - 11	LIVE	2 SAW	11.5	32.0	129	0.0	372.4	60.2
DF	12 - 14	LIVE	2 SAW	13.0	32.0	1,701	1.2	5,067.5	794.6
DF	12 - 14	LIVE	CULL	13.6	2.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	CULL	15.4	10.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	2 SAW	16.7	32.0	1,257	1.7	3,488.7	587.3
DF	20+	LIVE	2 SAW	23.7	30.0	323	3.3	766.4	151.0
DF	20+	LIVE	CULL	24.7	5.0	0	100.0	0.0	0.0
ES	5 - 8	LIVE	4 SAW	5.3	28.0	2	0.0	8.1	1.0
ES	12 - 14	LIVE	2 SAW	11.9	32.0	10	2.1	24.2	4.5
LP	5 - 8	LIVE	CULL	5.0	10.0	0	100.0	0.0	0.0
LP	5 - 8	LIVE	4 SAW	5.3	19.0	75	2.7	205.8	35.2
LP	5 - 8	LIVE	3 SAW	7.2	32.0	197	2.9	560.9	92.2
LP	9 - 11	LIVE	3 SAW	10.1	32.0	19	0.0	63.7	9.0
LP	12 - 14	LIVE	2 SAW	13.4	32.0	24	0.0	54.9	11.3
PP	< 5	LIVE	5 SAW	0.0	32.0	1	0.0	0.0	0.2
PP	5 - 8	LIVE	CULL	6.4	9.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	5 SAW	6.6	26.0	1,030	0.8	3,099.1	481.2
PP	9 - 11	LIVE	5 SAW	9.8	31.0	670	1.4	1,839.3	312.8
PP	9 - 11	LIVE	CULL	9.8	3.0	0	100.0	0.0	0.0
PP	9 - 11	LIVE	4 SAW	11.5	32.0	17	0.0	51.5	7.8
PP	12 - 14	LIVE	4 SAW	12.8	32.0	441	0.4	1,155.8	206.0
PP	15 - 19	LIVE	4 SAW	16.4	30.0	119	0.0	298.1	55.6

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
PP	15 - 19	LIVE	CULL	17.1	8.0	0	100.0	0.0	0.0
WL	5 - 8	LIVE	4 SAW	5.5	21.0	84	1.7	260.5	39.5
WL	5 - 8	LIVE	3 SAW	6.6	31.0	201	2.2	598.4	93.9
WL	9 - 11	LIVE	3 SAW	9.6	32.0	254	2.5	696.3	118.8
WL	9 - 11	LIVE	2 SAW	11.5	32.0	20	0.0	38.6	9.2
WL	12 - 14	LIVE	2 SAW	13.5	32.0	300	0.9	808.7	139.9
WL	15 - 19	LIVE	2 SAW	16.8	32.0	123	1.1	300.5	57.3
WL	20+	LIVE	2 SAW	23.5	32.0	21	0.0	44.2	9.8

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Cull	5.8	6.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	Domestic	6.0	24.0	2,178	1.2	7,272.6	1,017.3
DF	9 - 11	LIVE	Cull	9.4	32.0	0	100.0	0.0	0.0
DF	9 - 11	LIVE	Domestic	10.0	31.0	1,868	2.0	5,875.5	872.5
DF	12 - 14	LIVE	Domestic	13.0	32.0	1,701	1.2	5,067.5	794.6
DF	12 - 14	LIVE	Cull	13.6	2.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	Cull	15.4	10.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	Domestic	16.7	32.0	1,257	1.7	3,488.7	587.3
DF	20+	LIVE	Domestic	23.7	30.0	323	3.3	766.4	151.0
DF	20+	LIVE	Cull	24.7	5.0	0	100.0	0.0	0.0
ES	5 - 8	LIVE	Domestic	5.3	28.0	2	0.0	8.1	1.0
ES	12 - 14	LIVE	Domestic	11.9	32.0	10	2.1	24.2	4.5
LP	5 - 8	LIVE	Cull	5.0	10.0	0	100.0	0.0	0.0
LP	5 - 8	LIVE	Domestic	6.2	25.0	273	2.8	766.7	127.4
LP	9 - 11	LIVE	Domestic	10.1	32.0	19	0.0	63.7	9.0
LP	12 - 14	LIVE	Domestic	13.4	32.0	24	0.0	54.9	11.3
PP	< 5	LIVE	Domestic	0.0	32.0	1	0.0	0.0	0.2
PP	5 - 8	LIVE	Cull	6.4	9.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	Domestic	6.6	26.0	1,030	0.8	3,099.1	481.2
PP	9 - 11	LIVE	Cull	9.8	3.0	0	100.0	0.0	0.0
PP	9 - 11	LIVE	Domestic	9.9	31.0	686	1.4	1,890.7	320.6
PP	12 - 14	LIVE	Domestic	12.8	32.0	441	0.4	1,155.8	206.0
PP	15 - 19	LIVE	Domestic	16.4	30.0	119	0.0	298.1	55.6
PP	15 - 19	LIVE	Cull	17.1	8.0	0	100.0	0.0	0.0
WL	5 - 8	LIVE	Domestic	6.0	26.0	285	2.0	858.9	133.4
WL	9 - 11	LIVE	Domestic	9.7	32.0	274	2.4	734.8	128.1

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WL	12 - 14	LIVE	Domestic	13.5	32.0	300	0.9	808.7	139.9
WL	15 - 19	LIVE	Domestic	16.8	32.0	123	1.1	300.5	57.3
WL	20+	LIVE	Domestic	23.5	32.0	21	0.0	44.2	9.8

Cruise Unit Report
Q BUCK MTN U1

Unit Sale Notice Volume (MBF): Q BUCK MTN U1

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	16.4			729.3	360.5	282.2	86.6	
PP	15.9			8.7			3.7	5.0
ALL	16.4			738.1	360.5	282.2	90.3	5.0

Unit Sale Notice Weight (tons): Q BUCK MTN U1

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	4,629.9	2,103.7	1,854.0	672.2	
PP	58.1			22.0	36.1
ALL	4,688.0	2,103.7	1,854.0	694.2	36.1

Unit Cruise Design: Q BUCK MTN U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	64.6	66.1	46	12	3

Unit Cruise Summary: Q BUCK MTN U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WL		5	2.5	0
DF	38	237	5.2	0
PP	5	6	0.1	0
ALL	43	248	5.4	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN 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 (%)
WL	50.0	84.9	60.0						
DF	103.0	77.4	11.4	131.8	32.4	5.3	13,577	83.9	12.6
PP	2.6	678.2	100.0	62.2	50.8	22.7	162	680.1	102.6
ALL	107.8	73.7	10.9	130.0	36.2	5.5	14,022	82.1	12.2

Unit Summary: Q BUCK MTN U1

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	38	ALL	16.1	50	74	11,285	3.2	60.6	85.7	21.3	4,629.9	729.4
DF	LIVE	LEA	8	ALL	22.8	18	21	2,291	3.2	6.1	17.4	3.6	940.1	148.1
PP	LIVE	CUT	5	ALL	15.9	36	59	135	6.5	1.6	2.2	0.5	58.1	8.7
PP	LIVE	LEA	1	ALL	19.0	59	80	27	6.5	0.2	0.4	0.1	11.6	1.7
WL	LIVE	CUT	0	ALL							0.4			
WL	LIVE	LEA	0	ALL	15.2					1.4	1.7	0.4		
ALL	LIVE	CUT	43	ALL	16.1	50	74	11,420	3.2	62.2	88.3	21.8	4,688.0	738.1
ALL	LIVE	LEA	9	ALL	21.5	16	19	2,318	3.3	7.7	19.5	4.1	951.7	149.8
ALL	ALL	ALL	52	ALL	16.8	46	68	13,738	3.2	69.9	107.8	25.9	5,639.7	887.9

Unit Stand Table: Q BUCK MTN U1

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	2	7.6	30	65	406	0.0	13.9	4.4	1.6	163.2	26.3
DF	10	LIVE	CUT	1	10.5	27	47	0		3.7	2.2	0.7	0.0	0.0
DF	12	LIVE	CUT	3	12.0	35	57	358	2.5	8.4	6.6	1.9	216.6	23.1
DF	14	LIVE	CUT	2	13.3	59	80	582	0.0	4.6	4.4	1.2	250.0	37.6
DF	16	LIVE	CUT	5	16.1	61	82	1,525	0.2	7.8	11.0	2.7	627.2	98.5
DF	18	LIVE	CUT	7	17.9	64	80	1,986	0.9	8.8	15.4	3.6	861.7	128.4
DF	20	LIVE	CUT	3	19.6	63	80	800	13.6	3.1	6.6	1.5	327.1	51.7
DF	22	LIVE	CUT	3	21.9	72	94	934	2.0	2.5	6.6	1.4	401.6	60.4
DF	24	LIVE	CUT	5	23.5	67	85	1,559	3.3	3.6	11.0	2.3	644.3	100.8
DF	26	LIVE	CUT	2	26.3	82	104	840	0.0	1.2	4.4	0.9	305.1	54.3
DF	28	LIVE	CUT	4	28.2	76	92	1,447	2.4	2.0	8.8	1.7	554.5	93.5
DF	34	LIVE	CUT	1	33.0	78	109	391	19.1	0.4	2.2	0.4	125.2	25.3
DF	40	LIVE	CUT	1	39.9	78	98	457	3.1	0.3	2.2	0.3	153.3	29.5
DF	16	LIVE	LEA	2	15.5			101	3.2	0.7	0.9	0.2	45.0	6.5
DF	18	LIVE	LEA	2	18.0			101	3.2	0.5	0.9	0.2	45.0	6.5
DF	20	LIVE	LEA	5	19.8	24	28	331	2.0	1.2	2.7	0.6	140.1	21.4
DF	22	LIVE	LEA	7	21.3			354	3.2	1.3	3.1	0.7	157.7	22.9
DF	24	LIVE	LEA	6	23.3	31	36	388	1.7	1.1	3.1	0.6	163.4	25.1
DF	26	LIVE	LEA	1	26.0			51	3.2	0.1	0.4	0.1	22.5	3.3
DF	28	LIVE	LEA	6	27.3	53	56	493	1.0	0.8	3.1	0.6	185.0	31.9
DF	30	LIVE	LEA	2	29.0			101	3.2	0.2	0.9	0.2	45.0	6.5
DF	32	LIVE	LEA	1	32.0			51	3.2	0.1	0.4	0.1	22.5	3.3
DF	34	LIVE	LEA	2	33.5			101	3.2	0.1	0.9	0.2	45.0	6.5
DF	38	LIVE	LEA	1	38.0	114	124	111	0.0	0.1	0.4	0.1	34.7	7.1

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	48	LIVE	LEA	1	47.6	113	120	109	0.0	0.0	0.4	0.1	34.0	7.0
PP	10	LIVE	CUT	1	10.9	41	78	43	0.0	0.7	0.4	0.1	15.6	2.8
PP	16	LIVE	CUT	2	15.5	26	37	28	11.9	0.7	0.9	0.2	17.1	1.8
PP	26	LIVE	CUT	2	25.8	52	62	64	8.1	0.2	0.9	0.2	25.4	4.2
PP	20	LIVE	LEA	1	19.0	59	80	27	0.0	0.2	0.4	0.1	11.6	1.7
WL	14	LIVE	LEA	3	13.3					1.3	1.3	0.3		
WL	60	LIVE	LEA	1	60.0					0.0	0.4	0.1		

Unit Log Grade Summary: Q BUCK MTN U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	15.1	32.0	5,579	2.5	2,103.7	360.5
DF	LIVE	3 SAW	8.9	31.0	4,366	1.3	1,854.0	282.2
DF	LIVE	4 SAW	5.5	23.0	1,341	1.3	672.2	86.6
DF	LIVE	CULL	17.8	9.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	16.1	24.0	57	2.3	22.0	3.7
PP	LIVE	5 SAW	7.7	26.0	78	0.8	36.1	5.0
PP	LIVE	CULL	6.6	11.0	0	100.0	0.0	0.0

Unit Log Sort Summary: Q BUCK MTN U1

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	17.8	9.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	8.5	28.0	11,285	1.9	4,629.9	729.3
PP	LIVE	Cull	6.6	11.0	0	100.0	0.0	0.0
PP	LIVE	Domestic	8.9	26.0	135	1.4	58.1	8.7

Unit Log Grade x Sort Summary: Q BUCK MTN U1

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	15.1	32.0	5,579	2.5	2,103.7	360.5
DF	LIVE	3 SAW	Domestic	8.9	31.0	4,366	1.3	1,854.0	282.2
DF	LIVE	4 SAW	Domestic	5.5	23.0	1,341	1.3	672.2	86.6
DF	LIVE	CULL	Cull	17.8	9.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	Domestic	16.1	24.0	57	2.3	22.0	3.7
PP	LIVE	5 SAW	Domestic	7.7	26.0	78	0.8	36.1	5.0
PP	LIVE	CULL	Cull	6.6	11.0	0	100.0	0.0	0.0

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U1

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.3	24.0	1,282	1.1	646.1	82.9
DF	5 - 8	LIVE	3 SAW	6.9	31.0	1,030	2.7	473.8	66.6
DF	9 - 11	LIVE	4 SAW	9.1	16.0	58	5.1	26.1	3.8
DF	9 - 11	LIVE	3 SAW	10.2	31.0	3,335	0.9	1,380.2	215.6
DF	12 - 14	LIVE	2 SAW	13.1	32.0	2,205	2.1	873.2	142.5
DF	15 - 19	LIVE	CULL	15.4	10.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	2 SAW	16.7	32.0	2,931	1.6	1,078.5	189.4
DF	20+	LIVE	CULL	24.7	5.0	0	100.0	0.0	0.0
DF	20+	LIVE	2 SAW	26.3	22.0	443	9.6	152.0	28.6
PP	5 - 8	LIVE	CULL	6.6	11.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	5 SAW	6.9	30.0	62	1.0	30.1	4.0
PP	9 - 11	LIVE	5 SAW	10.5	12.0	16	0.0	6.0	1.0
PP	12 - 14	LIVE	4 SAW	13.9	32.0	32	4.0	13.8	2.1
PP	15 - 19	LIVE	4 SAW	18.4	16.0	25	0.0	8.2	1.6

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U1

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.7	26.0	2,313	1.8	1,119.9	149.5
DF	9 - 11	LIVE	Domestic	10.1	30.0	3,394	0.9	1,406.3	219.3
DF	12 - 14	LIVE	Domestic	13.1	32.0	2,205	2.1	873.2	142.5
DF	15 - 19	LIVE	Cull	15.4	10.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	Domestic	16.7	32.0	2,931	1.6	1,078.5	189.4
DF	20+	LIVE	Cull	24.7	5.0	0	100.0	0.0	0.0
DF	20+	LIVE	Domestic	26.3	22.0	443	9.6	152.0	28.6
PP	5 - 8	LIVE	Cull	6.6	11.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	Domestic	6.9	30.0	62	1.0	30.1	4.0
PP	9 - 11	LIVE	Domestic	10.5	12.0	16	0.0	6.0	1.0
PP	12 - 14	LIVE	Domestic	13.9	32.0	32	4.0	13.8	2.1
PP	15 - 19	LIVE	Domestic	18.4	16.0	25	0.0	8.2	1.6

Cruise Unit Report
Q BUCK MTN U2

Unit Sale Notice Volume (MBF): Q BUCK MTN U2

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	15.4			730.3	378.9	262.6	88.8	
WL	18.3			204.5	119.8	67.7	17.1	
PP	18.6			36.0			21.6	14.3
LP	12.1			9.0		5.1	3.9	
ALL	16.1			979.7	498.7	335.3	131.4	14.3

Unit Sale Notice Weight (tons): Q BUCK MTN U2

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	4,771.1	2,249.3	1,902.7	619.1	
WL	1,220.8	690.0	407.5	123.3	
PP	212.6			118.2	94.4
LP	68.9		39.7	29.2	
ALL	6,273.4	2,939.3	2,349.9	889.8	94.4

Unit Cruise Design: Q BUCK MTN U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	83.4	85.9	51	14	2

Unit Cruise Summary: Q BUCK MTN U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	37	181	3.5	0
WL	19	48	0.9	0
PP	3	36	0.7	0
LP	2	4	0.1	0
ALL	61	269	5.3	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN 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	71.0	85.5	12.0	135.3	37.1	6.1	9,602	93.2	13.4
WL	18.8	191.7	26.8	156.3	33.2	7.6	2,941	194.6	27.9
PP	14.1	158.5	22.2	100.0	32.3	18.7	1,412	161.8	29.0
LP	1.6	430.0	60.2	68.9	51.0	36.0	108	433.0	70.2
ALL	105.5	58.0	8.1	133.3	39.1	5.0	14,063	70.0	9.5

Unit Summary: Q BUCK MTN U2

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	37	ALL	15.4	51	74	8,753	1.9	50.0	64.7	16.5	4,771.1	730.3
DF	LIVE	LEA	0	ALL	22.9			849	1.9	2.2	6.3	1.3	462.7	70.8
LP	LIVE	CUT	2	ALL	12.1	33	44	108	0.0	2.0	1.6	0.5	68.9	9.0
PP	LIVE	CUT	3	ALL	18.6	56	79	431	0.0	2.3	4.3	1.0	212.6	36.0
PP	LIVE	LEA	0	ALL	27.6			980	0.0	2.4	9.8	1.9	483.1	81.8
WL	LIVE	CUT	19	ALL	18.3	71	93	2,451	2.3	8.6	15.7	3.7	1,220.8	204.5
WL	LIVE	LEA	0	ALL	24.1	8	8	490	2.3	1.0	3.1	0.6	244.2	40.9
ALL	LIVE	CUT	61	ALL	15.9	53	76	11,743	1.9	62.9	86.3	21.7	6,273.4	979.8
ALL	LIVE	LEA	0	ALL	25.2	1	1	2,319	1.2	5.6	19.2	3.8	1,190.0	193.5
ALL	ALL	ALL	61	ALL	16.8	49	70	14,062	1.8	68.5	105.5	25.5	7,463.4	1,173.3

Unit Stand Table: Q BUCK MTN U2

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	2	8.0	30	62	279	2.9	10.1	3.5	1.2	142.5	23.3
DF	10	LIVE	CUT	3	9.5	31	53	361	2.5	10.6	5.2	1.7	228.9	30.1
DF	12	LIVE	CUT	2	12.4	56	81	353	6.9	4.2	3.5	1.0	243.4	29.4
DF	14	LIVE	CUT	4	14.3	54	71	730	0.0	6.2	7.0	1.8	440.7	60.9
DF	16	LIVE	CUT	4	16.0	58	75	725	5.6	5.0	7.0	1.8	478.6	60.5
DF	18	LIVE	CUT	3	17.9	71	88	724	0.9	3.0	5.2	1.2	403.8	60.4
DF	20	LIVE	CUT	5	19.8	74	92	1,248	0.4	4.1	8.7	2.0	690.9	104.2
DF	22	LIVE	CUT	3	21.5	72	90	788	2.2	2.1	5.2	1.1	410.0	65.8
DF	24	LIVE	CUT	3	23.1	79	100	761	1.9	1.8	5.2	1.1	432.8	63.5
DF	26	LIVE	CUT	3	25.7	90	114	1,055	0.6	1.5	5.2	1.0	487.0	88.1
DF	28	LIVE	CUT	2	27.8	80	101	596	2.0	0.8	3.5	0.7	298.6	49.7
DF	30	LIVE	CUT	1	29.2	93	119	341	1.8	0.4	1.7	0.3	163.6	28.4
DF	32	LIVE	CUT	1	31.9	95	121	365	3.8	0.3	1.7	0.3	170.7	30.5

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	46	LIVE	CUT	1	45.0	102	130	426	0.0	0.2	1.7	0.3	179.5	35.5
DF	14	LIVE	LEA	1	14.0			53	1.9	0.4	0.4	0.1	28.9	4.4
DF	16	LIVE	LEA	2	15.5			106	1.9	0.6	0.8	0.2	57.8	8.9
DF	18	LIVE	LEA	1	18.0			53	1.9	0.2	0.4	0.1	28.9	4.4
DF	22	LIVE	LEA	1	22.0			53	1.9	0.1	0.4	0.1	28.9	4.4
DF	24	LIVE	LEA	1	24.0			53	1.9	0.1	0.4	0.1	28.9	4.4
DF	28	LIVE	LEA	3	27.3			159	1.9	0.3	1.2	0.2	86.8	13.3
DF	32	LIVE	LEA	2	32.0			106	1.9	0.1	0.8	0.1	57.8	8.9
DF	34	LIVE	LEA	1	33.0			53	1.9	0.1	0.4	0.1	28.9	4.4
DF	36	LIVE	LEA	4	35.0			212	1.9	0.2	1.6	0.3	115.6	17.7
LP	10	LIVE	CUT	1	10.2	24	34	35	0.0	1.4	0.8	0.3	22.1	2.9
LP	16	LIVE	CUT	1	15.7	54	69	73	0.0	0.6	0.8	0.2	46.8	6.1
PP	16	LIVE	CUT	1	15.3	45	70	97	0.0	1.1	1.4	0.4	56.4	8.1
PP	22	LIVE	CUT	2	21.3	66	88	334	0.0	1.2	2.9	0.6	156.2	27.9
PP	18	LIVE	LEA	1	17.0			39	0.0	0.2	0.4	0.1	19.3	3.3
PP	20	LIVE	LEA	1	19.0			39	0.0	0.2	0.4	0.1	19.3	3.3
PP	22	LIVE	LEA	3	21.3			118	0.0	0.5	1.2	0.3	58.0	9.8
PP	24	LIVE	LEA	1	23.0			39	0.0	0.1	0.4	0.1	19.3	3.3
PP	26	LIVE	LEA	1	26.0			39	0.0	0.1	0.4	0.1	19.3	3.3
PP	30	LIVE	LEA	3	30.0			117	0.0	0.2	1.2	0.2	57.9	9.8
PP	32	LIVE	LEA	3	31.7			118	0.0	0.2	1.2	0.2	58.0	9.8
PP	34	LIVE	LEA	8	33.4			353	0.0	0.6	3.5	0.6	174.0	29.4
PP	36	LIVE	LEA	1	35.0			39	0.0	0.1	0.4	0.1	19.3	3.3
PP	38	LIVE	LEA	1	38.0			39	0.0	0.0	0.4	0.1	19.3	3.3
PP	40	LIVE	LEA	1	39.0			39	0.0	0.0	0.4	0.1	19.3	3.3
WL	12	LIVE	CUT	2	12.2	46	64	138	0.0	2.0	1.7	0.5	90.9	11.5
WL	14	LIVE	CUT	2	13.8	71	96	256	0.0	1.6	1.7	0.4	124.2	21.4
WL	16	LIVE	CUT	1	15.3	61	82	52	36.2	0.6	0.8	0.2	53.3	4.4
WL	20	LIVE	CUT	6	19.9	82	103	794	0.7	2.3	5.0	1.1	395.1	66.3
WL	22	LIVE	CUT	4	21.8	82	104	509	2.5	1.3	3.3	0.7	258.4	42.4
WL	26	LIVE	CUT	3	26.1	96	122	478	1.6	0.7	2.5	0.5	218.7	39.9
WL	34	LIVE	CUT	1	33.4	105	134	223	0.0	0.1	0.8	0.1	80.1	18.6
WL	18	LIVE	LEA	1	18.0			61	2.3	0.2	0.4	0.1	30.5	5.1
WL	20	LIVE	LEA	1	19.0			61	2.3	0.2	0.4	0.1	30.5	5.1
WL	24	LIVE	LEA	1	23.0			61	2.3	0.1	0.4	0.1	30.5	5.1
WL	28	LIVE	LEA	2	27.3			184	2.3	0.3	1.2	0.2	91.6	15.3
WL	32	LIVE	LEA	2	31.5	51	57	123	2.3	0.1	0.8	0.1	61.1	10.2

Unit Log Grade Summary: Q BUCK MTN U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.6	32.0	4,542	1.2	2,249.3	378.9
DF	LIVE	3 SAW	8.3	31.0	3,147	2.7	1,902.7	262.6
DF	LIVE	4 SAW	5.4	20.0	1,064	0.9	619.1	88.8
DF	LIVE	CULL	7.8	2.0	0	100.0	0.0	0.0
LP	LIVE	3 SAW	9.2	32.0	61	0.0	39.7	5.1
LP	LIVE	4 SAW	5.6	20.0	47	0.0	29.2	3.9
PP	LIVE	4 SAW	12.5	32.0	259	0.0	118.2	21.6
PP	LIVE	5 SAW	7.2	31.0	172	0.0	94.4	14.3
WL	LIVE	2 SAW	14.3	32.0	1,436	1.3	690.0	119.8
WL	LIVE	3 SAW	8.8	31.0	811	3.9	407.5	67.7
WL	LIVE	4 SAW	5.6	22.0	205	2.5	123.3	17.1

Unit Log Sort Summary: Q BUCK MTN U2

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	7.8	2.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	7.9	26.0	8,753	1.7	4,771.1	730.3
LP	LIVE	Domestic	6.4	23.0	108	0.0	68.9	9.0
PP	LIVE	Domestic	9.0	32.0	431	0.0	212.6	36.0
WL	LIVE	Domestic	9.0	28.0	2,451	2.3	1,220.8	204.5

Unit Log Grade x Sort Summary: Q BUCK MTN U2

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	14.6	32.0	4,542	1.2	2,249.3	378.9
DF	LIVE	3 SAW	Domestic	8.3	31.0	3,147	2.7	1,902.7	262.6
DF	LIVE	4 SAW	Domestic	5.4	20.0	1,064	0.9	619.1	88.8
DF	LIVE	CULL	Cull	7.8	2.0	0	100.0	0.0	0.0
LP	LIVE	3 SAW	Domestic	9.2	32.0	61	0.0	39.7	5.1
LP	LIVE	4 SAW	Domestic	5.6	20.0	47	0.0	29.2	3.9
PP	LIVE	4 SAW	Domestic	12.5	32.0	259	0.0	118.2	21.6
PP	LIVE	5 SAW	Domestic	7.2	31.0	172	0.0	94.4	14.3
WL	LIVE	2 SAW	Domestic	14.3	32.0	1,436	1.3	690.0	119.8
WL	LIVE	3 SAW	Domestic	8.8	31.0	811	3.9	407.5	67.7
WL	LIVE	4 SAW	Domestic	5.6	22.0	205	2.5	123.3	17.1

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U2

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.4	20.0	1,064	0.9	619.1	88.8
DF	5 - 8	LIVE	CULL	6.5	2.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	3 SAW	7.3	31.0	1,464	5.2	959.0	122.1
DF	9 - 11	LIVE	3 SAW	10.1	31.0	1,683	0.4	943.6	140.4
DF	12 - 14	LIVE	2 SAW	13.2	32.0	2,416	0.7	1,235.8	201.5
DF	12 - 14	LIVE	CULL	13.6	2.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	2 SAW	17.0	32.0	1,558	1.6	759.7	130.0
DF	20+	LIVE	2 SAW	23.7	32.0	568	2.3	253.8	47.4
LP	5 - 8	LIVE	4 SAW	5.6	20.0	47	0.0	29.2	3.9
LP	9 - 11	LIVE	3 SAW	9.2	32.0	61	0.0	39.7	5.1
PP	5 - 8	LIVE	5 SAW	7.2	31.0	172	0.0	94.4	14.3
PP	12 - 14	LIVE	4 SAW	12.5	32.0	259	0.0	118.2	21.6
WL	5 - 8	LIVE	4 SAW	5.6	22.0	205	2.5	123.3	17.1
WL	5 - 8	LIVE	3 SAW	7.6	31.0	279	1.1	147.5	23.3
WL	9 - 11	LIVE	3 SAW	9.8	31.0	532	5.3	260.0	44.4
WL	12 - 14	LIVE	2 SAW	13.4	32.0	980	1.1	489.0	81.8
WL	15 - 19	LIVE	2 SAW	17.3	32.0	338	2.2	156.8	28.2
WL	20+	LIVE	2 SAW	23.5	32.0	117	0.0	44.2	9.8

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U2

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	6.1	23.0	2,528	3.4	1,578.2	210.9
DF	5 - 8	LIVE	Cull	6.5	2.0	0	100.0	0.0	0.0
DF	9 - 11	LIVE	Domestic	10.1	31.0	1,683	0.4	943.6	140.4
DF	12 - 14	LIVE	Domestic	13.2	32.0	2,416	0.7	1,235.8	201.5
DF	12 - 14	LIVE	Cull	13.6	2.0	0	100.0	0.0	0.0
DF	15 - 19	LIVE	Domestic	17.0	32.0	1,558	1.6	759.7	130.0
DF	20+	LIVE	Domestic	23.7	32.0	568	2.3	253.8	47.4
LP	5 - 8	LIVE	Domestic	5.6	20.0	47	0.0	29.2	3.9
LP	9 - 11	LIVE	Domestic	9.2	32.0	61	0.0	39.7	5.1
PP	5 - 8	LIVE	Domestic	7.2	31.0	172	0.0	94.4	14.3
PP	12 - 14	LIVE	Domestic	12.5	32.0	259	0.0	118.2	21.6
WL	5 - 8	LIVE	Domestic	6.3	25.0	484	1.7	270.8	40.4
WL	9 - 11	LIVE	Domestic	9.8	31.0	532	5.3	260.0	44.4
WL	12 - 14	LIVE	Domestic	13.4	32.0	980	1.1	489.0	81.8
WL	15 - 19	LIVE	Domestic	17.3	32.0	338	2.2	156.8	28.2

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WL	20+	LIVE	Domestic	23.5	32.0	117	0.0	44.2	9.8

Cruise Unit Report
Q BUCK MTN U3

Unit Sale Notice Volume (MBF): Q BUCK MTN U3

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	19.9			329.1	226.5	82.1	20.4	
PP	18.4			231.9			66.5	165.4
WL	22.7			53.7	47.2	6.5		
ALL	19.3			614.7	273.7	88.6	86.9	165.4

Unit Sale Notice Weight (tons): Q BUCK MTN U3

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	2,005.1	1,312.7	533.2	159.1	
PP	1,442.9			391.9	1,051.0
WL	257.7	221.8	35.9		
ALL	3,705.7	1,534.5	569.1	551.1	1,051.0

Unit Cruise Design: Q BUCK MTN U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft	54.9	55.1	27	10	1

Unit Cruise Summary: Q BUCK MTN U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
PP	14	64	2.4	0
DF	16	41	1.5	0
WL	2	5	0.2	0
ALL	32	110	4.1	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN 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 (%)
PP	65.8	82.9	15.9	100.2	28.7	7.7	6,597	87.7	17.7
DF	42.2	125.7	24.2	149.4	47.5	11.9	6,304	134.4	27.0

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 (%)
WL	5.1	261.0	50.2	237.5	0.9	0.6	1,222	261.0	50.2
ALL	113.2	51.4	9.9	124.8	51.4	9.1	14,123	72.7	13.4

Unit Summary: Q BUCK MTN U3

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	16	ALL	19.9	64	81	5,996	3.2	18.6	40.1	9.0	2,005.1	329.1
DF	LIVE	LEA	0	ALL	29.5			307	3.2	0.4	2.1	0.4	102.8	16.9
PP	LIVE	CUT	14	ALL	18.4	59	86	4,226	3.4	22.8	42.2	9.8	1,442.9	231.9
PP	LIVE	LEA	0	ALL	26.0	7	9	2,371	3.4	6.4	23.7	4.6	809.4	130.1
WL	LIVE	CUT	2	ALL	22.7	97	124	978	0.0	1.5	4.1	0.9	257.7	53.6
WL	LIVE	LEA	0	ALL	30.0			244	0.0	0.2	1.0	0.2	64.4	13.4
ALL	LIVE	CUT	32	ALL	19.2	62	85	11,200	3.0	42.9	86.4	19.7	3,705.7	614.6
ALL	LIVE	LEA	0	ALL	26.3	6	8	2,922	3.1	7.0	26.8	5.2	976.6	160.4
ALL	ALL	ALL	32	ALL	20.4	55	74	14,122	3.0	49.9	113.2	24.9	4,682.3	775.0

Unit Stand Table: Q BUCK MTN U3

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	12	LIVE	CUT	1	11.3	27	36	144	0.0	3.6	2.5	0.7	62.0	7.9
DF	14	LIVE	CUT	1	14.4	50	67	228	0.0	2.2	2.5	0.7	104.0	12.5
DF	16	LIVE	CUT	1	16.5	82	103	497	0.0	1.7	2.5	0.6	147.9	27.3
DF	18	LIVE	CUT	2	17.8	76	96	813	1.4	2.9	5.0	1.2	272.1	44.6
DF	20	LIVE	CUT	1	19.9	53	64	181	14.3	1.2	2.5	0.6	101.7	9.9
DF	22	LIVE	CUT	2	22.0	83	105	833	5.1	1.9	5.0	1.1	287.1	45.7
DF	24	LIVE	CUT	1	24.1	82	104	423	2.2	0.8	2.5	0.5	139.9	23.2
DF	26	LIVE	CUT	4	25.6	73	91	1,260	6.8	2.8	10.0	2.0	428.6	69.1
DF	28	LIVE	CUT	2	27.5	80	102	841	1.0	1.2	5.0	1.0	279.3	46.2
DF	38	LIVE	CUT	1	37.4	105	134	775	0.0	0.3	2.5	0.4	182.5	42.5
DF	26	LIVE	LEA	1	26.0			153	3.2	0.3	1.1	0.2	51.4	8.4
DF	36	LIVE	LEA	1	35.0			154	3.2	0.2	1.1	0.2	51.4	8.4
PP	14	LIVE	CUT	1	14.0	32	50	107	5.0	2.8	3.0	0.8	66.8	5.9
PP	16	LIVE	CUT	3	15.4	48	75	730	0.0	7.0	9.0	2.3	270.9	40.1
PP	18	LIVE	CUT	4	17.7	67	98	1,356	0.9	7.0	12.1	2.9	449.8	74.4
PP	20	LIVE	CUT	1	20.1	62	86	284	0.0	1.4	3.0	0.7	104.5	15.6
PP	22	LIVE	CUT	3	22.4	85	114	1,195	1.9	3.3	9.0	1.9	381.4	65.6
PP	26	LIVE	CUT	1	26.7	69	91	243	30.8	0.8	3.0	0.6	64.3	13.3
PP	32	LIVE	CUT	1	31.0	64	84	309	0.0	0.6	3.0	0.5	105.2	17.0

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
PP	16	LIVE	LEA	1	15.0			103	3.4	0.8	1.0	0.3	35.2	5.7
PP	18	LIVE	LEA	1	17.0			103	3.4	0.7	1.0	0.2	35.2	5.7
PP	22	LIVE	LEA	2	21.5			206	3.4	0.8	2.1	0.4	70.4	11.3
PP	24	LIVE	LEA	2	23.5			206	3.4	0.7	2.1	0.4	70.4	11.3
PP	26	LIVE	LEA	2	25.3			309	3.4	0.9	3.1	0.6	105.5	17.0
PP	28	LIVE	LEA	3	28.0			309	3.4	0.7	3.1	0.6	105.6	17.0
PP	30	LIVE	LEA	1	30.0			103	3.4	0.2	1.0	0.2	35.2	5.7
PP	32	LIVE	LEA	2	31.5	45	54	206	3.4	0.4	2.1	0.4	70.3	11.3
PP	34	LIVE	LEA	4	33.7	23	27	413	3.4	0.7	4.1	0.7	140.9	22.6
PP	36	LIVE	LEA	3	35.7	33	38	309	3.4	0.4	3.1	0.5	105.6	17.0
PP	40	LIVE	LEA	1	40.0			103	3.4	0.1	1.0	0.2	35.2	5.7
WL	20	LIVE	CUT	1	20.8	97	124	492	0.0	0.9	2.1	0.4	128.1	27.0
WL	26	LIVE	CUT	1	25.3	98	125	486	0.0	0.6	2.1	0.4	129.6	26.7
WL	30	LIVE	LEA	1	30.0			244	0.0	0.2	1.0	0.2	64.4	13.4

Unit Log Grade Summary: Q BUCK MTN U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	14.4	32.0	4,127	2.0	1,312.7	226.5
DF	LIVE	3 SAW	8.8	31.0	1,496	2.2	533.2	82.1
DF	LIVE	4 SAW	5.7	18.0	372	0.4	159.1	20.4
DF	LIVE	CULL	7.2	20.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	13.5	32.0	1,212	0.6	391.9	66.5
PP	LIVE	5 SAW	7.8	28.0	3,014	1.1	1,051.0	165.4
PP	LIVE	CULL	19.5	8.0	0	100.0	0.0	0.0
WL	LIVE	2 SAW	14.5	32.0	860	0.0	221.8	47.2
WL	LIVE	3 SAW	7.2	30.0	118	0.0	35.9	6.5

Unit Log Sort Summary: Q BUCK MTN U3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	7.2	20.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	9.4	27.0	5,996	2.0	2,005.1	329.1
PP	LIVE	Cull	19.5	8.0	0	100.0	0.0	0.0
PP	LIVE	Domestic	8.4	29.0	4,226	0.9	1,442.9	231.9
WL	LIVE	Domestic	12.1	31.0	978	0.0	257.7	53.7

Unit Log Grade x Sort Summary: Q BUCK MTN U3

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	14.4	32.0	4,127	2.0	1,312.7	226.5
DF	LIVE	3 SAW	Domestic	8.8	31.0	1,496	2.2	533.2	82.1
DF	LIVE	4 SAW	Domestic	5.7	18.0	372	0.4	159.1	20.4
DF	LIVE	CULL	Cull	7.2	20.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	Domestic	13.5	32.0	1,212	0.6	391.9	66.5
PP	LIVE	5 SAW	Domestic	7.8	28.0	3,014	1.1	1,051.0	165.4
PP	LIVE	CULL	Cull	19.5	8.0	0	100.0	0.0	0.0
WL	LIVE	2 SAW	Domestic	14.5	32.0	860	0.0	221.8	47.2
WL	LIVE	3 SAW	Domestic	7.2	30.0	118	0.0	35.9	6.5

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U3

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	CULL	5.0	8.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	4 SAW	5.7	18.0	372	0.4	159.1	20.4
DF	5 - 8	LIVE	3 SAW	7.8	31.0	697	0.4	256.0	38.3
DF	9 - 11	LIVE	CULL	9.4	32.0	0	100.0	0.0	0.0
DF	9 - 11	LIVE	3 SAW	10.7	32.0	799	3.6	277.3	43.9
DF	9 - 11	LIVE	2 SAW	11.5	32.0	326	0.0	95.1	17.9
DF	12 - 14	LIVE	2 SAW	12.4	32.0	1,138	5.6	395.7	62.4
DF	15 - 19	LIVE	2 SAW	16.4	32.0	1,996	0.9	669.7	109.5
DF	20+	LIVE	2 SAW	24.8	32.0	668	0.0	152.1	36.6
PP	5 - 8	LIVE	5 SAW	6.7	26.0	1,326	0.4	482.4	72.8
PP	9 - 11	LIVE	5 SAW	10.1	32.0	1,688	1.6	568.6	92.7
PP	12 - 14	LIVE	4 SAW	13.1	32.0	968	0.7	308.7	53.1
PP	15 - 19	LIVE	4 SAW	16.8	32.0	244	0.0	83.3	13.4
PP	15 - 19	LIVE	CULL	19.5	8.0	0	100.0	0.0	0.0
WL	5 - 8	LIVE	3 SAW	7.2	30.0	118	0.0	35.9	6.5
WL	9 - 11	LIVE	2 SAW	11.5	32.0	168	0.0	38.6	9.2
WL	12 - 14	LIVE	2 SAW	14.1	32.0	162	0.0	39.5	8.9
WL	15 - 19	LIVE	2 SAW	16.4	32.0	530	0.0	143.7	29.1

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U3

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Cull	5.0	8.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	Domestic	6.4	22.0	1,069	0.4	415.1	58.7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	9 - 11	LIVE	Cull	9.4	32.0	0	100.0	0.0	0.0
DF	9 - 11	LIVE	Domestic	10.9	32.0	1,125	2.6	372.4	61.8
DF	12 - 14	LIVE	Domestic	12.4	32.0	1,138	5.6	395.7	62.4
DF	15 - 19	LIVE	Domestic	16.4	32.0	1,996	0.9	669.7	109.5
DF	20+	LIVE	Domestic	24.8	32.0	668	0.0	152.1	36.6
PP	5 - 8	LIVE	Domestic	6.7	26.0	1,326	0.4	482.4	72.8
PP	9 - 11	LIVE	Domestic	10.1	32.0	1,688	1.6	568.6	92.7
PP	12 - 14	LIVE	Domestic	13.1	32.0	968	0.7	308.7	53.1
PP	15 - 19	LIVE	Domestic	16.8	32.0	244	0.0	83.3	13.4
PP	15 - 19	LIVE	Cull	19.5	8.0	0	100.0	0.0	0.0
WL	5 - 8	LIVE	Domestic	7.2	30.0	118	0.0	35.9	6.5
WL	9 - 11	LIVE	Domestic	11.5	32.0	168	0.0	38.6	9.2
WL	12 - 14	LIVE	Domestic	14.1	32.0	162	0.0	39.5	8.9
WL	15 - 19	LIVE	Domestic	16.4	32.0	530	0.0	143.7	29.1

Cruise Unit Report
Q BUCK MTN U4

Unit Sale Notice Volume (MBF): Q BUCK MTN U4

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	19.0			220.7	103.4	104.4	12.9	
WL	13.0			141.4	20.7	101.1	19.6	
PP	14.6			100.3			21.3	79.0
ES	17.1			5.5	4.5		1.0	
LP	10.0			4.8		2.6	2.2	
ALL	15.0			472.7	128.6	208.1	57.1	79.0

Unit Sale Notice Weight (tons): Q BUCK MTN U4

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	1,538.1	645.2	783.0	109.9	
WL	869.8	118.5	632.5	118.8	
PP	626.5			125.0	501.5
LP	33.4		18.6	14.8	
ES	32.2	24.2		8.1	
ALL	3,100.0	787.9	1,434.1	376.5	501.5

Unit Cruise Design: Q BUCK MTN U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft	46.5	46.8	34	12	0

Unit Cruise Summary: Q BUCK MTN U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	18	47	1.4	0
PP	9	47	1.4	0
WL	12	33	1.0	0
ES	1	1	0.0	0
LP	2	2	0.1	0
ALL	42	130	3.8	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN 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	38.4	133.3	22.9	123.5	43.8	10.3	4,744	140.3	25.1
PP	38.4	115.4	19.8	87.9	22.0	7.3	3,376	117.5	21.1
WL	27.0	130.5	22.4	124.0	33.8	9.8	3,344	134.8	24.4
ES	0.8	583.1	100.0	146.1	0.0	0.0	119	583.1	100.0
LP	1.6	406.0	69.6	63.0	11.5	8.1	103	406.2	70.1
ALL	106.2	49.2	8.4	110.0	42.0	6.5	11,687	64.7	10.6

Unit Summary: Q BUCK MTN U4

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	18	ALL	19.0	57	73	4,744	2.1	19.5	38.4	8.8	1,538.1	220.7
ES	LIVE	CUT	1	ALL	17.1	63	76	119	1.7	0.5	0.8	0.2	32.2	5.6
LP	LIVE	CUT	2	ALL	10.0	31	44	103	17.8	3.0	1.6	0.5	33.4	4.8
PP	LIVE	CUT	9	ALL	14.6	45	76	2,155	1.3	21.1	24.5	6.4	626.5	100.2
PP	LIVE	LEA	0	ALL	23.9			1,221	1.3	4.5	13.9	2.8	355.0	56.8
WL	LIVE	CUT	12	ALL	13.0	54	77	3,040	1.6	26.6	24.5	6.8	869.8	141.4
WL	LIVE	LEA	0	ALL	26.2			304	1.6	0.7	2.5	0.5	87.0	14.1
ALL	LIVE	LEA	0	ALL	24.2			1,525	1.4	5.2	16.4	3.3	442.0	70.9
ALL	LIVE	CUT	42	ALL	15.3	51	74	10,161	1.9	70.7	89.8	22.7	3,100.0	472.7
ALL	ALL	ALL	42	ALL	16.0	48	69	11,686	1.9	75.9	106.2	26.0	3,542.0	543.6

Unit Stand Table: Q BUCK MTN U4

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	14	LIVE	CUT	4	14.1	47	62	796	2.6	7.9	8.5	2.3	278.4	37.0
DF	16	LIVE	CUT	1	16.5	51	64	171	2.5	1.4	2.1	0.5	74.3	8.0
DF	18	LIVE	CUT	3	17.8	61	76	668	2.8	3.7	6.4	1.5	243.6	31.1
DF	20	LIVE	CUT	2	19.2	58	74	414	0.0	2.1	4.3	1.0	159.0	19.3
DF	22	LIVE	CUT	1	21.1	64	80	289	0.0	0.9	2.1	0.5	86.2	13.4
DF	24	LIVE	CUT	3	24.2	69	86	768	2.0	2.0	6.4	1.3	267.3	35.7
DF	28	LIVE	CUT	1	28.8	75	94	237	7.0	0.5	2.1	0.4	93.1	11.0
DF	30	LIVE	CUT	1	30.8	82	104	433	0.0	0.4	2.1	0.4	103.9	20.2
DF	34	LIVE	CUT	2	34.0	95	121	967	2.2	0.7	4.3	0.7	232.3	45.0
ES	18	LIVE	CUT	1	17.1	63	76	119	1.7	0.5	0.8	0.2	32.2	5.5
LP	8	LIVE	CUT	1	8.9	24	38	47	0.0	1.9	0.8	0.3	14.8	2.2
LP	12	LIVE	CUT	1	11.6	42	55	56	28.6	1.1	0.8	0.2	18.6	2.6
PP	12	LIVE	CUT	2	11.5	39	78	431	0.0	7.5	5.4	1.6	122.2	20.1

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
PP	14	LIVE	CUT	4	13.9	44	72	909	0.6	10.3	10.9	2.9	267.8	42.3
PP	20	LIVE	CUT	1	19.5	54	74	234	0.0	1.3	2.7	0.6	73.3	10.9
PP	22	LIVE	CUT	1	21.0	61	80	255	3.8	1.1	2.7	0.6	77.1	11.9
PP	24	LIVE	CUT	1	23.6	72	90	326	3.7	0.9	2.7	0.6	86.1	15.1
PP	14	LIVE	LEA	1	14.0			72	1.3	0.8	0.8	0.2	20.9	3.3
PP	18	LIVE	LEA	2	17.0			144	1.3	1.0	1.6	0.4	41.8	6.7
PP	20	LIVE	LEA	1	19.0			72	1.3	0.4	0.8	0.2	20.9	3.3
PP	24	LIVE	LEA	2	23.5			144	1.3	0.5	1.6	0.3	41.8	6.7
PP	26	LIVE	LEA	1	26.0			72	1.3	0.2	0.8	0.2	20.9	3.3
PP	28	LIVE	LEA	3	27.3			216	1.3	0.6	2.5	0.5	62.7	10.0
PP	30	LIVE	LEA	1	30.0			72	1.3	0.2	0.8	0.1	20.9	3.3
PP	32	LIVE	LEA	1	32.0			72	1.3	0.1	0.8	0.1	20.9	3.3
PP	34	LIVE	LEA	1	33.0			72	1.3	0.1	0.8	0.1	20.9	3.3
PP	36	LIVE	LEA	2	36.0			144	1.3	0.2	1.6	0.3	41.8	6.7
PP	38	LIVE	LEA	1	38.0			72	1.3	0.1	0.8	0.1	20.9	3.3
PP	40	LIVE	LEA	1	39.0			72	1.3	0.1	0.8	0.1	20.9	3.3
WL	10	LIVE	CUT	3	10.4	45	72	615	1.1	10.3	6.1	1.9	186.2	28.6
WL	12	LIVE	CUT	2	11.8	37	53	258	12.0	5.4	4.1	1.2	99.8	12.0
WL	14	LIVE	CUT	4	14.0	68	90	1,159	0.0	7.6	8.2	2.2	320.1	53.9
WL	16	LIVE	CUT	1	15.5	79	102	346	0.0	1.6	2.0	0.5	88.6	16.1
WL	20	LIVE	CUT	2	20.6	78	99	661	1.1	1.8	4.1	0.9	175.2	30.8
WL	18	LIVE	LEA	1	18.0			101	1.6	0.5	0.8	0.2	29.0	4.7
WL	38	LIVE	LEA	1	37.0			101	1.6	0.1	0.8	0.1	29.0	4.7
WL	42	LIVE	LEA	1	42.0			101	1.6	0.1	0.8	0.1	29.0	4.7

Unit Log Grade Summary: Q BUCK MTN U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	16.0	32.0	2,223	2.4	645.2	103.4
DF	LIVE	3 SAW	8.9	31.0	2,243	0.2	783.0	104.4
DF	LIVE	4 SAW	5.7	19.0	278	6.5	109.9	12.9
DF	LIVE	CULL	5.0	10.0	0	100.0	0.0	0.0
ES	LIVE	2 SAW	11.9	32.0	97	2.1	24.2	4.5
ES	LIVE	4 SAW	5.3	28.0	22	0.0	8.1	1.0
LP	LIVE	3 SAW	7.5	30.0	56	15.3	18.6	2.6
LP	LIVE	4 SAW	5.6	20.0	47	0.0	14.8	2.2
LP	LIVE	CULL	5.0	10.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	12.7	32.0	457	1.5	125.0	21.3

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
PP	LIVE	5 SAW	7.1	27.0	1,698	1.2	501.5	79.0
WL	LIVE	2 SAW	14.0	32.0	445	1.6	118.5	20.7
WL	LIVE	3 SAW	7.4	32.0	2,173	1.8	632.5	101.1
WL	LIVE	4 SAW	5.1	20.0	422	0.7	118.8	19.6

Unit Log Sort Summary: Q BUCK MTN U4

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Cull	5.0	10.0	0	100.0	0.0	0.0
DF	LIVE	Domestic	8.9	27.0	4,744	1.6	1,538.1	220.7
ES	LIVE	Domestic	8.6	30.0	119	1.7	32.2	5.5
LP	LIVE	Cull	5.0	10.0	0	100.0	0.0	0.0
LP	LIVE	Domestic	6.3	24.0	103	8.9	33.4	4.8
PP	LIVE	Domestic	7.5	27.0	2,155	1.3	626.5	100.3
WL	LIVE	Domestic	6.9	28.0	3,040	1.6	869.8	141.4

Unit Log Grade x Sort Summary: Q BUCK MTN U4

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	16.0	32.0	2,223	2.4	645.2	103.4
DF	LIVE	3 SAW	Domestic	8.9	31.0	2,243	0.2	783.0	104.4
DF	LIVE	4 SAW	Domestic	5.7	19.0	278	6.5	109.9	12.9
DF	LIVE	CULL	Cull	5.0	10.0	0	100.0	0.0	0.0
ES	LIVE	2 SAW	Domestic	11.9	32.0	97	2.1	24.2	4.5
ES	LIVE	4 SAW	Domestic	5.3	28.0	22	0.0	8.1	1.0
LP	LIVE	3 SAW	Domestic	7.5	30.0	56	15.3	18.6	2.6
LP	LIVE	4 SAW	Domestic	5.6	20.0	47	0.0	14.8	2.2
LP	LIVE	CULL	Cull	5.0	10.0	0	100.0	0.0	0.0
PP	LIVE	4 SAW	Domestic	12.7	32.0	457	1.5	125.0	21.3
PP	LIVE	5 SAW	Domestic	7.1	27.0	1,698	1.2	501.5	79.0
WL	LIVE	2 SAW	Domestic	14.0	32.0	445	1.6	118.5	20.7
WL	LIVE	3 SAW	Domestic	7.4	32.0	2,173	1.8	632.5	101.1
WL	LIVE	4 SAW	Domestic	5.1	20.0	422	0.7	118.8	19.6

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U4

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	CULL	5.0	10.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	4 SAW	5.5	19.0	260	6.9	103.8	12.1

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	3 SAW	7.0	31.0	645	0.0	243.3	30.0
DF	9 - 11	LIVE	4 SAW	9.5	14.0	18	0.0	6.0	0.8
DF	9 - 11	LIVE	3 SAW	10.3	31.0	1,599	0.3	539.7	74.4
DF	12 - 14	LIVE	2 SAW	13.6	32.0	702	2.2	232.3	32.7
DF	15 - 19	LIVE	2 SAW	16.0	32.0	695	2.5	204.6	32.3
DF	20+	LIVE	2 SAW	22.0	32.0	826	2.6	208.4	38.4
ES	5 - 8	LIVE	4 SAW	5.3	28.0	22	0.0	8.1	1.0
ES	12 - 14	LIVE	2 SAW	11.9	32.0	97	2.1	24.2	4.5
LP	5 - 8	LIVE	CULL	5.0	10.0	0	100.0	0.0	0.0
LP	5 - 8	LIVE	4 SAW	5.6	20.0	47	0.0	14.8	2.2
LP	5 - 8	LIVE	3 SAW	7.5	30.0	56	15.3	18.6	2.6
PP	5 - 8	LIVE	5 SAW	6.8	27.0	1,433	0.7	422.9	66.7
PP	9 - 11	LIVE	5 SAW	10.4	27.0	265	3.9	78.6	12.3
PP	12 - 14	LIVE	4 SAW	12.7	32.0	457	1.5	125.0	21.3
WL	5 - 8	LIVE	4 SAW	5.1	20.0	422	0.7	118.8	19.6
WL	5 - 8	LIVE	3 SAW	6.4	32.0	1,017	3.7	318.6	47.3
WL	9 - 11	LIVE	3 SAW	9.5	32.0	1,156	0.0	313.9	53.8
WL	12 - 14	LIVE	2 SAW	14.0	32.0	445	1.6	118.5	20.7

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U4

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Cull	5.0	10.0	0	100.0	0.0	0.0
DF	5 - 8	LIVE	Domestic	6.2	24.0	904	2.1	347.2	42.1
DF	9 - 11	LIVE	Domestic	10.2	30.0	1,617	0.3	545.7	75.2
DF	12 - 14	LIVE	Domestic	13.6	32.0	702	2.2	232.3	32.7
DF	15 - 19	LIVE	Domestic	16.0	32.0	695	2.5	204.6	32.3
DF	20+	LIVE	Domestic	22.0	32.0	826	2.6	208.4	38.4
ES	5 - 8	LIVE	Domestic	5.3	28.0	22	0.0	8.1	1.0
ES	12 - 14	LIVE	Domestic	11.9	32.0	97	2.1	24.2	4.5
LP	5 - 8	LIVE	Cull	5.0	10.0	0	100.0	0.0	0.0
LP	5 - 8	LIVE	Domestic	6.3	24.0	103	8.9	33.4	4.8
PP	5 - 8	LIVE	Domestic	6.8	27.0	1,433	0.7	422.9	66.7
PP	9 - 11	LIVE	Domestic	10.4	27.0	265	3.9	78.6	12.3
PP	12 - 14	LIVE	Domestic	12.7	32.0	457	1.5	125.0	21.3
WL	5 - 8	LIVE	Domestic	5.8	26.0	1,439	2.9	437.4	66.9
WL	9 - 11	LIVE	Domestic	9.5	32.0	1,156	0.0	313.9	53.8
WL	12 - 14	LIVE	Domestic	14.0	32.0	445	1.6	118.5	20.7

Cruise Unit Report
Q BUCK MTN U5

Unit Sale Notice Volume (MBF): Q BUCK MTN U5

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
PP	11.7			51.3			9.0	42.3
DF	17.8			22.9	11.2	8.6	3.1	
WL	11.2			1.8			1.8	
ALL	13.1			76.0	11.2	8.6	14.0	42.3

Unit Sale Notice Weight (tons): Q BUCK MTN U5

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
PP	312.8			46.7	266.1
DF	169.0	72.7	71.6	24.7	
WL	12.0			12.0	
ALL	493.8	72.7	71.6	83.4	266.1

Unit Cruise Design: Q BUCK MTN U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	14.7	15.1	13	7	0

Unit Cruise Summary: Q BUCK MTN U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
PP	14	47	3.6	0
DF	7	10	0.8	0
WL	1	1	0.1	0
ALL	22	58	4.5	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN 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 (%)
PP	72.3	34.9	9.7	75.8	50.6	13.5	5,478	61.4	16.6
DF	15.4	120.5	33.4	101.4	28.5	10.8	1,560	123.8	35.1

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 (%)
WL	1.5	360.6	100.0	81.9	0.0	0.0	126	360.6	100.0
ALL	89.2	29.8	8.3	80.3	44.8	9.6	7,164	53.8	12.6

Unit Summary: Q BUCK MTN U5

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	7	ALL	17.8	51	65	1,560	0.5	8.9	15.4	3.6	169.0	22.9
PP	LIVE	CUT	14	ALL	11.7	33	83	3,497	1.2	61.8	46.2	13.5	312.8	51.3
PP	LIVE	LEA	0	ALL	24.2			1,981	1.2	8.2	26.2	5.3	177.3	29.1
WL	LIVE	CUT	1	ALL	11.2	40	58	126	0.0	2.2	1.5	0.5	12.0	1.8
ALL	LIVE	LEA	0	ALL	24.2			1,981	1.2	8.2	26.2	5.3	177.3	29.1
ALL	LIVE	CUT	22	ALL	12.6	35	80	5,183	1.0	72.9	63.1	17.6	493.8	76.0
ALL	ALL	ALL	22	ALL	14.2	32	72	7,164	1.1	81.1	89.3	22.9	671.1	105.1

Unit Stand Table: Q BUCK MTN U5

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	14	LIVE	CUT	2	14.0	45	60	314	0.0	3.6	3.9	1.0	37.0	4.6
DF	16	LIVE	CUT	1	16.3	49	61	154	0.0	1.3	1.9	0.5	19.7	2.3
DF	18	LIVE	CUT	1	17.6	44	57	135	0.0	1.1	1.9	0.5	18.3	2.0
DF	20	LIVE	CUT	1	20.2	63	74	484	2.7	1.7	3.9	0.9	46.3	7.1
DF	24	LIVE	CUT	1	24.8	73	92	278	0.0	0.6	1.9	0.4	26.5	4.1
DF	26	LIVE	CUT	1	25.0	54	67	195	0.3	0.6	1.9	0.4	21.2	2.9
PP	8	LIVE	CUT	3	8.3	23	44	299	0.0	26.4	9.9	3.4	22.3	4.4
PP	10	LIVE	CUT	1	9.7	21	266	161	0.0	6.4	3.3	1.1	18.1	2.4
PP	12	LIVE	CUT	3	11.7	38	76	835	0.0	13.3	9.9	2.9	74.6	12.3
PP	14	LIVE	CUT	2	13.8	53	88	719	0.0	6.3	6.6	1.8	59.9	10.5
PP	16	LIVE	CUT	2	16.0	47	69	498	3.8	4.7	6.6	1.6	49.1	7.3
PP	20	LIVE	CUT	1	19.5	54	76	230	9.4	1.6	3.3	0.7	28.0	3.4
PP	22	LIVE	CUT	2	21.2	62	83	755	0.0	2.7	6.6	1.4	60.8	11.1
PP	14	LIVE	LEA	1	14.0			117	1.2	1.4	1.5	0.4	10.4	1.7
PP	16	LIVE	LEA	2	15.0			233	1.2	2.5	3.1	0.8	20.9	3.4
PP	26	LIVE	LEA	1	26.0			116	1.2	0.4	1.5	0.3	10.4	1.7
PP	28	LIVE	LEA	4	27.7			466	1.2	1.5	6.2	1.2	41.7	6.8
PP	30	LIVE	LEA	2	30.0			233	1.2	0.6	3.1	0.6	20.8	3.4
PP	32	LIVE	LEA	1	32.0			117	1.2	0.3	1.5	0.3	10.4	1.7
PP	34	LIVE	LEA	2	33.7			466	1.2	1.0	6.2	1.1	41.7	6.8
PP	36	LIVE	LEA	2	35.5			233	1.2	0.4	3.1	0.5	20.9	3.4

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
WL	12	LIVE	CUT	1	11.2	40	58	126	0.0	2.2	1.5	0.4	12.0	1.8

Unit Log Grade Summary: Q BUCK MTN U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.6	32.0	760	1.7	72.7	11.2
DF	LIVE	3 SAW	8.7	29.0	587	0.0	71.6	8.6
DF	LIVE	4 SAW	5.5	17.0	213	0.3	24.7	3.1
PP	LIVE	4 SAW	12.6	32.0	614	0.0	46.7	9.0
PP	LIVE	5 SAW	5.7	24.0	2,883	0.8	266.1	42.3
PP	LIVE	CULL	6.0	7.0	0	100.0	0.0	0.0
WL	LIVE	4 SAW	6.4	19.0	126	0.0	12.0	1.8

Unit Log Sort Summary: Q BUCK MTN U5

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	7.9	24.0	1,560	0.9	169.0	22.9
PP	LIVE	Cull	6.0	7.0	0	100.0	0.0	0.0
PP	LIVE	Domestic	6.0	24.0	3,497	0.7	312.8	51.3
WL	LIVE	Domestic	6.4	19.0	126	0.0	12.0	1.8

Unit Log Grade x Sort Summary: Q BUCK MTN U5

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.6	32.0	760	1.7	72.7	11.2
DF	LIVE	3 SAW	Domestic	8.7	29.0	587	0.0	71.6	8.6
DF	LIVE	4 SAW	Domestic	5.5	17.0	213	0.3	24.7	3.1
PP	LIVE	4 SAW	Domestic	12.6	32.0	614	0.0	46.7	9.0
PP	LIVE	5 SAW	Domestic	5.7	24.0	2,883	0.8	266.1	42.3
PP	LIVE	CULL	Cull	6.0	7.0	0	100.0	0.0	0.0
WL	LIVE	4 SAW	Domestic	6.4	19.0	126	0.0	12.0	1.8

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U5

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.5	17.0	213	0.3	24.7	3.1
DF	5 - 8	LIVE	3 SAW	7.9	32.0	145	0.0	17.3	2.1
DF	9 - 11	LIVE	3 SAW	9.0	29.0	442	0.0	54.3	6.5
DF	12 - 14	LIVE	2 SAW	13.2	32.0	564	2.3	53.6	8.3

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	15 - 19	LIVE	2 SAW	15.4	32.0	196	0.0	19.1	2.9
PP	< 5	LIVE	5 SAW	0.0	32.0	16	0.0	0.0	0.2
PP	5 - 8	LIVE	CULL	6.0	7.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	5 SAW	6.1	22.0	2,071	0.0	194.9	30.4
PP	9 - 11	LIVE	5 SAW	9.3	32.0	796	2.9	71.3	11.7
PP	12 - 14	LIVE	4 SAW	12.6	32.0	614	0.0	46.7	9.0
WL	5 - 8	LIVE	4 SAW	6.4	19.0	126	0.0	12.0	1.8

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U5

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.9	20.0	358	0.2	42.0	5.3
DF	9 - 11	LIVE	Domestic	9.0	29.0	442	0.0	54.3	6.5
DF	12 - 14	LIVE	Domestic	13.2	32.0	564	2.3	53.6	8.3
DF	15 - 19	LIVE	Domestic	15.4	32.0	196	0.0	19.1	2.9
PP	< 5	LIVE	Domestic	0.0	32.0	16	0.0	0.0	0.2
PP	5 - 8	LIVE	Cull	6.0	7.0	0	100.0	0.0	0.0
PP	5 - 8	LIVE	Domestic	6.1	22.0	2,071	0.0	194.9	30.4
PP	9 - 11	LIVE	Domestic	9.3	32.0	796	2.9	71.3	11.7
PP	12 - 14	LIVE	Domestic	12.6	32.0	614	0.0	46.7	9.0
WL	5 - 8	LIVE	Domestic	6.4	19.0	126	0.0	12.0	1.8

Cruise Unit Report
Q BUCK MTN U6

Unit Sale Notice Volume (MBF): Q BUCK MTN U6

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
PP	14.9			522.9			123.2	399.6
DF	14.2			471.6	168.5	210.5	92.5	
WL	14.0			26.3		26.3		
LP	17.7			4.4		3.9	0.6	
ALL	14.8			1,025.1	168.5	240.6	216.3	399.6

Unit Sale Notice Weight (tons): Q BUCK MTN U6

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	3,274.3	1,052.0	1,543.7	678.7	
PP	3,135.1			666.0	2,469.1
WL	142.4		142.4		
LP	29.1		24.0	5.1	
ALL	6,580.9	1,052.0	1,710.0	1,349.8	2,469.1

Unit Cruise Design: Q BUCK MTN U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft	96.6	98.2	66	19	1

Unit Cruise Summary: Q BUCK MTN U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
ES		1	1.0	0
PP	50	168	2.5	0
DF	11	99	1.5	0
WL	1	6	0.1	0
LP	1	1	0.0	0
ALL	63	275	4.2	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN U6

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 (%)
ES	27.8	0.0	0.0						
PP	70.7	89.1	11.0	101.2	32.3	4.6	7,159	94.8	11.9
DF	41.7	118.2	14.6	123.4	32.0	9.7	5,140	122.5	17.5
WL	2.5	372.5	45.9	161.8	0.0	0.0	409	372.5	45.9
LP	0.4	812.4	100.0	110.0	0.0	0.0	46	812.4	100.0
ALL	115.8	51.5	6.3	110.6	31.6	4.0	12,801	60.4	7.5

Unit Summary: Q BUCK MTN U6

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	11	ALL	14.2	53	75	4,881	1.1	36.0	39.6	10.5	3,274.3	471.5
DF	LIVE	LEA	0	ALL	28.2	18	20	260	1.1	0.5	2.1	0.4	174.2	25.1
ES	LIVE	LEA	0	ALL	21.0					0.2	0.4	0.1		
LP	LIVE	CUT	1	ALL	17.7	57	69	46	0.0	0.2	0.4	0.1	29.1	4.5
PP	LIVE	CUT	50	ALL	14.9	49	104	5,412	1.1	44.1	53.5	13.8	3,135.1	522.8
PP	LIVE	LEA	0	ALL	27.6	2	2	1,747	1.1	4.2	17.3	3.3	1,012.1	168.8
WL	LIVE	CUT	1	ALL	14.0	70	91	272	0.0	1.6	1.7	0.4	142.4	26.3
WL	LIVE	LEA	0	ALL	21.7			136	0.0	0.3	0.8	0.2	71.2	13.2
ALL	LIVE	LEA	0	ALL	27.1	3	4	2,143	1.0	5.2	20.6	4.0	1,257.5	207.1
ALL	LIVE	CUT	63	ALL	14.6	51	91	10,611	1.0	81.9	95.2	24.8	6,580.9	1,025.1
ALL	ALL	ALL	63	ALL	15.6	48	86	12,754	1.0	87.1	115.8	28.8	7,838.4	1,232.2

Unit Stand Table: Q BUCK MTN U6

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	1	8.7	32	54	288	0.0	8.7	3.6	1.2	191.9	27.8
DF	12	LIVE	CUT	2	11.5	46	72	670	0.0	10.0	7.2	2.1	512.7	64.7
DF	14	LIVE	CUT	2	13.5	64	89	943	0.0	7.2	7.2	2.0	631.3	91.1
DF	16	LIVE	CUT	1	16.8	77	95	652	0.0	2.3	3.6	0.9	353.9	63.0
DF	18	LIVE	CUT	2	17.2	62	79	750	6.5	4.5	7.2	1.7	588.8	72.4
DF	22	LIVE	CUT	1	22.8	77	97	496	0.0	1.3	3.6	0.8	324.9	47.9
DF	24	LIVE	CUT	1	23.7	60	74	398	0.0	1.2	3.6	0.7	284.5	38.5
DF	30	LIVE	CUT	1	29.4	94	120	685	0.0	0.8	3.6	0.7	386.4	66.2
DF	24	LIVE	LEA	1	23.0			52	1.1	0.1	0.4	0.1	34.8	5.0
DF	26	LIVE	LEA	1	26.0			52	1.1	0.1	0.4	0.1	34.8	5.0
DF	30	LIVE	LEA	1	29.0	93	104	52	1.1	0.1	0.4	0.1	34.9	5.0

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	34	LIVE	LEA	1	33.0			52	1.1	0.1	0.4	0.1	34.9	5.0
DF	36	LIVE	LEA	1	35.0			52	1.1	0.1	0.4	0.1	34.8	5.0
ES	22	LIVE	LEA	1	21.0					0.2	0.4	0.1		
LP	18	LIVE	CUT	1	17.7	57	69	46	0.0	0.2	0.4	0.1	29.1	4.4
PP	10	LIVE	CUT	4	10.3	37	87	396	0.5	7.2	4.2	1.3	216.8	38.3
PP	12	LIVE	CUT	8	11.6	42	150	680	3.0	11.4	8.4	2.5	441.4	65.7
PP	14	LIVE	CUT	8	13.6	42	86	670	0.3	8.3	8.4	2.3	446.7	64.7
PP	16	LIVE	CUT	10	15.8	55	86	1,107	0.1	8.4	11.5	2.9	672.0	106.9
PP	18	LIVE	CUT	3	17.9	66	94	371	0.0	1.8	3.1	0.7	200.5	35.9
PP	20	LIVE	CUT	8	20.1	72	97	996	0.0	3.8	8.4	1.9	561.8	96.2
PP	22	LIVE	CUT	5	21.9	66	87	573	5.3	2.0	5.2	1.1	297.1	55.4
PP	24	LIVE	CUT	2	24.5	83	108	321	0.0	0.6	2.1	0.4	154.0	31.0
PP	30	LIVE	CUT	2	30.0	74	98	298	0.4	0.4	2.1	0.4	144.8	28.7
PP	14	LIVE	LEA	1	14.0			43	1.1	0.4	0.4	0.1	24.7	4.1
PP	18	LIVE	LEA	1	18.0			43	1.1	0.2	0.4	0.1	24.7	4.1
PP	22	LIVE	LEA	3	22.0			128	1.1	0.5	1.3	0.3	74.0	12.3
PP	24	LIVE	LEA	4	23.0			170	1.1	0.6	1.7	0.4	98.7	16.5
PP	26	LIVE	LEA	3	25.0			128	1.1	0.4	1.3	0.3	74.1	12.3
PP	28	LIVE	LEA	3	27.3			128	1.1	0.3	1.3	0.2	74.1	12.4
PP	30	LIVE	LEA	5	29.5			256	1.1	0.5	2.5	0.5	148.1	24.7
PP	32	LIVE	LEA	3	31.7			128	1.1	0.2	1.3	0.2	74.0	12.3
PP	34	LIVE	LEA	7	33.7	14	16	298	1.1	0.5	3.0	0.5	172.9	28.8
PP	36	LIVE	LEA	4	35.2			170	1.1	0.2	1.7	0.3	98.8	16.5
PP	38	LIVE	LEA	2	37.5			85	1.1	0.1	0.8	0.1	49.4	8.2
PP	40	LIVE	LEA	2	40.0			85	1.1	0.1	0.8	0.1	49.3	8.2
PP	42	LIVE	LEA	1	41.0			43	1.1	0.0	0.4	0.1	24.7	4.1
PP	44	LIVE	LEA	1	43.0			43	1.1	0.0	0.4	0.1	24.6	4.1
WL	14	LIVE	CUT	1	14.0	70	91	272	0.0	1.6	1.7	0.5	142.4	26.3
WL	20	LIVE	LEA	1	19.0			68	0.0	0.2	0.4	0.1	35.6	6.6
WL	26	LIVE	LEA	1	26.0			68	0.0	0.1	0.4	0.1	35.6	6.6

Unit Log Grade Summary: Q BUCK MTN U6

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.7	32.0	1,744	0.0	1,052.0	168.5
DF	LIVE	3 SAW	8.0	31.0	2,179	2.3	1,543.7	210.5
DF	LIVE	4 SAW	5.2	26.0	958	0.0	678.7	92.5
LP	LIVE	3 SAW	11.0	32.0	40	0.0	24.0	3.9

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
LP	LIVE	4 SAW	6.0	20.0	6	0.0	5.1	0.6
PP	LIVE	4 SAW	13.1	32.0	1,276	0.0	666.0	123.2
PP	LIVE	5 SAW	7.2	27.0	4,136	0.4	2,469.1	399.6
PP	LIVE	CULL	11.5	4.0	0	100.0	0.0	0.0
WL	LIVE	3 SAW	7.8	32.0	272	0.0	142.4	26.3

Unit Log Sort Summary: Q BUCK MTN U6

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	7.2	29.0	4,881	1.1	3,274.3	471.6
LP	LIVE	Domestic	8.5	26.0	46	0.0	29.1	4.4
PP	LIVE	Cull	11.5	4.0	0	100.0	0.0	0.0
PP	LIVE	Domestic	7.6	27.0	5,412	0.3	3,135.1	522.9
WL	LIVE	Domestic	7.8	32.0	272	0.0	142.4	26.3

Unit Log Grade x Sort Summary: Q BUCK MTN U6

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.7	32.0	1,744	0.0	1,052.0	168.5
DF	LIVE	3 SAW	Domestic	8.0	31.0	2,179	2.3	1,543.7	210.5
DF	LIVE	4 SAW	Domestic	5.2	26.0	958	0.0	678.7	92.5
LP	LIVE	3 SAW	Domestic	11.0	32.0	40	0.0	24.0	3.9
LP	LIVE	4 SAW	Domestic	6.0	20.0	6	0.0	5.1	0.6
PP	LIVE	4 SAW	Domestic	13.1	32.0	1,276	0.0	666.0	123.2
PP	LIVE	5 SAW	Domestic	7.2	27.0	4,136	0.4	2,469.1	399.6
PP	LIVE	CULL	Cull	11.5	4.0	0	100.0	0.0	0.0
WL	LIVE	3 SAW	Domestic	7.8	32.0	272	0.0	142.4	26.3

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U6

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.2	26.0	958	0.0	678.7	92.5
DF	5 - 8	LIVE	3 SAW	7.2	31.0	1,110	0.0	756.0	107.2
DF	9 - 11	LIVE	3 SAW	9.5	32.0	1,069	4.6	787.7	103.3
DF	12 - 14	LIVE	2 SAW	13.0	32.0	1,329	0.0	804.2	128.4
DF	15 - 19	LIVE	2 SAW	18.5	32.0	415	0.0	247.8	40.1
LP	5 - 8	LIVE	4 SAW	6.0	20.0	6	0.0	5.1	0.6
LP	9 - 11	LIVE	3 SAW	11.0	32.0	40	0.0	24.0	3.9
PP	5 - 8	LIVE	5 SAW	6.7	26.0	2,698	0.6	1,669.2	260.7

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
PP	9 - 11	LIVE	5 SAW	9.8	32.0	1,438	0.0	799.8	138.9
PP	9 - 11	LIVE	CULL	10.4	3.0	0	100.0	0.0	0.0
PP	9 - 11	LIVE	4 SAW	11.5	32.0	81	0.0	51.5	7.8
PP	12 - 14	LIVE	4 SAW	12.5	32.0	774	0.0	408.0	74.8
PP	15 - 19	LIVE	CULL	15.5	8.0	0	100.0	0.0	0.0
PP	15 - 19	LIVE	4 SAW	16.0	32.0	420	0.0	206.5	40.6
WL	5 - 8	LIVE	3 SAW	5.7	32.0	79	0.0	43.5	7.6
WL	9 - 11	LIVE	3 SAW	9.8	32.0	193	0.0	98.9	18.7

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U6

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.9	28.0	2,068	0.0	1,434.6	199.8
DF	9 - 11	LIVE	Domestic	9.5	32.0	1,069	4.6	787.7	103.3
DF	12 - 14	LIVE	Domestic	13.0	32.0	1,329	0.0	804.2	128.4
DF	15 - 19	LIVE	Domestic	18.5	32.0	415	0.0	247.8	40.1
LP	5 - 8	LIVE	Domestic	6.0	20.0	6	0.0	5.1	0.6
LP	9 - 11	LIVE	Domestic	11.0	32.0	40	0.0	24.0	3.9
PP	5 - 8	LIVE	Domestic	6.7	26.0	2,698	0.6	1,669.2	260.7
PP	9 - 11	LIVE	Domestic	9.9	32.0	1,519	0.0	851.3	146.8
PP	9 - 11	LIVE	Cull	10.4	3.0	0	100.0	0.0	0.0
PP	12 - 14	LIVE	Domestic	12.5	32.0	774	0.0	408.0	74.8
PP	15 - 19	LIVE	Cull	15.5	8.0	0	100.0	0.0	0.0
PP	15 - 19	LIVE	Domestic	16.0	32.0	420	0.0	206.5	40.6
WL	5 - 8	LIVE	Domestic	5.7	32.0	79	0.0	43.5	7.6
WL	9 - 11	LIVE	Domestic	9.8	32.0	193	0.0	98.9	18.7

Cruise Unit Report
Q BUCK MTN U7

Unit Sale Notice Volume (MBF): Q BUCK MTN U7

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	14.5			524.0	187.1	279.4	57.6	
PP	16.8			69.3			10.6	58.7
LP	11.8			52.4		45.6	6.8	
WL	20.1			37.8	28.6	9.2		
ALL	14.0			683.5	215.7	334.1	75.0	58.7

Unit Sale Notice Weight (tons): Q BUCK MTN U7

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	3,398.3	1,217.6	1,790.1	390.5	
PP	402.6			58.6	344.0
LP	313.1		280.2	32.9	
WL	214.5	161.7	52.8		
ALL	4,328.5	1,379.3	2,123.1	482.0	344.0

Unit Cruise Design: Q BUCK MTN U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft	59.6	60.5	44	12	2

Unit Cruise Summary: Q BUCK MTN U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	18	104	2.4	0
PP	5	33	0.8	0
LP	8	13	0.3	0
WL	1	9	0.2	0
ALL	32	159	3.6	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN U7

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	65.7	101.6	15.3	140.7	21.5	5.1	9,237	103.9	16.1
PP	20.8	179.9	27.1	122.9	12.4	5.5	2,560	180.3	27.7
LP	8.2	248.4	37.4	107.1	19.3	6.8	879	249.1	38.1
WL	5.7	225.6	34.0	143.4	0.0	0.0	815	225.6	34.0
ALL	100.4	56.7	8.5	134.4	21.6	3.8	13,490	60.7	9.4

Unit Summary: Q BUCK MTN U7

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	18	ALL	14.5	60	85	8,792	1.3	54.5	62.5	16.4	3,398.3	524.0
DF	LIVE	LEA	0	ALL	22.6	19	23	444	1.3	1.1	3.2	0.7	171.6	26.5
LP	LIVE	CUT	8	ALL	11.8	46	65	879	0.0	10.8	8.2	2.4	313.1	52.4
PP	LIVE	CUT	5	ALL	16.8	68	105	1,163	3.3	6.2	9.5	2.3	402.6	69.3
PP	LIVE	LEA	0	ALL	22.9	15	19	1,396	3.3	4.0	11.4	2.4	483.2	83.2
WL	LIVE	CUT	1	ALL	20.1	70	84	634	0.0	2.0	4.4	1.0	214.5	37.8
WL	LIVE	LEA	0	ALL	13.6			181	0.0	1.3	1.3	0.3	61.3	10.8
ALL	LIVE	LEA	0	ALL	21.3	13	16	2,021	2.6	6.4	15.9	3.4	716.1	120.5
ALL	LIVE	CUT	32	ALL	14.5	59	84	11,468	1.4	73.5	84.6	22.1	4,328.5	683.5
ALL	ALL	ALL	32	ALL	15.2	55	78	13,489	1.6	79.9	100.5	25.5	5,044.6	804.0

Unit Stand Table: Q BUCK MTN U7

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	1	8.5	34	67	306	0.0	8.3	3.3	1.1	127.3	18.2
DF	10	LIVE	CUT	2	10.0	46	75	717	0.0	12.1	6.6	2.1	276.3	42.7
DF	12	LIVE	CUT	2	12.3	67	93	1,653	0.9	11.9	9.9	2.8	564.6	98.5
DF	14	LIVE	CUT	1	14.9	57	74	350	0.0	2.7	3.3	0.9	156.5	20.8
DF	16	LIVE	CUT	3	16.2	67	86	1,142	8.4	6.9	9.9	2.5	525.5	68.0
DF	18	LIVE	CUT	2	18.2	81	104	1,038	0.0	3.6	6.6	1.5	398.5	61.8
DF	20	LIVE	CUT	3	19.6	81	102	1,683	-1.6	4.7	9.9	2.2	605.4	100.3
DF	22	LIVE	CUT	2	21.9	76	96	905	0.0	2.5	6.6	1.4	370.8	53.9
DF	24	LIVE	CUT	1	23.0	77	91	431	0.0	1.1	3.3	0.7	179.7	25.7
DF	26	LIVE	CUT	1	26.9	75	94	568	4.3	0.8	3.3	0.6	193.6	33.8
DF	18	LIVE	LEA	1	18.0			89	1.3	0.4	0.6	0.2	34.3	5.3
DF	20	LIVE	LEA	1	20.0	76	89	89	1.3	0.3	0.6	0.1	34.3	5.3
DF	24	LIVE	LEA	1	24.0			89	1.3	0.2	0.6	0.1	34.3	5.3

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	28	LIVE	LEA	1	27.0			89	1.3	0.2	0.6	0.1	34.3	5.3
DF	30	LIVE	LEA	1	30.0			89	1.3	0.1	0.6	0.1	34.3	5.3
LP	12	LIVE	CUT	7	11.6	48	68	788	0.0	9.7	7.2	2.1	284.6	47.0
LP	14	LIVE	CUT	1	13.4	35	43	91	0.0	1.0	1.0	0.3	28.5	5.4
PP	14	LIVE	CUT	1	14.1	58	100	192	6.0	1.8	1.9	0.5	74.9	11.4
PP	16	LIVE	CUT	1	15.8	66	104	227	5.8	1.4	1.9	0.5	79.6	13.5
PP	18	LIVE	CUT	2	17.5	72	107	487	0.0	2.3	3.8	0.9	159.7	29.0
PP	22	LIVE	CUT	1	21.6	84	112	257	4.9	0.7	1.9	0.4	88.4	15.3
PP	16	LIVE	LEA	1	16.0			78	3.3	0.5	0.6	0.2	26.9	4.6
PP	18	LIVE	LEA	2	17.5			155	3.3	0.8	1.3	0.3	53.7	9.2
PP	20	LIVE	LEA	2	20.0	31	41	155	3.3	0.6	1.3	0.3	53.7	9.2
PP	22	LIVE	LEA	2	21.5			155	3.3	0.5	1.3	0.3	53.7	9.2
PP	24	LIVE	LEA	3	24.0			233	3.3	0.6	1.9	0.4	80.5	13.9
PP	26	LIVE	LEA	1	25.0			78	3.3	0.2	0.6	0.1	26.8	4.6
PP	28	LIVE	LEA	1	27.0			78	3.3	0.2	0.6	0.1	26.9	4.6
PP	30	LIVE	LEA	3	29.3	56	67	233	3.3	0.4	1.9	0.4	80.6	13.9
PP	32	LIVE	LEA	2	32.0	45	53	155	3.3	0.2	1.3	0.2	53.6	9.2
PP	34	LIVE	LEA	1	34.0	93	109	78	3.3	0.1	0.6	0.1	26.9	4.6
WL	20	LIVE	CUT	1	20.1	70	84	634	0.0	2.0	4.4	1.0	214.5	37.8
WL	12	LIVE	LEA	1	12.0			90	0.0	0.8	0.7	0.2	30.6	5.4
WL	16	LIVE	LEA	1	16.0			91	0.0	0.5	0.7	0.2	30.7	5.4

Unit Log Grade Summary: Q BUCK MTN U7

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.1	32.0	3,139	0.0	1,217.6	187.1
DF	LIVE	3 SAW	7.8	32.0	4,687	2.2	1,790.1	279.4
DF	LIVE	4 SAW	5.3	23.0	966	1.6	390.5	57.6
LP	LIVE	3 SAW	7.0	32.0	765	0.0	280.2	45.6
LP	LIVE	4 SAW	5.1	15.0	114	0.0	32.9	6.8
PP	LIVE	4 SAW	13.3	32.0	178	0.0	58.6	10.6
PP	LIVE	5 SAW	7.9	30.0	985	3.9	344.0	58.7
WL	LIVE	2 SAW	12.5	32.0	480	0.0	161.7	28.6
WL	LIVE	3 SAW	6.1	32.0	154	0.0	52.8	9.2

Unit Log Sort Summary: Q BUCK MTN U7

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	7.6	29.0	8,792	1.3	3,398.3	524.0
LP	LIVE	Domestic	6.3	25.0	879	0.0	313.1	52.4
PP	LIVE	Domestic	8.2	30.0	1,163	3.3	402.6	69.3
WL	LIVE	Domestic	9.3	32.0	634	0.0	214.5	37.8

Unit Log Grade x Sort Summary: Q BUCK MTN U7

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.1	32.0	3,139	0.0	1,217.6	187.1
DF	LIVE	3 SAW	Domestic	7.8	32.0	4,687	2.2	1,790.1	279.4
DF	LIVE	4 SAW	Domestic	5.3	23.0	966	1.6	390.5	57.6
LP	LIVE	3 SAW	Domestic	7.0	32.0	765	0.0	280.2	45.6
LP	LIVE	4 SAW	Domestic	5.1	15.0	114	0.0	32.9	6.8
PP	LIVE	4 SAW	Domestic	13.3	32.0	178	0.0	58.6	10.6
PP	LIVE	5 SAW	Domestic	7.9	30.0	985	3.9	344.0	58.7
WL	LIVE	2 SAW	Domestic	12.5	32.0	480	0.0	161.7	28.6
WL	LIVE	3 SAW	Domestic	6.1	32.0	154	0.0	52.8	9.2

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U7

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.3	23.0	966	1.6	390.5	57.6
DF	5 - 8	LIVE	3 SAW	6.9	32.0	2,290	0.0	841.4	136.5
DF	9 - 11	LIVE	3 SAW	9.3	32.0	2,397	4.2	948.7	142.9
DF	9 - 11	LIVE	2 SAW	11.5	32.0	340	0.0	138.8	20.3
DF	12 - 14	LIVE	2 SAW	13.0	32.0	2,417	-1.1	946.0	144.1
DF	15 - 19	LIVE	2 SAW	17.6	32.0	381	6.3	132.8	22.7
LP	5 - 8	LIVE	4 SAW	5.1	15.0	114	0.0	32.9	6.8
LP	5 - 8	LIVE	3 SAW	7.0	32.0	765	0.0	280.2	45.6
PP	5 - 8	LIVE	5 SAW	6.8	29.0	401	6.1	145.8	23.9
PP	9 - 11	LIVE	5 SAW	10.0	32.0	584	2.2	198.3	34.8
PP	12 - 14	LIVE	4 SAW	13.3	32.0	178	0.0	58.6	10.6
WL	5 - 8	LIVE	3 SAW	6.1	32.0	154	0.0	52.8	9.2
WL	12 - 14	LIVE	2 SAW	12.5	32.0	480	0.0	161.7	28.6

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	6.0	27.0	3,256	0.5	1,232.0	194.1
DF	9 - 11	LIVE	Domestic	9.5	32.0	2,738	3.7	1,087.5	163.2
DF	12 - 14	LIVE	Domestic	13.0	32.0	2,417	-1.1	946.0	144.1
DF	15 - 19	LIVE	Domestic	17.6	32.0	381	6.3	132.8	22.7
LP	5 - 8	LIVE	Domestic	6.3	25.0	879	0.0	313.1	52.4
PP	5 - 8	LIVE	Domestic	6.8	29.0	401	6.1	145.8	23.9
PP	9 - 11	LIVE	Domestic	10.0	32.0	584	2.2	198.3	34.8
PP	12 - 14	LIVE	Domestic	13.3	32.0	178	0.0	58.6	10.6
WL	5 - 8	LIVE	Domestic	6.1	32.0	154	0.0	52.8	9.2
WL	12 - 14	LIVE	Domestic	12.5	32.0	480	0.0	161.7	28.6

Cruise Unit Report
Q BUCK MTN U8

Unit Sale Notice Volume (MBF): Q BUCK MTN U8

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	12.4			284.0	78.4	163.2	42.5	
LP	10.9			68.8	11.3	37.0	20.5	
PP	14.8			16.6				16.6
WL	15.7			2.9		2.0	0.9	
ALL	12.2			372.4	89.7	202.2	63.9	16.6

Unit Sale Notice Weight (tons): Q BUCK MTN U8

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	1,973.5	539.8	1,138.2	295.5	
LP	390.5	54.9	218.8	116.8	
PP	99.2				99.2
WL	29.9		23.5	6.4	
ALL	2,493.1	594.7	1,380.5	418.6	99.2

Unit Cruise Design: Q BUCK MTN U8

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft	34.5	34.6	26	10	3

Unit Cruise Summary: Q BUCK MTN U8

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
ES		1	1.0	0
DF	20	67	2.6	0
LP	6	15	0.6	0
PP	2	17	0.7	0
WL	1	1	0.0	0
ALL	29	101	3.9	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN U8

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 (%)
ES	27.8	0.0	0.0						
DF	71.6	100.1	19.6	116.7	32.4	7.3	8,358	105.2	20.9
LP	16.0	177.9	34.9	124.5	19.1	7.8	1,995	179.0	35.8
PP	18.2	161.5	31.7	75.0	68.8	48.7	1,362	175.6	58.1
WL	1.1	509.9	100.0	79.6	0.0	0.0	85	509.9	100.0
ALL	107.9	64.4	12.6	110.4	33.3	6.2	11,918	72.5	14.1

Unit Summary: Q BUCK MTN U8

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	20	ALL	12.4	44	66	8,233	1.5	84.1	70.5	20.0	1,973.5	284.0
DF	LIVE	LEA	0	ALL	25.0			125	1.5	0.3	1.1	0.2	29.9	4.3
ES	LIVE	LEA	0	ALL	28.0					0.2	1.1	0.2		
LP	LIVE	CUT	6	ALL	10.9	45	70	1,995	3.9	24.7	16.0	4.9	390.5	68.8
PP	LIVE	CUT	2	ALL	14.8	41	86	481	11.4	5.4	6.4	1.7	99.2	16.6
PP	LIVE	LEA	0	ALL	21.3			881	11.4	4.7	11.8	2.5	181.9	30.4
WL	LIVE	CUT	1	ALL	15.7	65	86	85	19.5	0.8	1.1	0.3	29.9	2.9
ALL	LIVE	CUT	29	ALL	12.2	44	68	10,794	2.6	115.0	94.0	26.9	2,493.1	372.3
ALL	LIVE	LEA	0	ALL	21.8			1,006	10.3	5.2	14.0	2.9	211.8	34.7
ALL	ALL	ALL	29	ALL	12.8	42	65	11,800	3.3	120.2	108.0	29.8	2,704.9	407.0

Unit Stand Table: Q BUCK MTN U8

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	8	LIVE	CUT	2	7.1	20	36	333	0.0	25.6	7.1	2.6	75.7	11.5
DF	10	LIVE	CUT	2	9.4	32	54	497	0.0	14.6	7.1	2.3	132.8	17.2
DF	12	LIVE	CUT	4	11.7	55	84	1,647	0.0	19.0	14.1	4.1	410.8	56.8
DF	14	LIVE	CUT	2	14.1	67	91	963	1.9	6.5	7.1	1.9	224.8	33.2
DF	16	LIVE	CUT	3	15.5	63	81	1,259	3.2	8.1	10.6	2.7	313.0	43.4
DF	18	LIVE	CUT	2	17.9	74	92	984	0.0	4.0	7.1	1.7	230.1	34.0
DF	20	LIVE	CUT	2	19.9	76	95	897	3.1	3.2	7.1	1.6	231.8	30.9
DF	22	LIVE	CUT	1	22.1	74	93	433	7.1	1.3	3.5	0.7	113.2	14.9
DF	24	LIVE	CUT	1	24.5	76	96	517	0.0	1.1	3.5	0.7	113.4	17.8
DF	26	LIVE	CUT	1	26.0	88	100	702	0.0	1.0	3.5	0.7	127.8	24.2
DF	26	LIVE	LEA	1	25.0			125	1.5	0.3	1.1	0.2	29.9	4.3
ES	28	LIVE	LEA	1	28.0					0.3	1.1	0.2		

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
LP	8	LIVE	CUT	1	7.7	30	57	231	9.7	8.2	2.7	1.0	47.9	8.0
LP	10	LIVE	CUT	2	10.6	49	79	639	8.0	8.6	5.3	1.6	135.8	22.1
LP	12	LIVE	CUT	2	12.1	52	71	702	0.0	6.7	5.3	1.5	132.9	24.2
LP	20	LIVE	CUT	1	19.6	66	77	422	0.0	1.3	2.7	0.6	73.9	14.6
PP	14	LIVE	CUT	2	14.8	41	86	481	11.4	5.3	6.4	1.7	99.2	16.6
PP	16	LIVE	LEA	2	15.5			160	11.4	1.6	2.1	0.5	33.1	5.5
PP	18	LIVE	LEA	1	18.0			80	11.4	0.6	1.1	0.3	16.5	2.8
PP	20	LIVE	LEA	2	19.5			160	11.4	1.0	2.1	0.5	33.1	5.5
PP	24	LIVE	LEA	1	24.0			80	11.4	0.3	1.1	0.2	16.5	2.8
PP	26	LIVE	LEA	1	26.0			80	11.4	0.3	1.1	0.2	16.5	2.8
PP	28	LIVE	LEA	1	28.0			80	11.4	0.3	1.1	0.2	16.5	2.8
PP	32	LIVE	LEA	3	31.3			240	11.4	0.6	3.2	0.6	49.6	8.3
WL	16	LIVE	CUT	1	15.7	65	86	85	19.5	0.8	1.1	0.3	29.9	2.9

Unit Log Grade Summary: Q BUCK MTN U8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.1	32.0	2,272	2.6	539.8	78.4
DF	LIVE	3 SAW	7.7	32.0	4,730	1.3	1,138.2	163.2
DF	LIVE	4 SAW	5.2	17.0	1,231	0.0	295.5	42.5
LP	LIVE	2 SAW	13.4	32.0	328	0.0	54.9	11.3
LP	LIVE	3 SAW	7.6	32.0	1,073	4.9	218.8	37.0
LP	LIVE	4 SAW	5.3	21.0	595	4.0	116.8	20.5
PP	LIVE	5 SAW	8.4	22.0	481	7.7	99.2	16.6
PP	LIVE	CULL	8.8	4.0	0	100.0	0.0	0.0
WL	LIVE	3 SAW	9.2	32.0	58	23.2	23.5	2.0
WL	LIVE	4 SAW	5.2	30.0	27	10.5	6.4	0.9

Unit Log Sort Summary: Q BUCK MTN U8

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	6.8	25.0	8,233	1.5	1,973.5	284.0
LP	LIVE	Domestic	6.4	25.0	1,995	3.9	390.5	68.8
PP	LIVE	Cull	8.8	4.0	0	100.0	0.0	0.0
PP	LIVE	Domestic	8.4	22.0	481	7.7	99.2	16.6
WL	LIVE	Domestic	7.2	31.0	85	19.5	29.9	2.9

Unit Log Grade x Sort Summary: Q BUCK MTN U8

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.1	32.0	2,272	2.6	539.8	78.4
DF	LIVE	3 SAW	Domestic	7.7	32.0	4,730	1.3	1,138.2	163.2
DF	LIVE	4 SAW	Domestic	5.2	17.0	1,231	0.0	295.5	42.5
LP	LIVE	2 SAW	Domestic	13.4	32.0	328	0.0	54.9	11.3
LP	LIVE	3 SAW	Domestic	7.6	32.0	1,073	4.9	218.8	37.0
LP	LIVE	4 SAW	Domestic	5.3	21.0	595	4.0	116.8	20.5
PP	LIVE	5 SAW	Domestic	8.4	22.0	481	7.7	99.2	16.6
PP	LIVE	CULL	Cull	8.8	4.0	0	100.0	0.0	0.0
WL	LIVE	3 SAW	Domestic	9.2	32.0	58	23.2	23.5	2.0
WL	LIVE	4 SAW	Domestic	5.2	30.0	27	10.5	6.4	0.9

Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U8

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.2	17.0	1,231	0.0	295.5	42.5
DF	5 - 8	LIVE	3 SAW	6.9	32.0	2,840	0.2	703.8	98.0
DF	9 - 11	LIVE	3 SAW	9.9	32.0	1,889	2.8	434.4	65.2
DF	9 - 11	LIVE	2 SAW	11.5	32.0	544	0.0	121.1	18.8
DF	12 - 14	LIVE	2 SAW	12.6	32.0	904	6.4	252.3	31.2
DF	15 - 19	LIVE	2 SAW	16.4	32.0	824	0.0	166.4	28.4
LP	5 - 8	LIVE	4 SAW	5.3	21.0	595	4.0	116.8	20.5
LP	5 - 8	LIVE	3 SAW	7.6	32.0	1,073	4.9	218.8	37.0
LP	12 - 14	LIVE	2 SAW	13.4	32.0	328	0.0	54.9	11.3
PP	5 - 8	LIVE	5 SAW	6.2	18.0	56	4.5	13.3	1.9
PP	9 - 11	LIVE	CULL	8.8	4.0	0	100.0	0.0	0.0
PP	9 - 11	LIVE	5 SAW	9.5	24.0	425	8.1	85.9	14.6
WL	5 - 8	LIVE	4 SAW	5.2	30.0	27	10.5	6.4	0.9
WL	9 - 11	LIVE	3 SAW	9.2	32.0	58	23.2	23.5	2.0

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U8

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.8	23.0	4,071	0.2	999.2	140.5
DF	9 - 11	LIVE	Domestic	10.2	32.0	2,434	2.2	555.6	84.0
DF	12 - 14	LIVE	Domestic	12.6	32.0	904	6.4	252.3	31.2
DF	15 - 19	LIVE	Domestic	16.4	32.0	824	0.0	166.4	28.4
LP	5 - 8	LIVE	Domestic	6.1	25.0	1,667	4.6	335.6	57.5

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
LP	12 - 14	LIVE	Domestic	13.4	32.0	328	0.0	54.9	11.3
PP	5 - 8	LIVE	Domestic	6.2	18.0	56	4.5	13.3	1.9
PP	9 - 11	LIVE	Cull	8.8	4.0	0	100.0	0.0	0.0
PP	9 - 11	LIVE	Domestic	9.5	24.0	425	8.1	85.9	14.6
WL	5 - 8	LIVE	Domestic	5.2	30.0	27	10.5	6.4	0.9
WL	9 - 11	LIVE	Domestic	9.2	32.0	58	23.2	23.5	2.0

Cruise Unit Report
Q BUCK MTN U9

Unit Sale Notice Volume (MBF): Q BUCK MTN U9

				MBF Volume by Grade				
Sp	QMD	Rings/In	Age	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	22.1			110.9	78.7	29.4	2.8	
PP	17.2			26.7			13.5	13.2
LP	10.6			8.2		7.0	1.2	
ALL	16.4			145.8	78.7	36.4	17.5	13.2

Unit Sale Notice Weight (tons): Q BUCK MTN U9

	Tons by Grade				
Sp	All	2 Saw	3 Saw	4 Saw	5 Saw
DF	711.4	501.9	188.2	21.4	
PP	153.9			76.9	77.0
LP	50.3		43.3	7.0	
ALL	915.6	501.9	231.5	105.3	77.0

Unit Cruise Design: Q BUCK MTN U9

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (20) Measure/Count Plots, Sighting Ht = 4.5 ft	12.3	12.4	10	5	0

Unit Cruise Summary: Q BUCK MTN U9

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WL		1	1.0	0
DF	9	27	2.7	0
PP	3	17	1.7	0
LP	3	3	0.3	0
ALL	15	48	4.8	0

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK MTN U9

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 (%)
WL	20.0	0.0	0.0						

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	54.0	85.6	27.1	167.0	20.1	6.7	9,020	88.0	27.9
PP	34.0	87.9	27.8	120.8	43.3	25.0	4,106	98.0	37.4
LP	6.0	316.2	100.0	111.5	16.3	9.4	669	316.6	100.4
ALL	96.0	46.9	14.8	146.8	28.6	7.4	14,089	54.9	16.6

Unit Summary: Q BUCK MTN U9

Sp	Status	Rx	N	D	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	LIVE	CUT	9	ALL	22.1	87	110	9,020	1.2	20.3	54.0	11.5	711.4	110.9
LP	LIVE	CUT	3	ALL	10.6	48	74	669	5.4	9.8	6.0	1.8	50.3	8.2
PP	LIVE	CUT	3	ALL	17.2	57	88	2,174	0.0	11.2	18.0	4.3	153.9	26.7
PP	LIVE	LEA	0	ALL	29.4	19	23	1,932	0.0	3.4	16.0	3.0	136.8	23.7
WL	LIVE	LEA	0	ALL	22.0					0.8	2.0	0.4		
ALL	LIVE	CUT	15	ALL	18.6	70	95	11,863	1.2	41.3	78.0	17.6	915.6	145.8
ALL	LIVE	LEA	0	ALL	28.1	15	19	1,932	0.0	4.2	18.0	3.4	136.8	23.7
ALL	ALL	ALL	15	ALL	19.7	65	88	13,795	1.1	45.5	96.0	21.0	1,052.4	169.5

Unit Stand Table: Q BUCK MTN U9

Sp	D	Status	Rx	N	QMD	BL	THT	BF Net	Defect %	TPA	BA	RD	Tons	MBF Net
DF	18	LIVE	CUT	1	18.0	86	109	910	0.0	3.4	6.0	1.4	78.5	11.2
DF	20	LIVE	CUT	3	19.6	81	101	2,619	0.0	8.6	18.0	4.1	221.1	32.2
DF	22	LIVE	CUT	1	22.7	78	98	872	0.0	2.1	6.0	1.3	74.1	10.7
DF	26	LIVE	CUT	3	25.5	105	134	3,799	0.0	5.1	18.0	3.6	266.5	46.7
DF	32	LIVE	CUT	1	31.3	74	93	820	11.8	1.1	6.0	1.1	71.1	10.1
LP	10	LIVE	CUT	1	9.0	41	72	181	13.0	4.5	2.0	0.7	14.7	2.2
LP	12	LIVE	CUT	2	11.7	53	75	488	2.1	5.3	4.0	1.2	35.6	6.0
PP	12	LIVE	CUT	1	12.5	37	69	387	0.0	7.0	6.0	1.7	35.3	4.8
PP	22	LIVE	CUT	1	22.2	99	132	1,007	0.0	2.2	6.0	1.3	65.2	12.4
PP	24	LIVE	CUT	1	23.9	80	104	780	0.0	1.9	6.0	1.2	53.4	9.6
PP	26	LIVE	LEA	2	26.0	39	48	483	0.0	1.1	4.0	0.8	34.2	5.9
PP	28	LIVE	LEA	2	27.0			483	0.0	1.0	4.0	0.8	34.2	5.9
PP	30	LIVE	LEA	1	30.0			241	0.0	0.4	2.0	0.4	17.1	3.0
PP	32	LIVE	LEA	1	32.0			242	0.0	0.4	2.0	0.4	17.1	3.0
PP	34	LIVE	LEA	1	34.0			241	0.0	0.3	2.0	0.3	17.1	3.0
PP	40	LIVE	LEA	1	40.0	103	117	241	0.0	0.2	2.0	0.3	17.1	3.0
WL	22	LIVE	LEA	1	22.0					0.8	2.0	0.4		

Unit Log Grade Summary: Q BUCK MTN U9

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	13.9	32.0	6,402	1.7	501.9	78.7
DF	LIVE	3 SAW	8.7	32.0	2,391	0.0	188.2	29.4
DF	LIVE	4 SAW	5.4	17.0	227	0.0	21.4	2.8
LP	LIVE	3 SAW	6.9	32.0	574	4.5	43.3	7.0
LP	LIVE	4 SAW	5.1	19.0	95	10.1	7.0	1.2
PP	LIVE	4 SAW	13.9	32.0	1,099	0.0	76.9	13.5
PP	LIVE	5 SAW	7.2	29.0	1,075	0.0	77.0	13.2

Unit Log Sort Summary: Q BUCK MTN U9

Sp	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	Domestic	10.1	29.0	9,020	1.2	711.4	110.9
LP	LIVE	Domestic	6.3	27.0	669	5.4	50.3	8.2
PP	LIVE	Domestic	8.7	30.0	2,174	0.0	153.9	26.7

Unit Log Grade x Sort Summary: Q BUCK MTN U9

Sp	Status	Grade	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.9	32.0	6,402	1.7	501.9	78.7
DF	LIVE	3 SAW	Domestic	8.7	32.0	2,391	0.0	188.2	29.4
DF	LIVE	4 SAW	Domestic	5.4	17.0	227	0.0	21.4	2.8
LP	LIVE	3 SAW	Domestic	6.9	32.0	574	4.5	43.3	7.0
LP	LIVE	4 SAW	Domestic	5.1	19.0	95	10.1	7.0	1.2
PP	LIVE	4 SAW	Domestic	13.9	32.0	1,099	0.0	76.9	13.5
PP	LIVE	5 SAW	Domestic	7.2	29.0	1,075	0.0	77.0	13.2

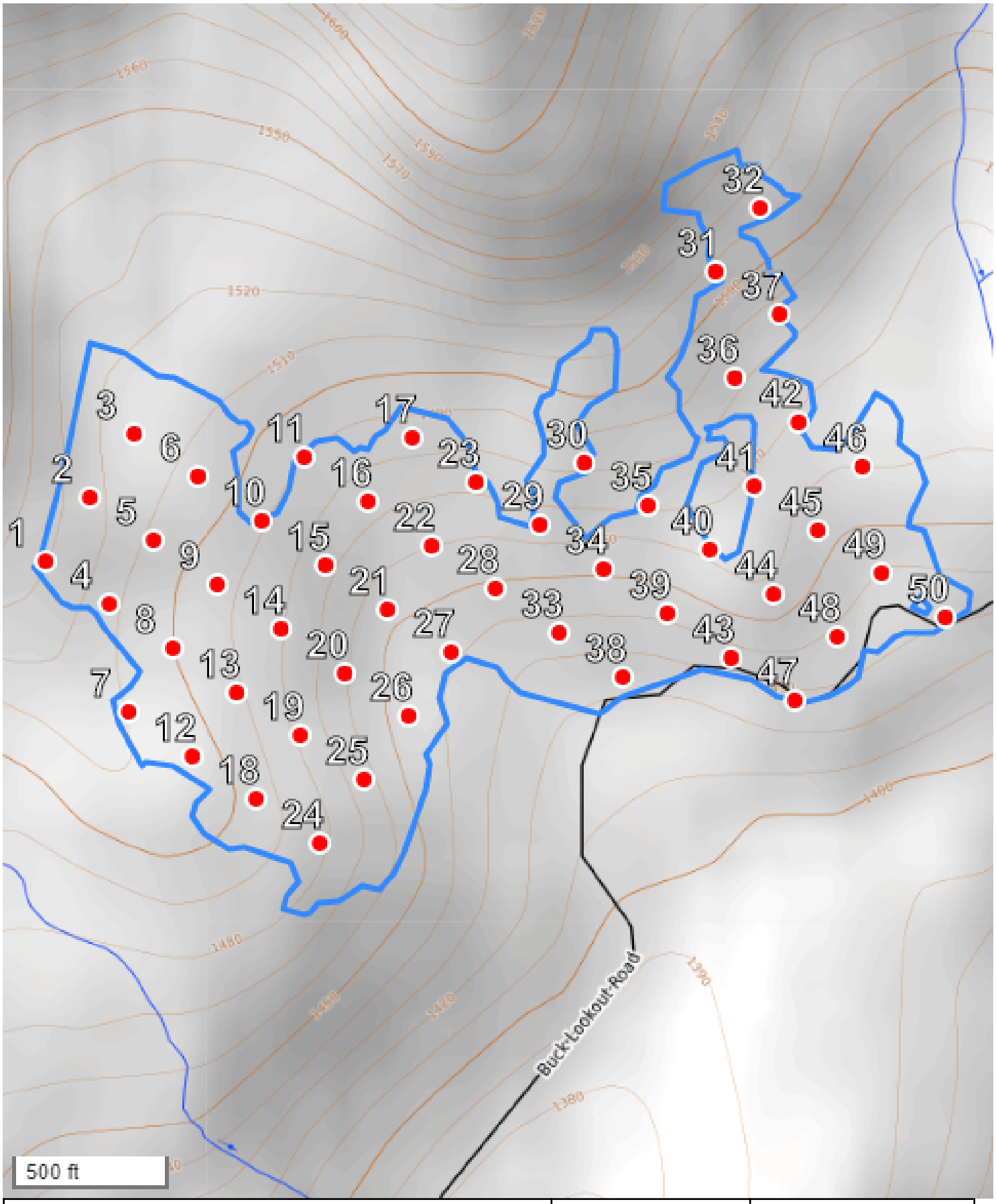
Unit Log Grade x Diameter Bin Summary: Q BUCK MTN U9

Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	4 SAW	5.4	17.0	227	0.0	21.4	2.8
DF	5 - 8	LIVE	3 SAW	7.9	32.0	1,121	0.0	83.1	13.8
DF	9 - 11	LIVE	3 SAW	9.8	32.0	1,270	0.0	105.1	15.6
DF	9 - 11	LIVE	2 SAW	11.5	32.0	267	0.0	17.3	3.3
DF	12 - 14	LIVE	2 SAW	12.9	32.0	3,541	0.0	274.5	43.5
DF	15 - 19	LIVE	2 SAW	17.1	32.0	2,594	4.1	210.1	31.9
LP	5 - 8	LIVE	4 SAW	5.1	19.0	95	10.1	7.0	1.2
LP	5 - 8	LIVE	3 SAW	6.9	32.0	574	4.5	43.3	7.0
PP	5 - 8	LIVE	5 SAW	6.3	29.0	526	0.0	46.1	6.5

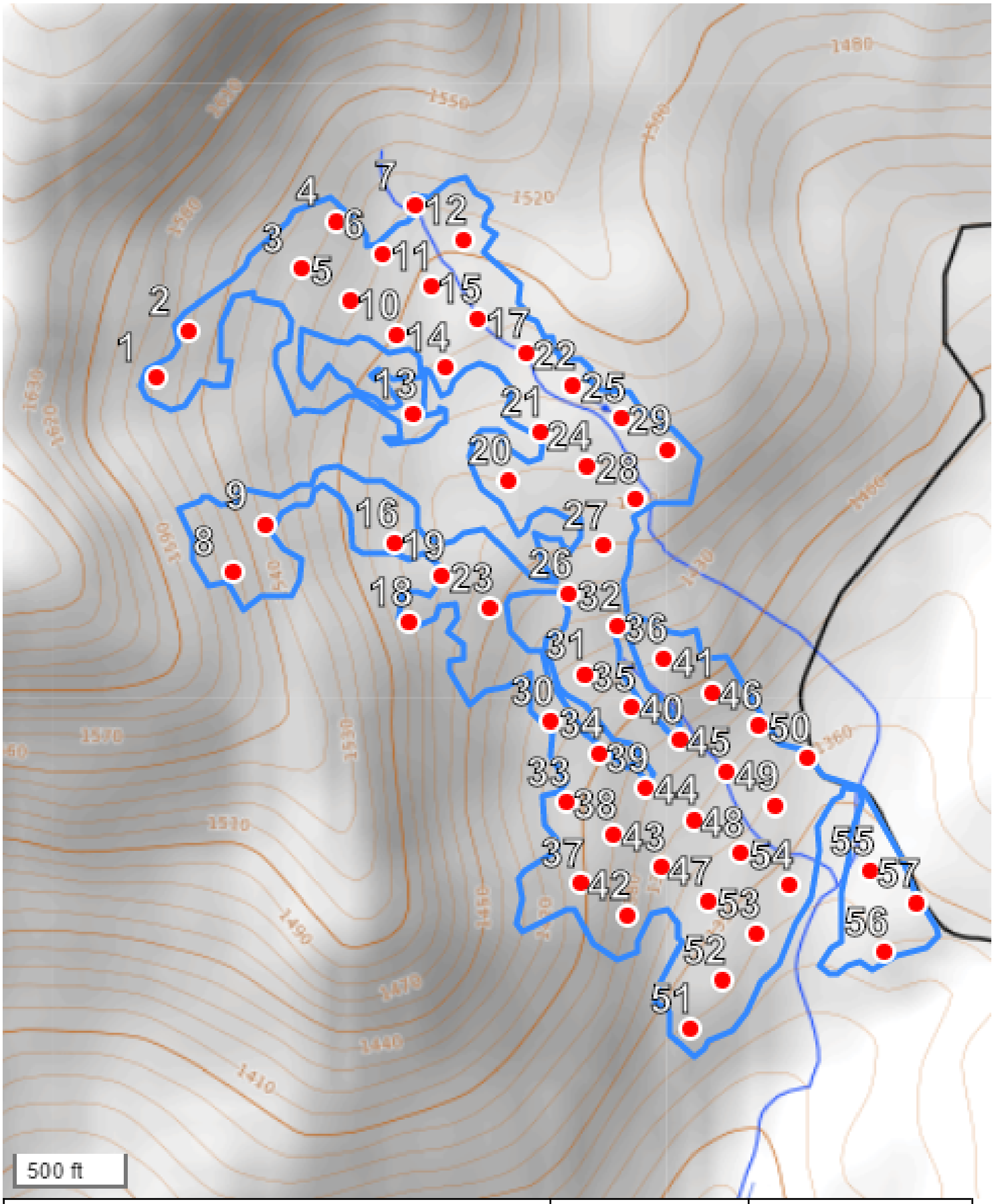
Sp	Bin	Status	Grade	Dia	Len	BF Net	Defect %	Tons	MBF Net
PP	9 - 11	LIVE	5 SAW	9.7	32.0	549	0.0	30.8	6.7
PP	12 - 14	LIVE	4 SAW	13.9	32.0	1,099	0.0	76.9	13.5

Unit Log Sort x Diameter Bin Summary: Q BUCK MTN U9

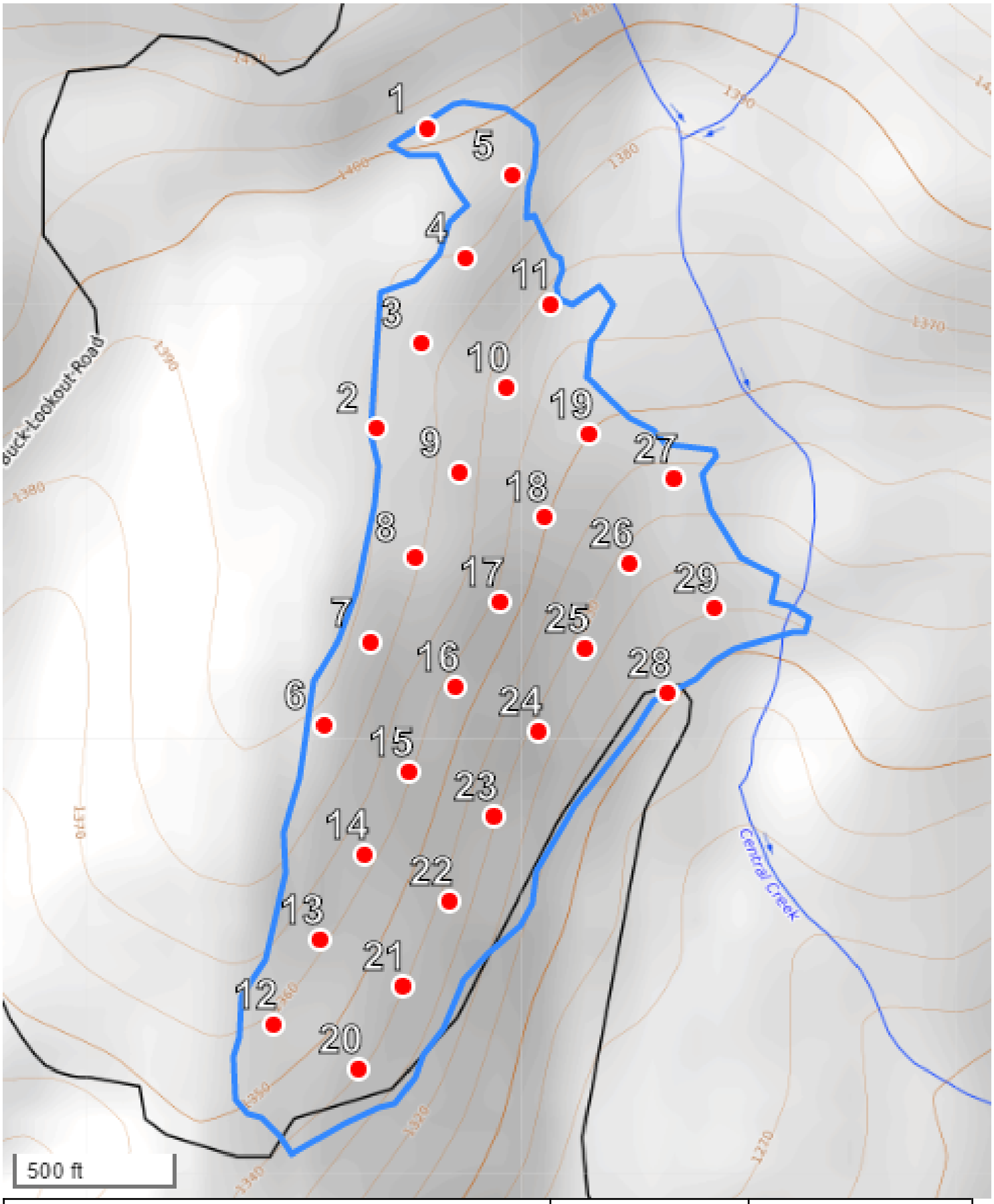
Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	6.6	24.0	1,348	0.0	104.4	16.6
DF	9 - 11	LIVE	Domestic	9.9	32.0	1,537	0.0	122.4	18.9
DF	12 - 14	LIVE	Domestic	12.9	32.0	3,541	0.0	274.5	43.5
DF	15 - 19	LIVE	Domestic	17.1	32.0	2,594	4.1	210.1	31.9
LP	5 - 8	LIVE	Domestic	6.3	27.0	669	5.4	50.3	8.2
PP	5 - 8	LIVE	Domestic	6.3	29.0	526	0.0	46.1	6.5
PP	9 - 11	LIVE	Domestic	9.7	32.0	549	0.0	30.8	6.7
PP	12 - 14	LIVE	Domestic	13.9	32.0	1,099	0.0	76.9	13.5



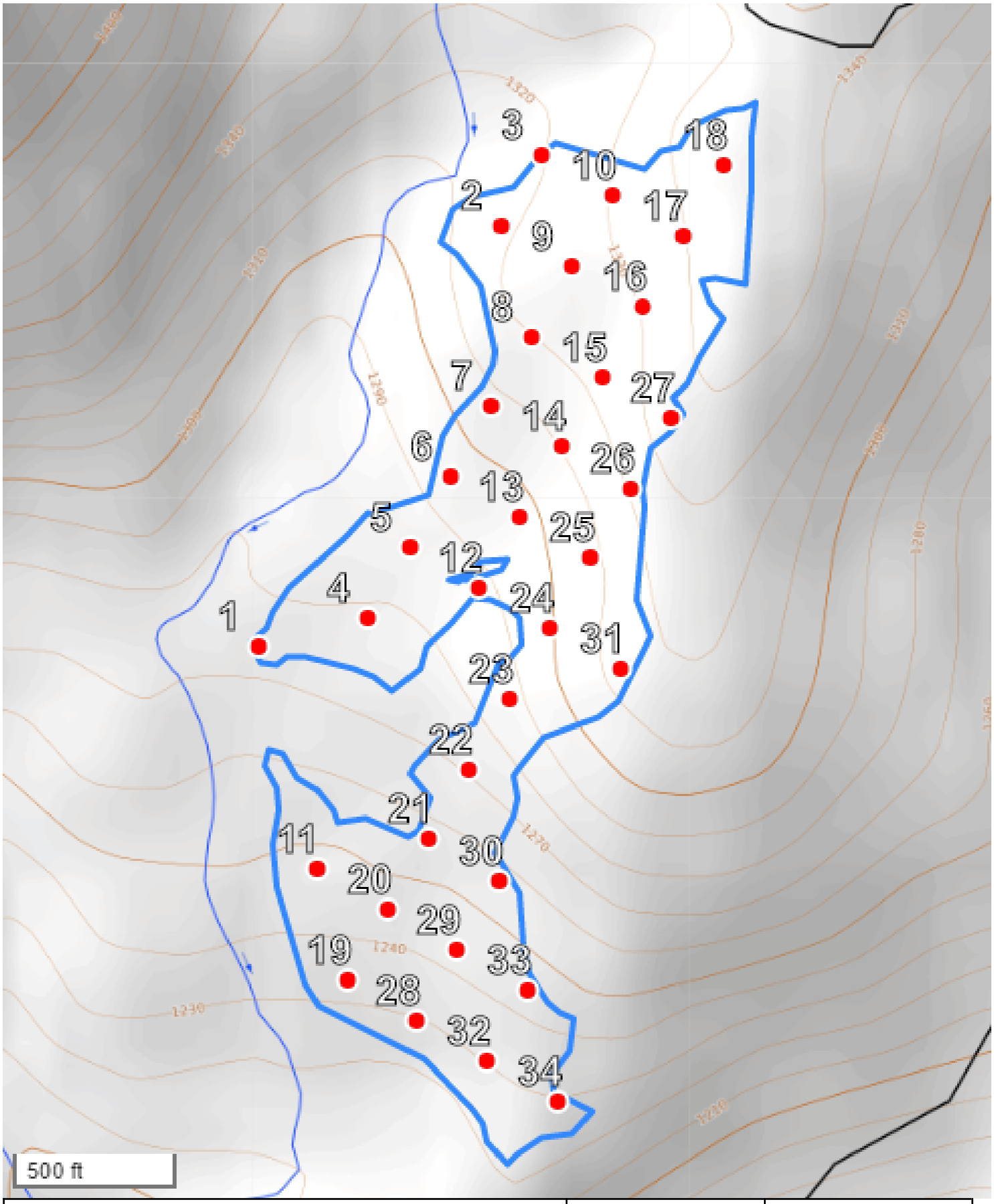
FMA Name: Q BUCK MTN U1	**N Plots:** 50	**Plot Spacing:** 247.2 ft
Grid Name: Q BUCK MTN U1 - 1	**Acres Treated:** 64.63	**Main Azimuth:** 34.6 deg



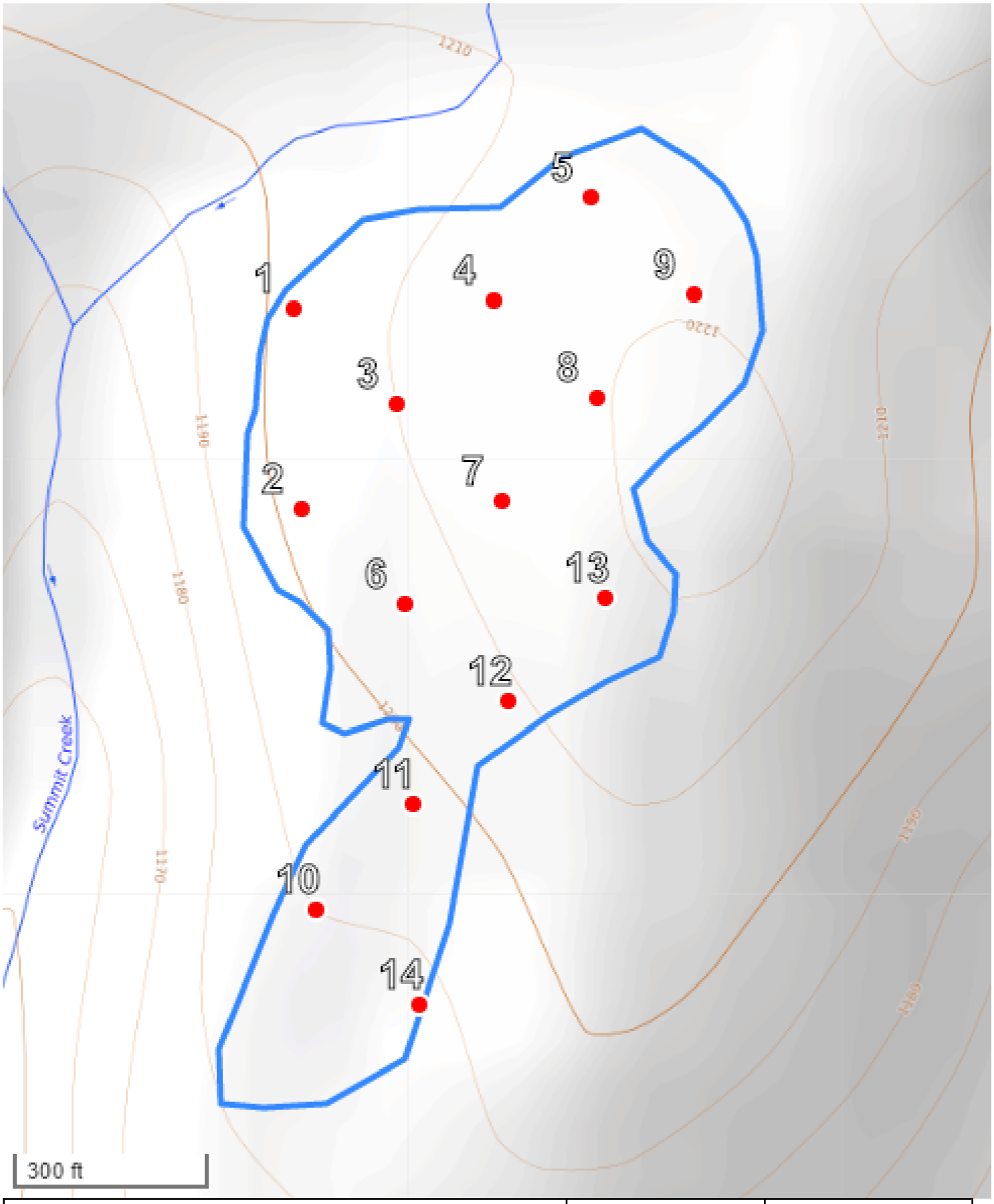
FMA Name: Q BUCK MTN U2	**N Plots:** 57	**Plot Spacing:** 249.5 ft
Grid Name: Q BUCK MTN U2 - 1	**Acres Treated:** 83.43	**Main Azimuth:** 34.7 deg



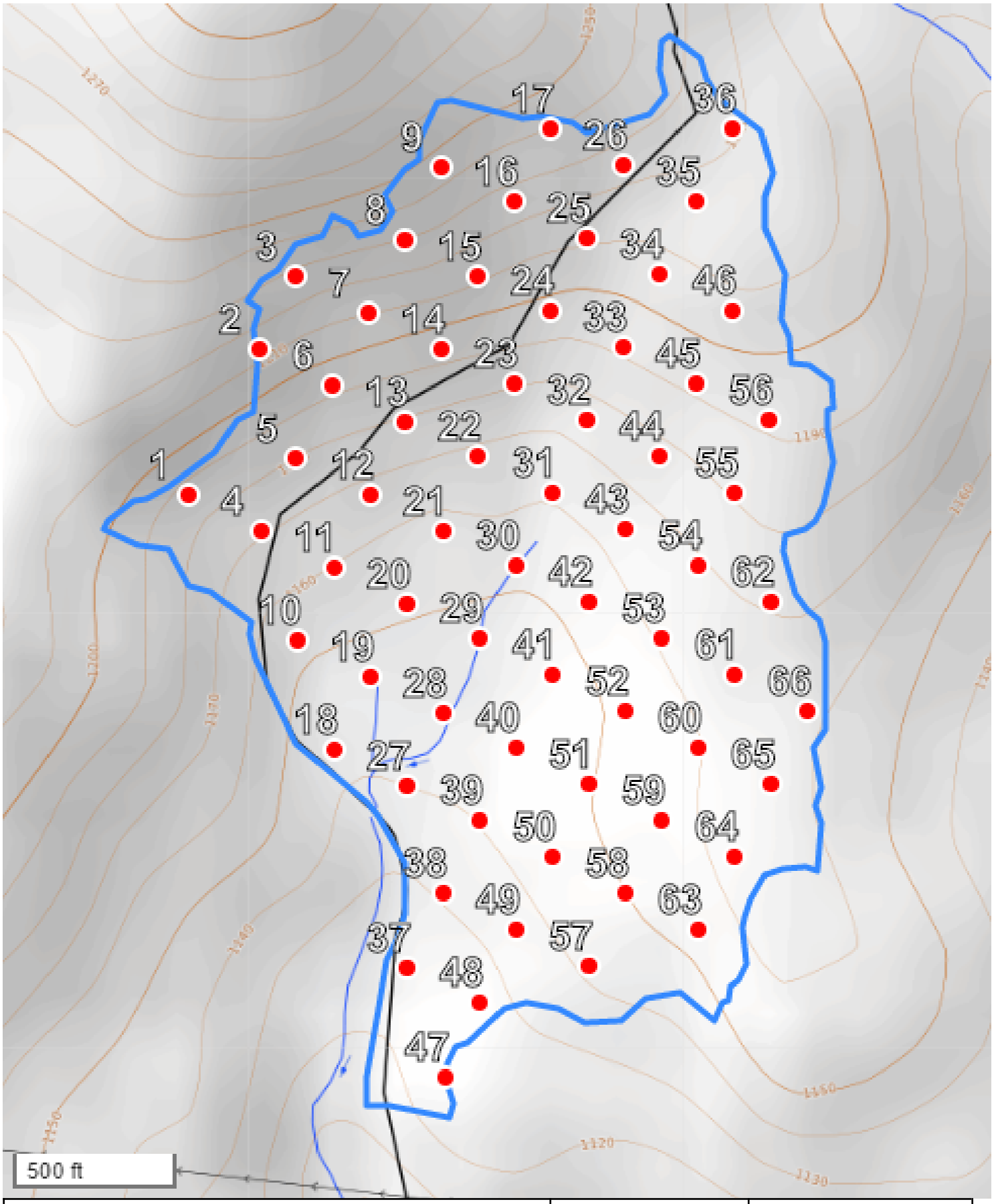
FMA Name: Q BUCK MTN U3	**N Plots:** 29	**Plot Spacing:** 292.4 ft
Grid Name: Q BUCK MTN U3 - 2	**Acres Treated:** 54.88	**Main Azimuth:** 28.1 deg



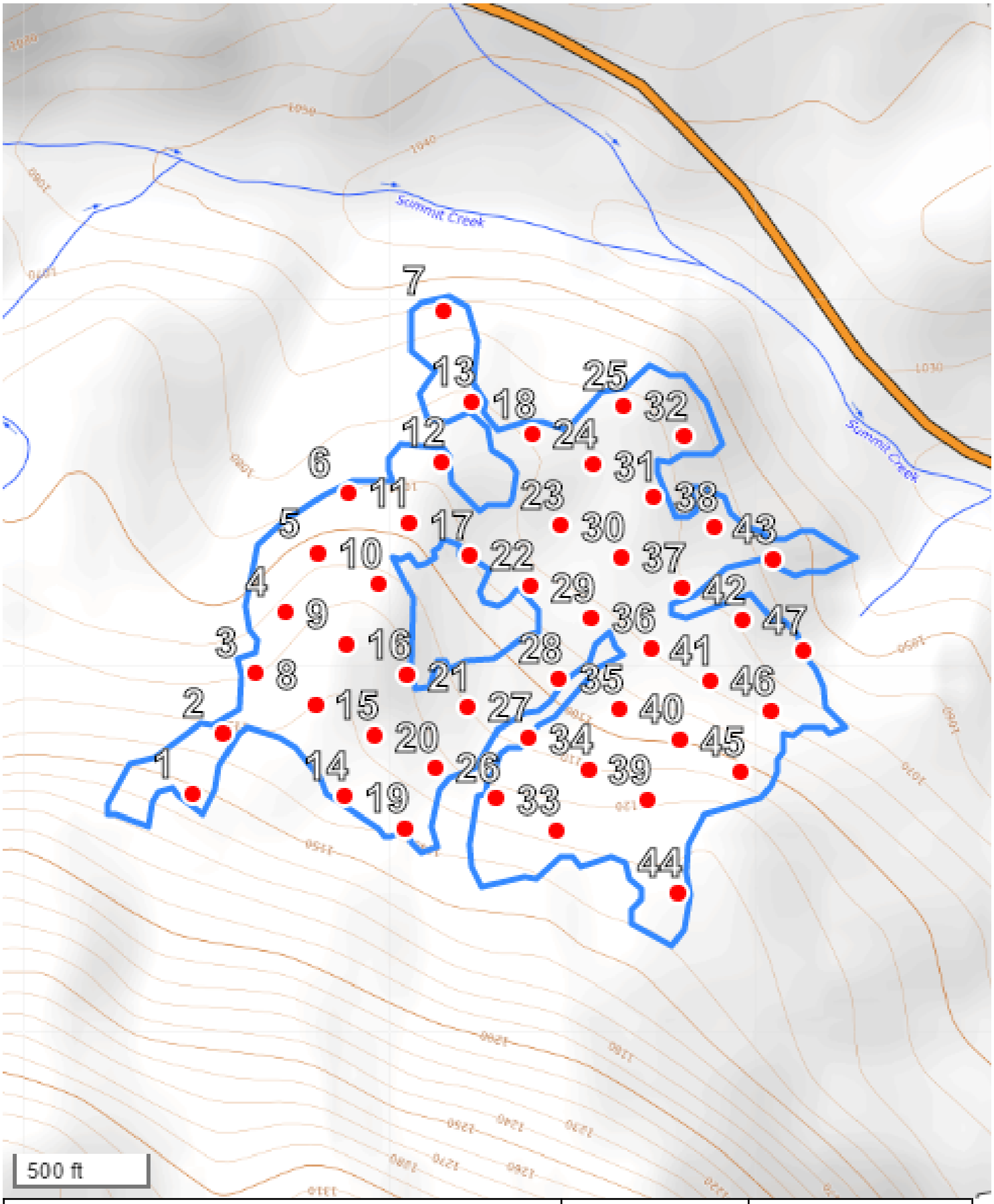
FMA Name: Q BUCK MTN U4	**N Plots:** 34	**Plot Spacing:** 248.2 ft
Grid Name: Q BUCK MTN U4 - 1	**Acres Treated:** 46.52	**Main Azimuth:** 30 deg



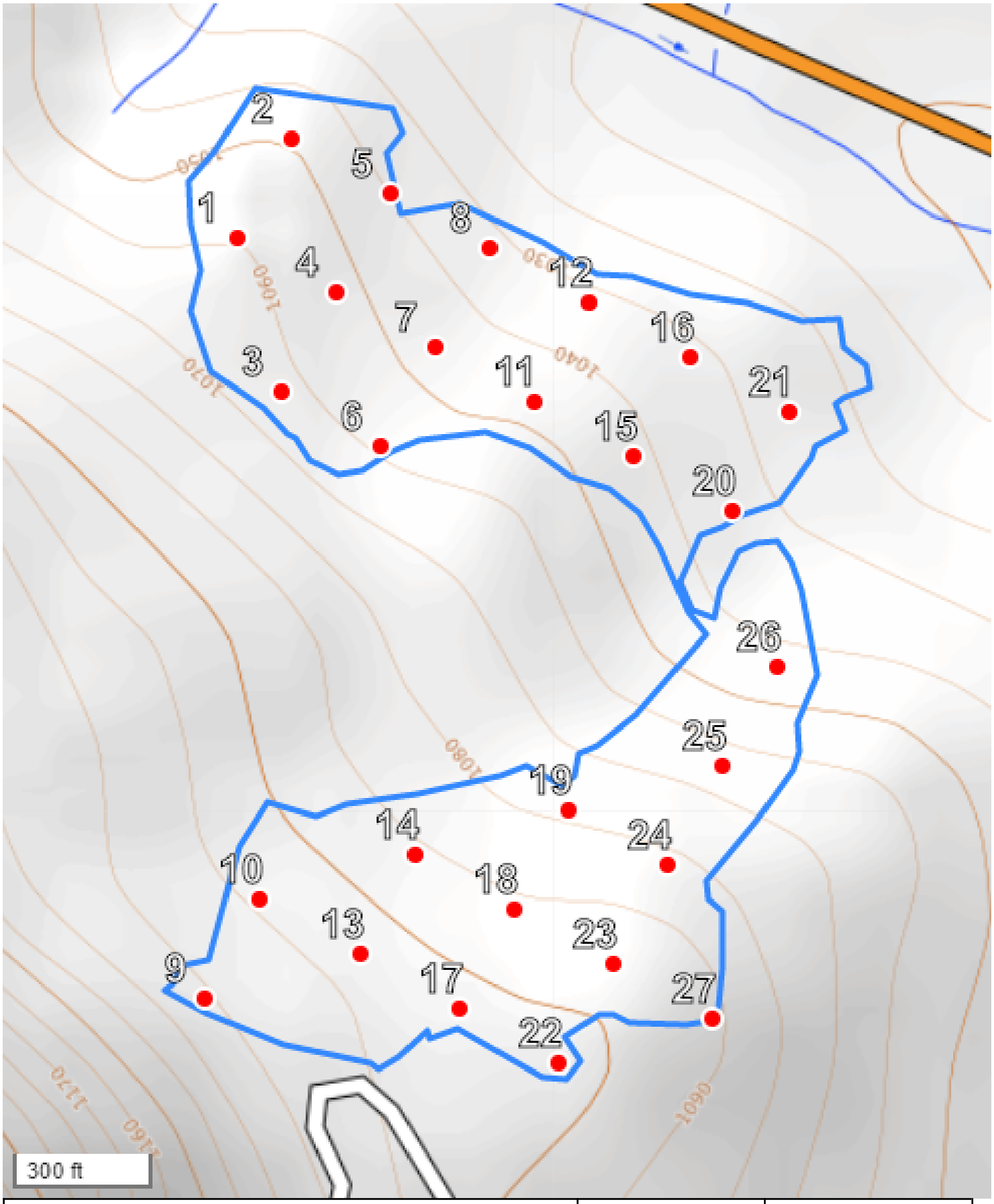
FMA Name: Q BUCK MTN U5	**N Plots:** 14	**Plot Spacing:** 216.4 ft
Grid Name: Q BUCK MTN U5 - 1	**Acres Treated:** 14.67	**Main Azimuth:** 43 deg



FMA Name: Q BUCK MTN U6	**N Plots:** 66	**Plot Spacing:** 248.7 ft
Grid Name: Q BUCK MTN U6 - 1	**Acres Treated:** 96.61	**Main Azimuth:** 26.4 deg



FMA Name: Q BUCK MTN U7	**N Plots:** 47	**Plot Spacing:** 247.3 ft
Grid Name: Q BUCK MTN U7 - 1	**Acres Treated:** 59.6	**Main Azimuth:** 27.4 deg



FMA Name: Q BUCK MTN U8	**N Plots:** 27	**Plot Spacing:** 245.2 ft
Grid Name: Q BUCK MTN U8 - 1	**Acres Treated:** 34.5	**Main Azimuth:** 29 deg

FMA Name: Q BUCK MTN U9	**N Plots:** 10	**Plot Spacing:** 212.1 ft
Grid Name: Q BUCK MTN U9 - 1	**Acres Treated:** 12.29	**Main Azimuth:** 41.3 deg

Forest Practices Application/Notification

Notice of Decision

FPA/N No:	3024214
Effective Date:	06/10/2020
Expiration Date:	06/10/2023
Shut Down Zone	678 E
EARR Tax Credit:	☑ Eligible ☐ Non-eligible
Reference:	DNR/Q Buck Mtn Timber Sale
	20,29,30,32-34-24/4,5,8,9-33-24

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

No conditions.

Issued By: Kyle Buckmiller **Region:** Northeast

Title: Forest Practices Forester **Date:** 06/10/2023

Copies to: ☐ **Landowner, Timber Owner and Operator**

Issued in person: ☑ **Landowner** ☑ **Timber Owner** ☑ **Operator** **By:** Nondis Taylor

Washington State Department of Natural Resources

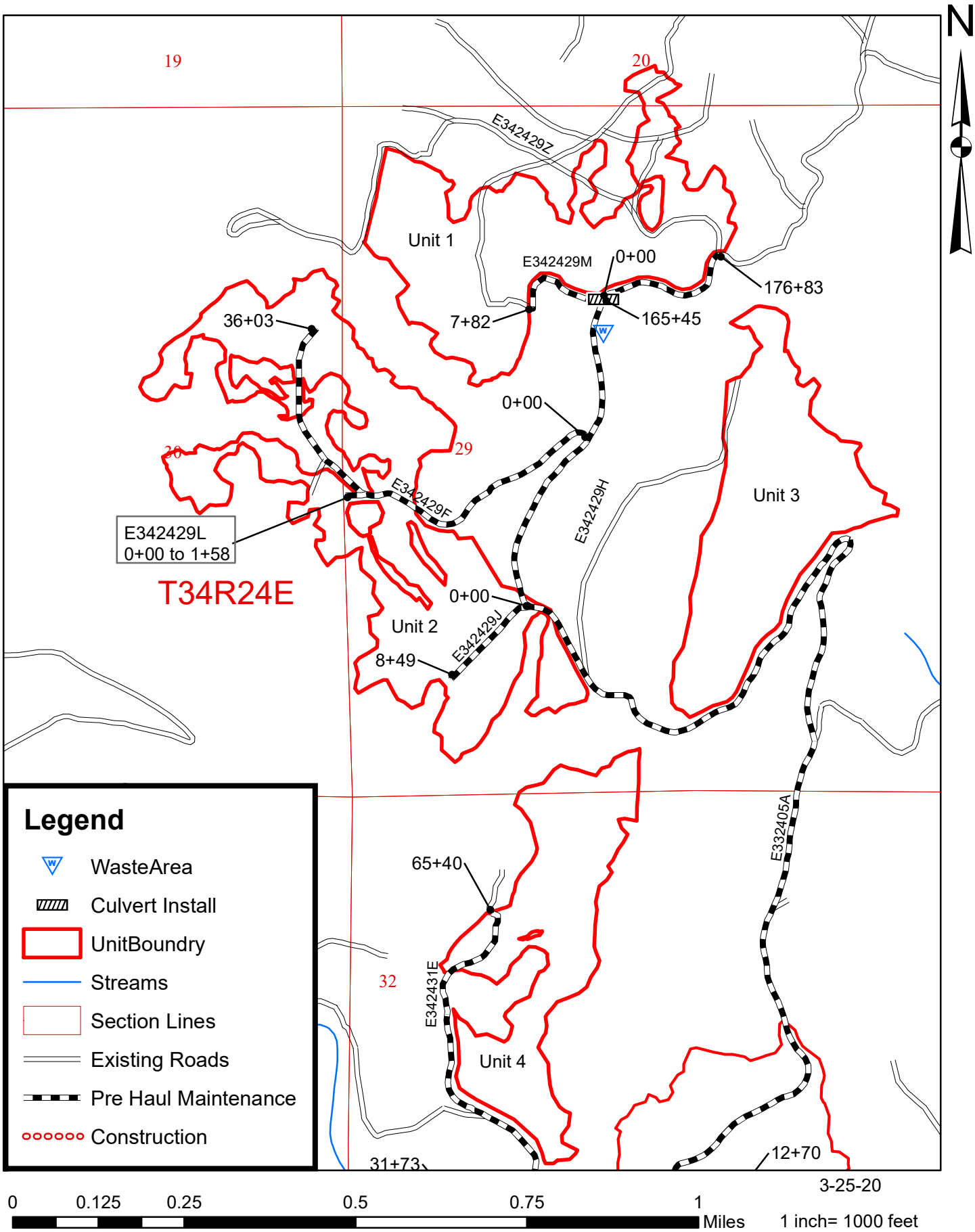
Sale Name: Buck Mountain

Road Plan Map

Region: Northeast

Agreement No: 30-100613

County: Okanogan



3-25-20

0 0.125 0.25 0.5 0.75 1 Miles

1 inch= 1000 feet

Washington State Department of Natural Resources

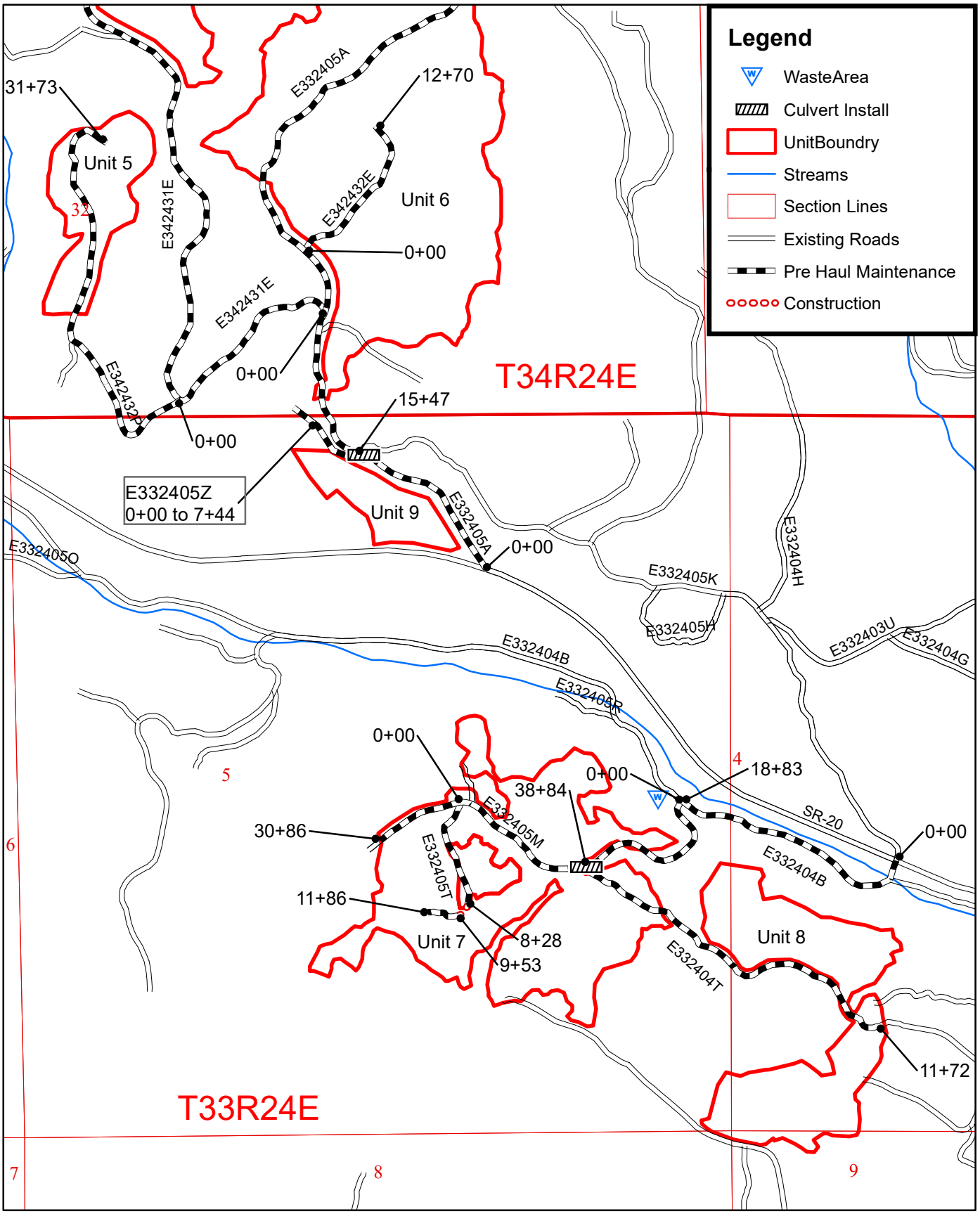
Sale Name: Buck Mountain

Road Plan Map

Region: Northeast

Agreement No: 30-100613

County: Okanogan



0 0.125 0.25 0.5 0.75 1 Miles

3/25/20

1 inch = 1000 feet

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

BUCK MOUNTAIN TIMBER SALE ROAD PLAN
OKANOGAN COUNTY
SOUTH OKANOGAN
NORTHEAST REGION

AGREEMENT NO.: 30-100613 STAFF ENGINEER: COLIN ROJAS

DATE: 3/25/20 DRAWN & COMPILED BY: COLIN ROJAS

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.

Road	Stations	Type
E332404B	0+00 to 18+83	Pre Haul Maintenance
E332404T	11+72 to 38+84	Pre Haul Maintenance
E332405A	0+00 to 176+83	Pre Haul Maintenance
E332405M	0+00 to 30+86	Pre Haul Maintenance
E332405T	0+00 to 8+28 9+53 to 11+86	Pre Haul Maintenance
E332405T	8+28 to 9+53	Construction
E332405Z	0+00 to 7+44	Pre Haul Maintenance
E342429F	0+00 to 36+03	Pre Haul Maintenance
E342429J	0+00 to 8+49	Pre Haul Maintenance
E342429L	0+00 to 1+58	Pre Haul Maintenance
E342429M	0+00 to 7+82	Pre Haul Maintenance
E342431E	0+00 to 65+40	Pre Haul Maintenance
E342432E	0+00 to 12+70	Pre Haul Maintenance
E342432P	0+00 to 31+73	Pre Haul Maintenance

0-4 CONSTRUCTION

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

Road	Stations	Requirements
E332405T	8+28 to 9+53	See sections 3, 4, and 5

0-6 PRE-HAUL MAINTENANCE

Road	Stations	Requirements
E332404B	0+00 to 18+83	Brushing and grading
E332404T	11+72 to 38+84	Brushing, grading and grubbing
E332405A	0+00 to 176+83	Brushing, grading, shaping, dip improvement, culvert installation, culvert maintenance, ditchout construction, and dip installation
E332405M	0+00 to 30+86	Brushing, grubbing, and grading
E332405T	0+00 to 8+28 9+53 to 11+86	Brushing, grubbing, and grading
E332405Z	0+00 to 7+44	Brushing, grubbing, and grading
E342429F	0+00 to 36+03	Brushing, grubbing, and grading
E342429J	0+00 to 8+49	Brushing and grading
E342429L	0+00 to 1+58	Brushing and grading
E342429M	0+00 to 7+82	Brushing and grading
E342431E	0+00 to 65+40	Brushing, grubbing, grading, shaping, dip shaping, waterbar installation,
E342432E	0+00 to 12+70	Brushing, grubbing, and grading
E342432P	0+00 to 31+73	Brushing, grubbing, grading, dip improvement

0-7 POST-HAUL MAINTENANCE

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

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 shall be submitted, in writing, to the Contract Administrator for consideration. The State must approve the submitted plans before construction begins.

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

Unless controlled by construction stakes or design data (plan, profile, and cross-sections), road work shall be performed in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan.

1-4 ROAD TOLERANCES

Road work shall be performed within the tolerance listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET. *Make sure typical sheet has tolerance classes.*

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

1-6 ORDER OF PRECEDENCE

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

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

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

1-7 TEMPORARY ROAD CLOSURE

Purchaser shall notify the Contract Administrator a minimum of 5 business 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

The Purchaser is responsible for the repair or replacement of all materials, roadway infrastructure, and road components damaged during road work or operation activities. Repairs and replacements shall be directed by the Contract Administrator. Repairs to

structural materials will be made according to the manufacturer's recommendation, and shall 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.

1-15 ROAD MARKING

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

- Pre and post haul maintenance: flagged in orange flagging

1-21 HAUL APPROVAL

The Purchaser shall not use roads constructed, reconstructed**,** maintained**,** under this road plan for timber hauling or rock hauling, other than timber cut on the right-of-way, without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

The Purchaser shall notify the Contract Administrator a minimum of 14 calendar days before any road work begins.

1-23 ROAD WORK PHASE APPROVAL

Written approval by Contract Administrator must be received upon completion of the following phases of road work:

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

1-25 ACTIVITY TIMING RESTRICTION

No operation of road construction equipment will be allowed on weekends or state recognized holidays, without written approval from the Contract Administrator.

Construction restrictions apply to this contract. All construction and transportation of heavy equipment and/or trucks is prohibited between the following dates, except as may be authorized in writing by the Contract Administrator.

<u>November 15 to May 31</u>

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTIONS, the Purchaser shall provide a maintenance plan to include further

protection of state resources. The Contract Administrator must approve the maintenance plan, in writing, before operation in the closure period. The Purchaser shall be required to maintain all haul roads at their own expense.

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 shall suspend road work or hauling of right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 4 inches on jaw run/pit run roads.
- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Wheel track rutting exceeds 8 inches on native surface roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- In the opinion of the Contract Administrator excessive road damage or rutting may occur.

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

1-33 SNOW PLOWING RESTRICTION

Snowplowing shall be permitted only after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

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

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

1-43 ROAD WORK AROUND UTILITIES

Road work is in close proximity to a utility. Known utilities are listed, but it is the Purchaser's responsibility to identify any utilities not listed. Purchaser shall work in

accordance with all applicable laws or rules concerning utilities. Purchaser is responsible for all notification, including "call before you dig", and liabilities associated with the utilities and their rights-of-way. Purchaser shall notify the Power Administration before starting road work.

Road	Stations	Utility	Utility Contact
E342431E	14+50	Power line	**509-422-8380**
E342432P	0+00 and 8+18	Power line	**509-422-8380**

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.

2-4 PASSAGE OF LIGHT VEHICLES

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

2-5 MAINTENANCE GRADING – EXISTING ROAD

A grader shall be used to shape existing surfaces.

2-6 CLEANING CULVERTS

All inlets and outlets of culverts shall be cleaned before the haul of timber and shall be subject to the written approval of the Contract Administrator.

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

Purchaser shall clean the ditches and catch basins. Work shall be completed before haul of timber.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

Vegetative material up to 3 inches in diameter, including limbs, shall be cut as shown on the BRUSHING DETAIL. Brushing shall be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation shall not be disturbed unless directed by the Contract Administrator.

3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal shall not be used for brushing. The Purchaser is required to submit a detailed list of equipment and methods to be used during brushing, for approval by the Contract

Administrator before starting work. Excavator buckets, log loaders and similar equipment shall not be used for brushing unless otherwise approved in writing by the Contract Administrator.

3-3 BRUSH REMOVAL

Remove brushing debris from the road surface, ditch lines, and culvert inlets and outlets.

3-5 CLEARING

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

3-7 RIGHT-OF-WAY DECKING

Deck all right-of-way timber. Decks shall be parallel to the road centerline and placed within the cleared right-of-way. Decks shall 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

Right-of-way timber shall not be decked 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 40%.
- Against standing trees.

3-10 GRUBBING

Remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Those stumps outside the grubbing limits but with undercut roots shall also be removed. Stumps over 22 inches diameter shall be split. Stumps over 40 inches shall be quartered. Grubbing shall be completed before starting excavation and embankment.

3-12 STUMP PLACEMENT

Grubbed stumps shall be placed outside of the clearing limits as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps shall be piled. Piles shall be dirt free and piled with a hydraulic excavator.

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

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

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract Clauses G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the grubbing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

All disposal of organic debris, shall be completed before approval of final maintenance.

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

Waste areas for organic debris shall be located within the cleared right-of-way or in natural openings approved in writing by the Contract Administrator, or as shown on the Road Plan Map.

3-23 PROHIBITED DISPOSAL AREAS

Organic debris shall not be deposited in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland, on road subgrades road prism excavation and embankment slopes embankments as shown on the TYPICAL SECTION SHEET.
- On slopes greater than 45%.
- On locations where brush will 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.

3-30 EXCLUSION OF DOZER BLADES

Dozer blades are not permitted for the piling of organic debris.

3-31 PILING

Organic debris shall be piled. Debris piles shall be made to be burnable, clean, tight, and free of rock or soil. Piles shall be made no closer than 20 feet from standing timber, and no higher than 10 feet. Debris piles shall be placed within the cleared right-of-way, or in natural openings, as designated by the Contract Administrator. Placement of debris piles outside of the right-of-way limits is subject to the written approval of the Contract Administrator.

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

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

4-2 PIONEERING

Pioneering shall not extend past construction that will be completed during the current construction season. Pioneering shall not extend more than 1000 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions shall be taken as pioneering progresses:

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

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

The following road grade and alignment standards shall be followed except as designed:

- Grade and alignment shall have smooth continuity, without abrupt changes in direction.
- Maximum grade shall not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Sag vertical curves shall not have a grade change greater than 5% in 100 feet.
- Crest vertical curves shall not have a grade change greater than 4% in 100 feet.

4-5 CUT SLOPE RATIO

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

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

4-6 EMBANKMENT SLOPE RATIO

Unless construction staked or designed, embankment slopes shall be constructed no steeper than shown on the following table:

Material Type	Embankment Slope Ratio	Embankment Slope Percent
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.

Curve widening is modified as follows:

Road	Station	Curve Widening (ft)
E332404B	18+83	10
E332404T	38+84	6

4-9 EMBANKMENT WIDENING

Except as construction staked or designed, embankments shall be widened as follows:

Height at Centerline	Subgrade Widening
Less than 6 feet	2 feet
6 feet or over	4 feet

Embankment widening shall be applied equally to both sides of the road to achieve the required width.

4-14 ONE-FOOT EXCAVATION LIMIT

Where side slopes are 0% to 15%, the cut at centerline shall not exceed one foot unless approved by the Contract Administrator.

4-20 SUBGRADE DIMENSIONS FOR INTERSECTIONS

Purchaser shall construct the subgrade to the dimensions shown on the INTERSECTION DETAIL.

4-21 TURNOUTS

Turnouts shall be intervisible with maximum of 1,000 feet between turnouts, unless shown otherwise on drawings. Locations shall be adjusted to fit the final subgrade alignment and sight distances. Minimum dimensions are shown on the TYPICAL SECTION SHEET. Turnouts are subject to written approval from the contract administrator.

4-22 TURNAROUNDS

Turnarounds shall be no larger than 30 feet long and 30 feet wide. Locations shall be subject to approval by the Contract Administrator.

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

The Purchaser shall construct or reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Excavated slopes shall be consistent with Clause 4-5 CUT SLOPE RATIO. Ditches shall be constructed concurrently with construction of the subgrade.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

The Purchaser shall construct ditch outs as identified and as needed and as directed by the Contract Administrator. Ditch outs shall be constructed in a manner that diverts ditch water onto the forest floor and shall have excavation back slopes no steeper than a 1:1 ratio.

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

Waste material may be side cast on side slopes up to 45% if the waste material is compacted and free of organic debris. On side slopes greater than 45%, all excavation shall be end hauled or pushed to designated embankment sites and waste areas.

4-37 WASTE AREA LOCATION

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

Road	Waste Area Location	Volume
E332405A	Station 163+02	300
E332404B	Station 20+23	200

4-38 PROHIBITED WASTE DISPOSAL AREAS

Waste material shall not be deposited in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- 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.
- Against standing timber.
- Outside the clearing limits.
- Waste Disposal areas are subject to written approval from the contract administrator.

4-46 COMMON BORROW

Common borrow consists of soil, and/or aggregate that is non-plastic and contains no more than 5% clay, organic debris, or trash by volume. The material is considered non-plastic if the fines in the sample cannot be rolled, between the hand and a smooth surface, into a thread at any moisture content. Common borrow material must be free of rocks greater than 6 inches in any dimension.

4-55 ROAD SHAPING

The road subgrade and surface shall be shaped as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape shall ensure runoff in an even, un-concentrated manner, and shall be uniform, firm, and rut-free. All grading shall be accomplished using a motor grader with a minimum of 175 horsepower.

4-56 DRY WEATHER SHAPING

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

4-60 FILL COMPACTION

All embankment and waste material shall be compacted. Minimum acceptable compaction is achieved by placing embankments in 1 foot or shallower lifts, and routing excavation equipment over the entire width of each lift.

Except as otherwise specified in this plan, a vibratory plate compactor or tamper shall be used for areas specifically requiring keyed embankment construction, and for embankment segments too narrow to accommodate equipment. Compaction with a plate compactor shall be made by a minimum of three full coverages; each lift shall not exceed 6 inches in depth.

4-62 DRY WEATHER COMPACTION

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

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

Berms shall be removed from road shoulders to permit the escape of runoff. The construction of ditch outs will be required where ponding will result from the effects of side cast debris.

5-5 CULVERTS

Culverts shall be installed as part of this contract. Culverts shall be installed concurrently with subgrade work and shall be installed before subgrade compaction and rock

application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT AND DRAINAGE LIST. Culvert, downspout, and flume lengths shall be adjusted to fit as-built conditions and shall not terminate directly on unprotected soil that will erode. Culverts shall be new steel, aluminum, or polyethylene meeting the material specifications in Clauses 10-15 through 10-23. Culvert placement shall precede embankment construction.

5-6 CULVERT TYPE

On the following road a steel culvert shall be install in accordance with Clauses 10-15 through 10-24.

Road	Stations	Comments
E332404T	38+84	18X50
E332405A	165+45	18X33
E332405A	15+47	18X40

5-12 UNUSED MATERIALS STATE PROPERTY

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

5-15 CULVERT INSTALLATION

Installation shall be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures".

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Purchaser shall obtain written approval from the Contract Administrator for the installation of culverts 24 inches in diameter and over before backfilling.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

Cross drain culverts shall be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts shall be installed with a depth of cover specified in the Engineer's design, or to the minimum depth recommended by the culvert manufacturer for the type of cover material over the pipe, whichever is greater.

5-20 ENERGY DISSIPATERS

Energy dissipaters shall be installed to prevent erosion and are subject to approval by the Contract Administrator. The type of energy dissipater and the amount of material shall be consistent with the specifications listed on the CULVERT AND DRAINAGE SPECIFICATION DETAIL. Energy dissipaters will be consistent with light loose rip rap specifications.

5-21 DOWNSPOUTS AND FLUMES

Downspouts and flumes longer than 10 feet must be staked on both sides at a maximum interval of 10 feet.

5-25 CATCH BASINS

Catch basins shall be constructed to resist erosion in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 4 feet wide and 4 feet long with back slopes consistent with Clause 4-5 CUT SLOPE RATIO.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Headwalls shall be constructed in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all permanent cross drain culverts. Rock used for headwalls shall meet the specifications for Light Loose Rip Rap. Rock shall be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock shall not restrict the flow of water into culvert inlets or catch basins. Placement shall be by zero-drop-height method only. No placement by end dumping or dropping of rock shall be allowed

5-30 DRIVABLE WATERBAR CONSTRUCTION

Drivable waterbars shall be constructed in accordance with the DRIVABLE WATERBAR DETAIL. Drivable waterbars must be installed concurrently with construction of the subgrade and must be maintained in an operable condition. Drivable waterbars shall be installed using a crawler tractor. Use of any other equipment is not allowed without written approval from the Contract Administrator

5-31 ROLLING DIP CONSTRUCTION

Rolling dips shall be constructed in accordance with the ROLLING DIP DETAIL and as specified on the CULVERT & DRAINAGE LIST. Rolling dips shall be installed concurrently with construction of the subgrade and shall be maintained in an operable condition. Minimum frequency of rolling dips shall be at a maximum spacing of 400 feet horizontal or one for every 10 feet of vertical change.

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads shall be water barred by November 1. Water bars shall be constructed according to the attached DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between water bars or between natural drainage paths, and with a maximum spacing of 300 feet.

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 will be subject to written approval by the Contract Administrator before their use.

6-21 IN-PLACE PROCESSING

The Purchaser may use in-place processing, such as a grid roller or other method, if suitable crushing can be demonstrated to meet the surfacing size restrictions specified in Clause 6-38 4-INCH IN-PLACE ROCK .The use of in-place processing methods is subject to written approval by the Contract Administrator.

6-21 FRACTURE REQUIREMENT FOR ROCK

A minimum of 50% by visual inspection of coarse aggregate shall have at least one fractured face. Coarse aggregate is the material retained on each specification sieve sized 1/4-inch and above, if that sieve retains more than 5% of the total sample.

6-28 1 ¼-INCH MINUS CRUSHED ROCK

% Passing 1 ¼” square sieve	100%
% Passing 5/8” square sieve	55 - 75%
% Passing U.S. #4 sieve	20 - 50%

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

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

6-50 LIGHT LOOSE RIP RAP

Light loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather. Light loose rip rap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

Quantity	Approximate Size Range
20% to 90%	500 lbs. to 1 ton (18”- 28”)
15% to 80%	50 lbs. to 500 lbs. (8”- 18”)
10% to 20%	3 inch to 50 lbs. (3”- 8”)

6-51 HEAVY LOOSE RIP RAP

Heavy loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance

to weather. Heavy loose rip rap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

Quantity	Size Range
30% to 90%	1 ton to 2 ton (28”- 36”)
30% to 70%	500 lbs. to 1 ton (18”- 28”)
20% to 50%	50 lbs. to 500 lbs. (8”- 18”)
10% to 20%	3 inch to 50 lbs. (3”- 8”)

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

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

6-70 APPROVAL BEFORE ROCK APPLICATION

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

6-71 ROCK APPLICATION

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

6-80 WATERING FOR DUST ABATEMENT

Purchaser shall use water for dust abatement

SECTION 7 – STRUCTURES

7-57 CULVERT SHAPE CONTROL

Purchaser shall monitor the culvert shape during backfill and compaction. Special attention must be paid to maintaining the structure’s rise dimensions, concentricity, and smooth uniform curvature. If compaction methods are resulting in peaking or deflection of the culvert, Purchaser shall modify the compaction method to achieve the appropriate end result.

7-71 GATE CLOSURE DURING HAUL

Purchaser shall keep gates closed and locked except for passing vehicles. If Purchaser elects to use an alternate plan for gate security, a detailed plan must be submitted to the Contract Administrator for written approval. For all gates required to be closed and

locked during haul, Purchaser may install temporary cattle guards. At the completion of hauling Purchaser shall remove temporary cattle guards re install gate.

Road	Station	Gate No.	Closure Period	Comment
E332404B	0+00			

7-75 GATE MAINTENANCE

Purchaser shall maintenance fences and gates they come in contact with. Any damaged fence or gate must be repaired. The repair shall be according to the 4-wire fence detail and the 4-wire gate detail

SECTION 9 – POST-HAUL ROAD WORK

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

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

9-5 POST-HAUL MAINTENANCE

Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS on all roads in this plan. Additional, the water bars currently listed in the roads below need to be re installed after being hauled on

Road	Stations	Additional Requirements
E342429F	0+00 to 36+03	Needs to have 13 water bars put in road
E342429H	0+00 to 29+07	Needs to have 4 water bars put in road

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface as approved, in writing, by the Contract Administrator.

9-11 LANDING EMBANKMENT

Landing embankments shall be sloped to original construction specifications.

SECTION 10 MATERIALS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts shall meet AASHTO M-36 (ASTM A-760) specifications. Culverts shall be galvanized (zinc coated meeting AASHTO M-218)

10-16 CORRUGATED ALUMINUM CULVERT

Aluminum culverts must meet AASHTO M-196 (ASTM A-745) specifications.

10-20 FLUME AND DOWNSPOUT

Downspouts and flumes shall meet the AASHTO specification designated for the culvert. Plastic downspouts and flumes shall be Type S – double walled with a corrugated exterior and smooth interior.

10-21 METAL BAND

Metal coupling and end bands must meet the AASHTO specification designated for the culvert and must have matching corrugations. Culverts 24 inches and smaller must have bands with a minimum width of 12 inches. Culverts over 24 inches must have bands with a minimum width of 24 inches.

10-24 GAUGE AND CORRUGATION

Unless otherwise stated in the engineer's design, metal culverts shall conform to the following specifications for gage and corrugation as a function of diameter.

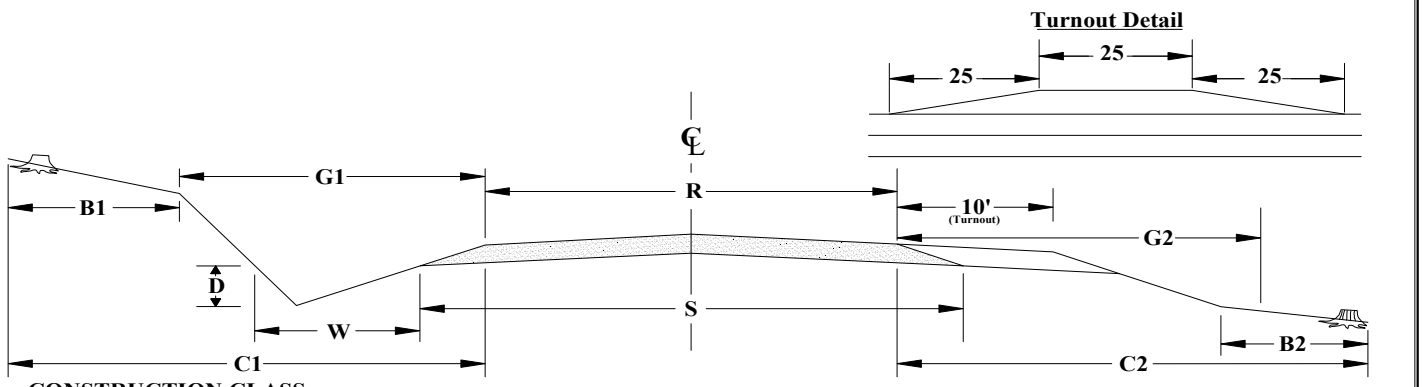
Diameter	Gauge	Corrugation
18"	16 (0.064")	2 $^{2}/_{3}$" X $^{1}/_{2}$"
24" to 48"	14 (0.079")	2 $^{2}/_{3}$" X $^{1}/_{2}$"
54" to 96"	12 (0.109")	3" X 1"

State of Washington

Department of Natural Resources

Application No. : 30-081736 **Name of Sale: Buck Mountain**

Typical Section Sheet



CONSTRUCTION CLASS
NEW CONSTRUCTION - C
RECONSTRUCTION - R
PRE HAUL MAINTENANCE - P

SECTION VIEW

ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	INSLOPE "/10'	OUTSLOPE "/10'	CROWN " AT CL	DITCH WIDTH (W)	DITCH DEPTH (D)	DITCH 2 SIDES			GRUBBING CUT BANK (G	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (B1	ROAD FILL CLEARING (B	R/W CUT CLEARING (C1)	R/W FILL CLEARING (C2)
E332404B	0+00	18+83	P		12		4											6	6
E332404T	11+72	38+84	P		12		4							2	2			6	6
E332405A	0+00	176+83	P		12		4		3	1								6	6
E332405M	0+00	30+86	P		12		4											6	6
E332405T	0+00	8+28	P		12		4							2	2			6	6
E332405T	8+28	9+53	C		12		4							2	2			6	6
E332405T	9+53	11+86	P		12		4							2	2			6	6
E332405Z	0+00	7+44	P		12		4							2	2			6	6
E342429F	0+00	36+03	P		12		4							2	2			6	6
E342429J	0+00	8+49	P		12		4											6	6
E342429L	0+00	1+58	P		12		4											6	6
E342429M	0+00	7+82	P		12		4											6	6
E342431E	0+00	65+40	P		12		4											6	6
E342432E	0+00	12+70	P		12		4							2	2			6	6
E342432P	0+00	31+73	P		12		4											6	6

Date: 3/25/20

STATE OF WASHINGTON

DEPARTMENT OF NATURAL RESOURCES

Application No.: 30-100613 **Name of Sale: Buck Mountain** **Date:3/25/20**

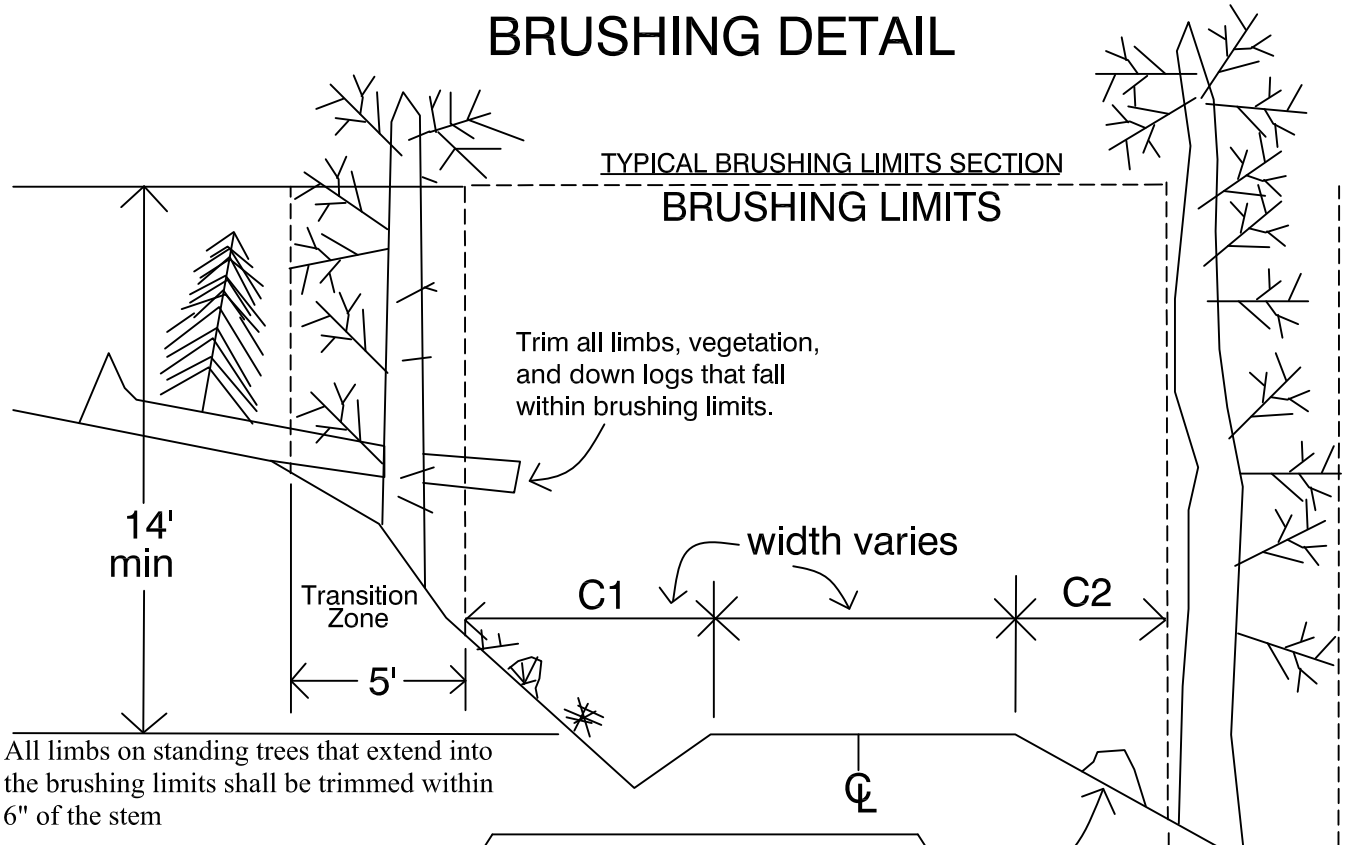
CULVERT & DRAINAGE LIST

Road Name	Station	CULVERT			LENGTH			RIPRAP			Ditch	Staked	Rolling Dip	Notes
		Diameter (in)	Gauge	Skew	Culvert (ft)	Downspout	Flume	Inlet C.Y.	Outlet C.Y.	Catchbasin				
E332404T	38+84	18	16	0	50			1	1					
E332405A	15+47	18	16	0	40			1	1					
E332405A	165+45	18	16	30	33			1	1					

STRUCTURE NOTES

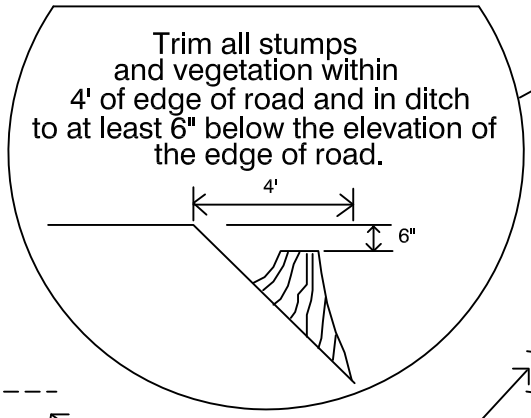
1. Install Headwall - See Detail D1
2. Install Catchbasin - See Detail D1
3. Armor Catchbasin - See Detail D1
4. Armor Ditch
5. Heavy Loose RipRap
6. Light Loose RipRap
7. Step Bevel Pipe Ends
8. Remove Existing Pipe
9. See Rolling Dip Detail D5
10. See Pipe Installation Detail D1
11. Install Energy dissipator - See D1

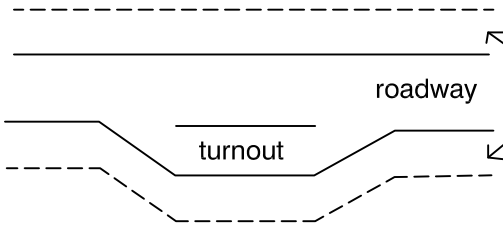
BRUSHING DETAIL



All limbs on standing trees that extend into the brushing limits shall be trimmed within 6" of the stem

Any trees less than 6" in diameter shall be cleared within the transition zones.

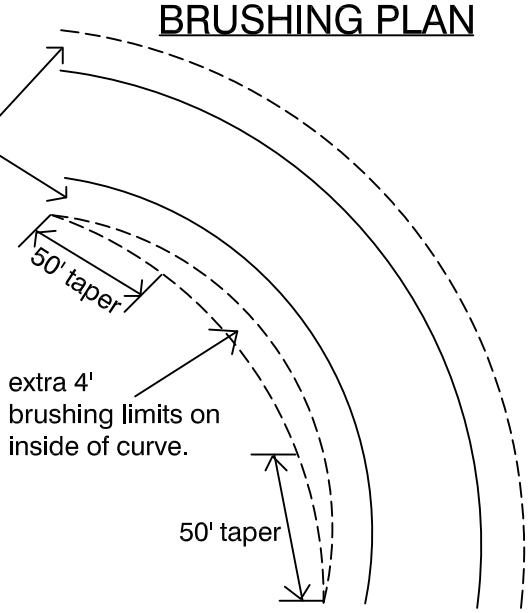




Brushing limits as shown on typical section

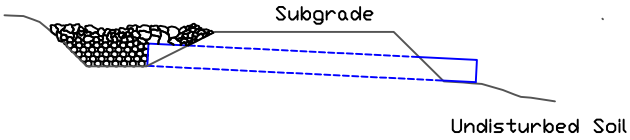
TURNOUT BRUSHING PLAN

CURVE BRUSHING PLAN

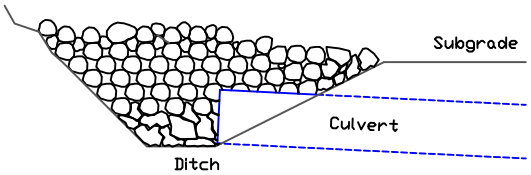


1. All vegetation within the brushing limits shall be cut to within 8" of the ground unless otherwise directed by the contract administrator.
2. All brush, trees limbs, etc. shall be removed from the road surface and ditchline.
3. All debris that may roll or migrate into the ditchline shall be removed.

CULVERT AND DRAINAGE SPECIFICATIONS DETAIL - D1



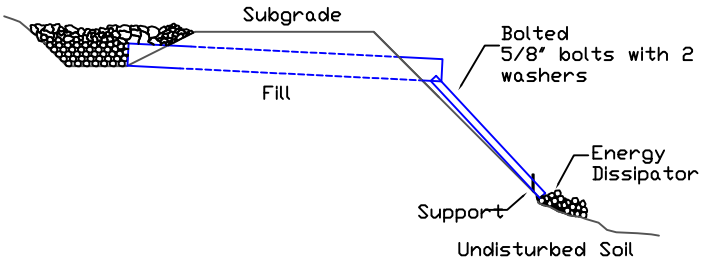
HEADWALLS



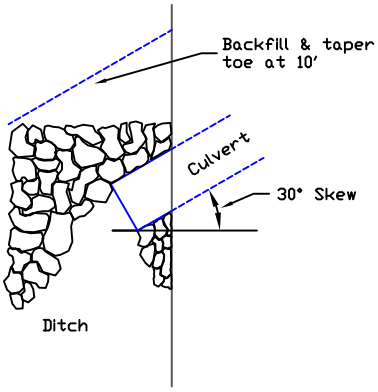
Headwall to be constructed of material that will resist erosion

FLUME

Use where ground conditions are uniform, providing for stability of flume.

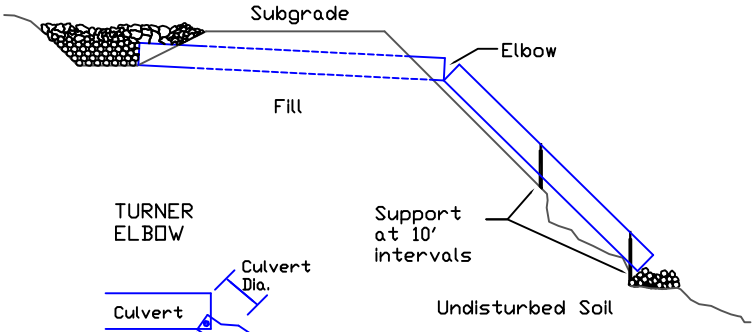


PLAN VIEW

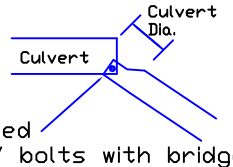


DOWNSPOUT

Use where ground conditions are irregular.



TURNER ELBOW



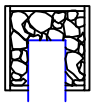
Bolted 5/8" bolts with bridge washers on both sides

CULVERT BACKFILL & BASE PREPARATION
(For Culverts Less Than 36")

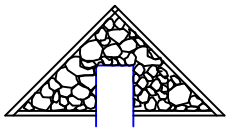
Minimum Cover	Minimum Bed Depth	Min. Trench Width	Nominal Diameter
A	B	C	D
12"	6"	36"	18"
12"	6"	42"	24"
12"	6"	48"	30"
12"	6"	54"	36"

DISSIPATOR SPEC'S
Size in Culvert Diameters

Area	2 X 2
Depth	1
Aggragate	1/3



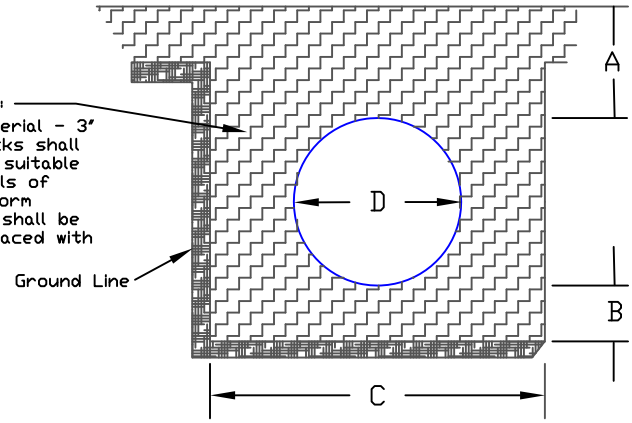
Level



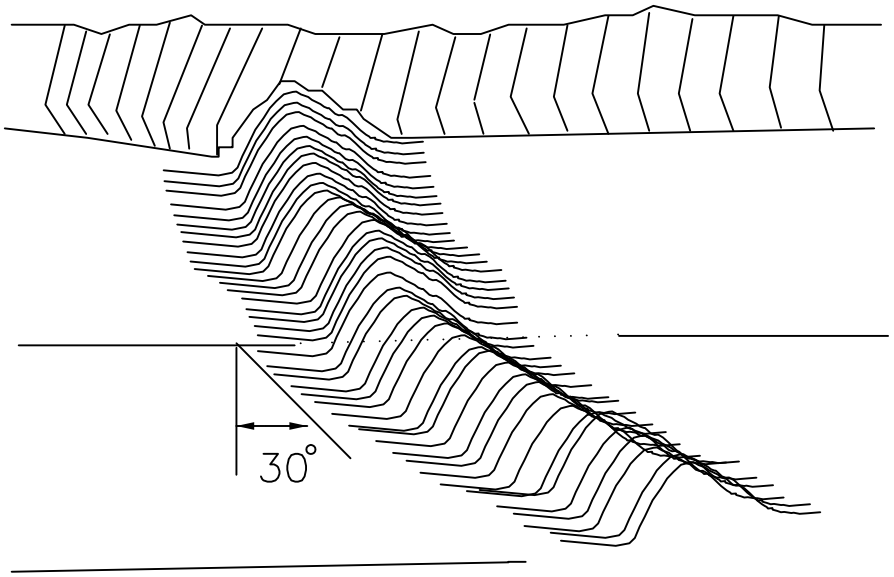
Side Hill

ROAD SURFACE

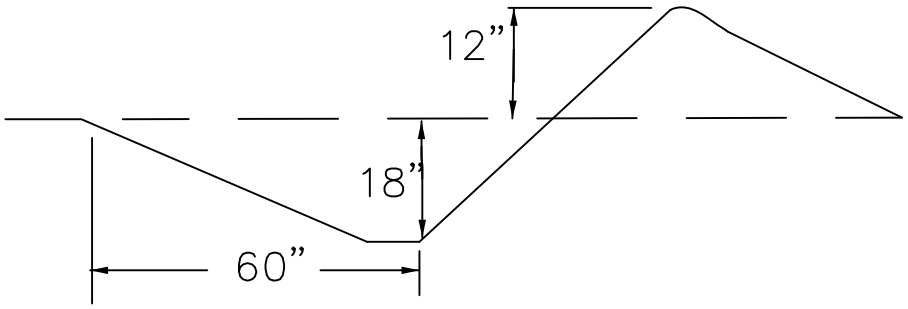
BEDDING MATERIAL:
Use granular material - 3" minus. Large rocks shall be replaced with suitable material. Materials of poor or non-uniform bearing capacity shall be removed and replaced with suitable fill.



Top View



Side View



1. Waterbar construction for forest roads with little or no traffic.
2. Specifications are average and may be adjusted to conditions.
3. Bottom of waterbar must be outsloped to ensure proper drainage.
4. Rock outlet if steep fill slope is present.

Driveable Waterbar Detail

WASHINGTON STATE DEPARTMENT OF
Natural Resources

Northeast Region
Colville, Washington

Designed By:	Stash Slabinski	9/06/05
Drawn By:	Stash Slabinski	9/06/05

Revised:

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

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

Surface

- Grade and shape the road surface, turnouts, and shoulders to the original shape on the as directed, 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.

Sturctures

- Repair culverts, bridges, gates, fences, cattle guards, signs, and other road structures as required because of purchaser use. Repairs shall be subject to Contract Administrator's approval.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Preventative Maintenance

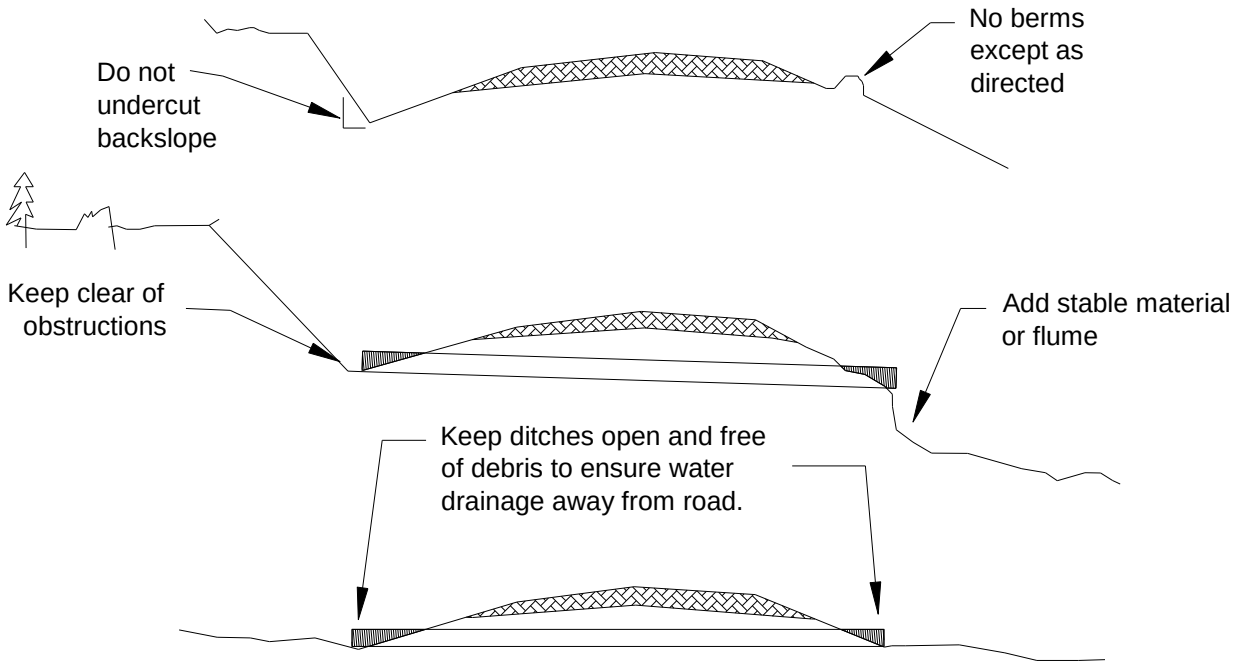
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

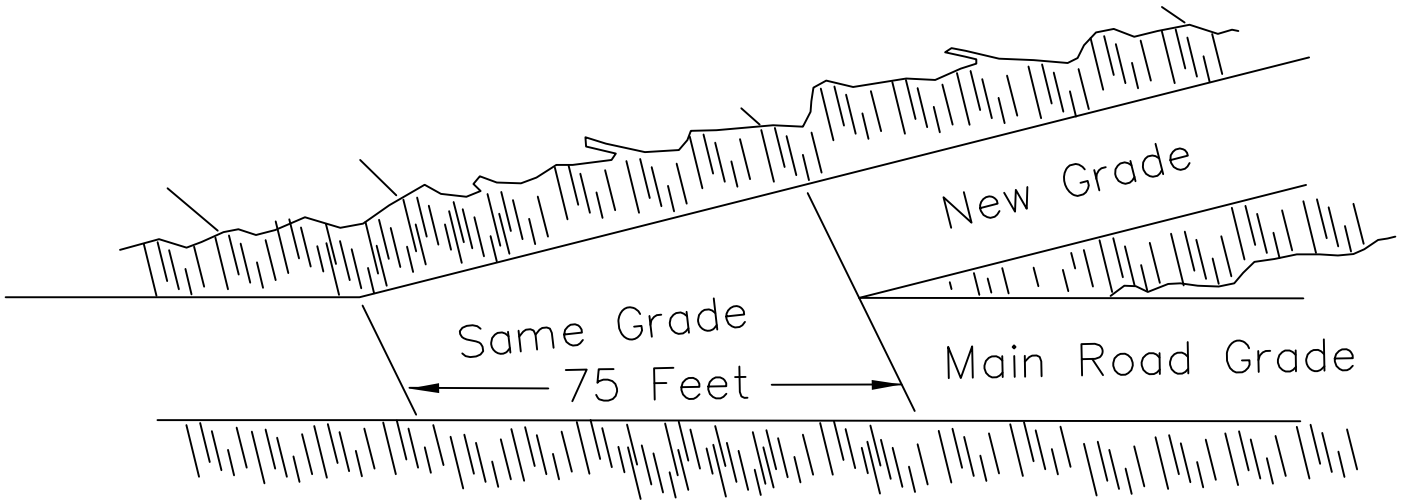
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

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

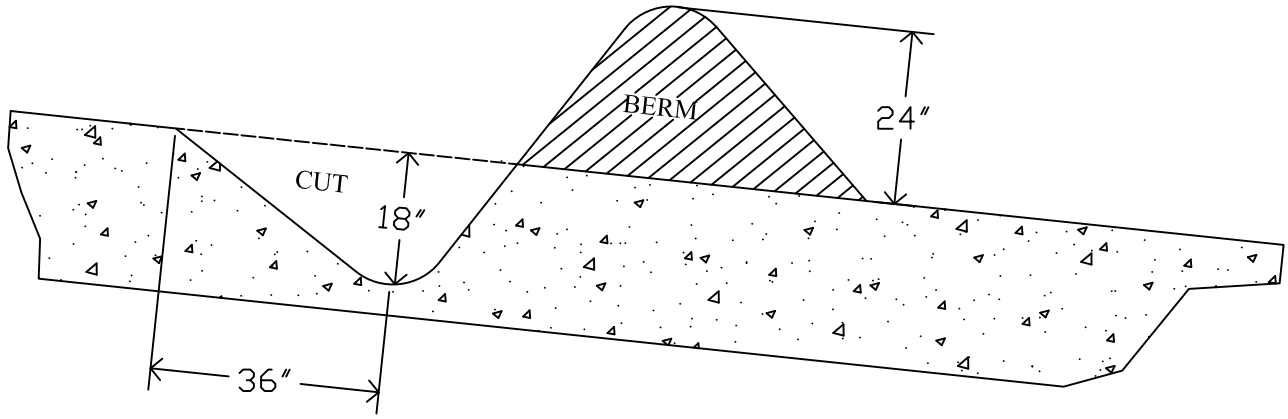


Intersection Detail



Main road and spur must have he same grade until there is horizontal separation from each other.

Non-Driveable Water Bar Detail



Notes:

1. WATERBAR CONSTRUCTION FOR FOREST ROADS WITH NO TRAFFIC. SPECIFICATIONS ARE AVERAGE AND MAY BE ADJUSTED TO CONDITIONS.

2. TIE BERM INTO BANK. IF DITCH EXISTS, TIE CUT INTO DITCH.

3. CONSTRUCT CROSS DRAIN BERM APPROXIMATELY 24 IN. HIGH.

4. CUT WATERBAR A MINIMUM OF 18 IN.

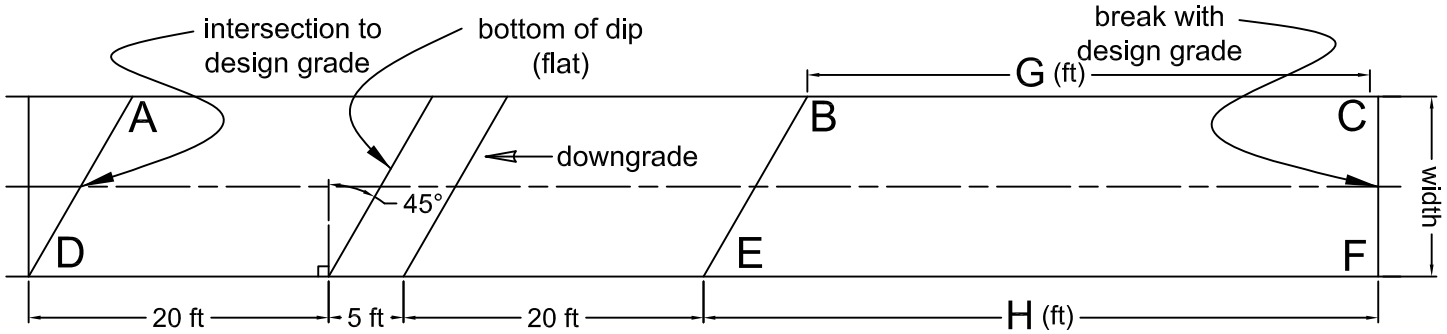
5. ENSURE PROPER DRAINAGE AT OUTLET.

6. SKEW WATERBAR 30 DEGREES DOWNGRADE WITH ROAD CENTERLINE.

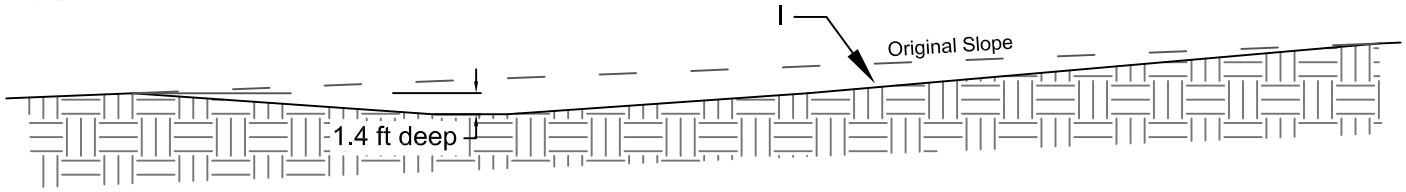
Non-Driveable Waterbar Detail			
Northeast Region Colville, Washington			WASHINGTON STATE DEPARTMENT OF Natural Resources
Designed By:	Stash Slabinski	4/21/05	
Drawn By:	Stash Slabinski	4/21/05	Revised: 1 OF 1

STANDARD 45° ROLLING DIP

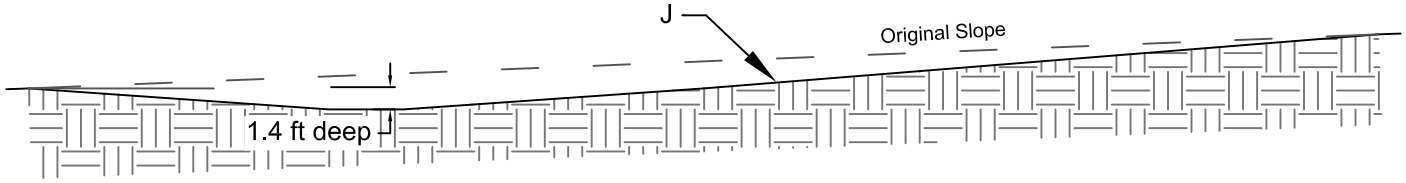
PLAN OF ROLLING DIP

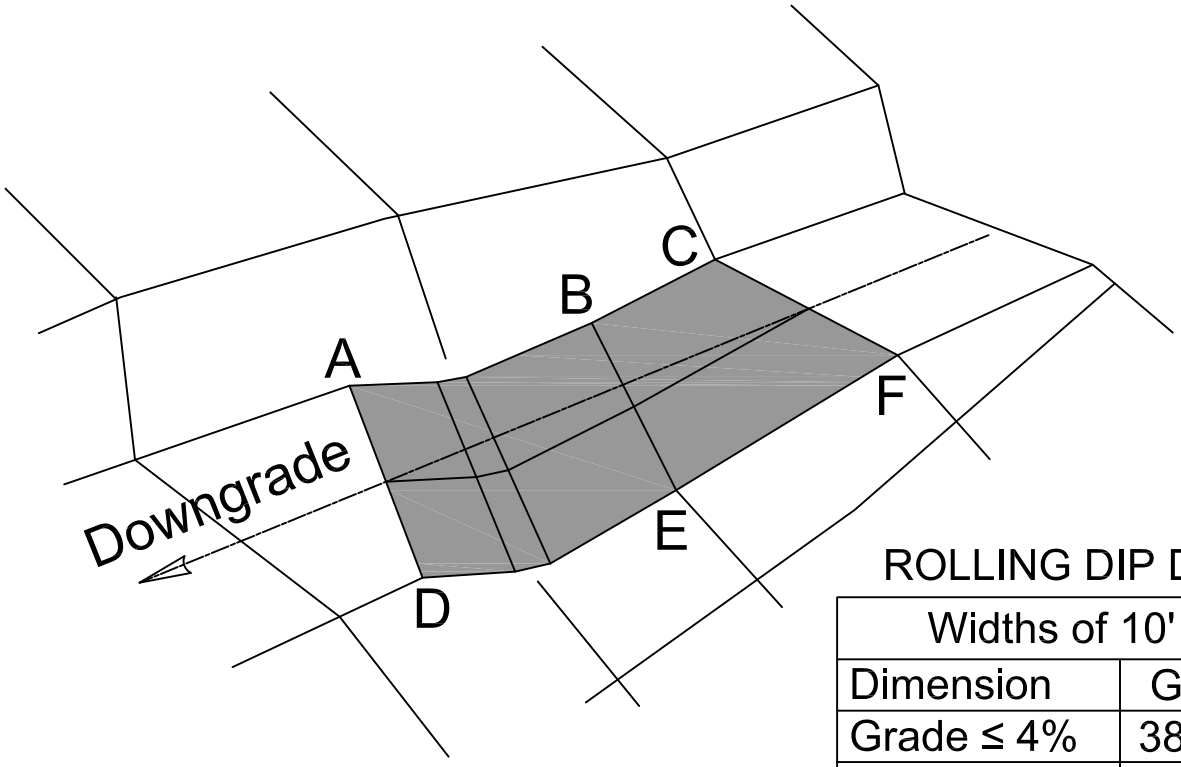


CUT BANK



FILL SLOPE





ROLLING DIP DEMENSIONS

Widths of 10' through 14'				
Dimension	G	H	I	J
Grade ≤ 4%	38'	45'	9%	8%
Grade = 6%	48'	55'	11%	11%
Grade = 8%	58'	65'	14%	14%

Erica Kemp 05/2008

Sale Name - BUCK MOUNTAIN

REGION: Northeast | CONTRACT #: 30-100613 | ENGINEER: COLIN ROJAS

DISTRICT: South Okanogan | DATE: 3/25/2020

	Construction	*Reconstruction*	*Maintenance*	*Deactivation*	*Abandonment*
ROAD NUMBERS:	E332405T		E332404B E332404T E332405A E332405M E332405T E342429F E332405Z E342429J E332429L E342429M E342431E E342432E E342432P		
Comments:					
ROAD STANDARD:	*Construction*	*Reconstruction*	*Maintenance*	*Deactivation*	*Abandonment*
NUMBER OF STATIONS:	***1.25***	***0.00***	***435.44***	***0.00***	***0.00***
BRUSH, GRUB, PRE HAUL GRAD	$0	$0	$ 16,850.00	$0	0
EXCAVATION AND FILL:	$ 546.88	$0	$1,400	$0	$0
MISC. MAINTENANCE:	$0	$0	$4,432	$0	$0
DIP AND WATERBAR INSTALL:	$0	$0	$545	$0	$0
CULVERTS:	$0	$0	$3,944	$0	$0
STRUCTURES/MATERIALS:	$0	$0	$0	$0	$0

TOTAL COSTS:		$547	$0		$27,171	$0	$0
COST PER STATION:		*$438*	*$0*		*$62*	*$0*	*$0*

		$/per move	# of moves		Total
MOBILIZATION:		$300	7		$2,100

TOTAL (All Roads) =	$29,817
SALE VOLUME mbf =	5,108
TOTAL $/MBF =	$6

Comments:

Engineer's Notes: Misc. maintenance includes dip improvement, post haul grading,and cleaning inlet and outlet of culverts