



GOOD NEIGHBOR AUTHORITY TIMBER NOTICE OF SALE

SALE NAME: *Klahanie*

AGREEMENT NO: *36-105255*

AUCTION: August 30th, 2023 starting at 10:00 a.m.,
Olympic Region Office, Forks, WA

COUNTY: Clallam

SALE LOCATION: Sale located approximately 2 miles NE of Forks, WA.

PRODUCTS SOLD AND SALE AREA:

Unit 1: All timber as described for removal in Schedule B, bounded by white timber sale boundary tags and pink flagging, or the 2900000 Road, or the 2900018 Road.

Unit 2 ROW: All timber as described for removal in Schedule B, bounded by orange right-of-way tags.

The above described products, located on approximately 57 acres on part(s) of: Township 28, Range 12 West, Sections 5 and 6 in Clallam County, Washington, as shown on the attached timber sale map and as designated on the sale area.

ESTIMATED SALE VOLUMES AND QUALITY:

| Species | Avg DBH | Total Take MBF | Price \$/MBF | MBF by Grade | | | |
|------------------|---------|----------------|--------------|--------------|-----|-----|----|
| | | | | 2S | 3S | 4S | UT |
| Western hemlock | 12.5 | 677 | \$20 | 82 | 428 | 146 | 21 |
| Douglas-fir | 14.9 | 580 | \$36.00 | 85 | 398 | 87 | 10 |
| Red alder | 12.3 | 154 | \$20 | 14 | 15 | 116 | 9 |
| Grand fir | 16.9 | 125 | \$20 | 79 | 35 | 8 | 3 |
| Sitka spruce | 13.9 | 0 | \$20 | 0 | 0 | 0 | 0 |
| Western redcedar | 7.3 | 0 | \$860.60 | 0 | 0 | 0 | 0 |
| Subtotal | 13.3 | 1536 | | 259 | 876 | 357 | 43 |

MINIMUM BID: Douglas-fir **\$36.00/MBF** (Est. Total Value \$40,000)

BID METHOD: Sealed Bids

PERFORMANCE

SECURITY: \$8,000.00

SALE TYPE: MBF Scale

EXPIRATION DATE: December 31st, 2026

ALLOCATION: Export Restricted

BIDDABLE SPECIES: Douglas-fir



GOOD NEIGHBOR AUTHORITY TIMBER NOTICE OF SALE

BID DEPOSIT: 10% of Total Value (\$4,000.00) or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Uphill Cable, Shovel, Feller-Buncher, Forwarder, or Skidder.

Harvesting activities are estimated to be 24% ground-based harvest, and 76% uphill cable yarding. Ground-based harvest equipment shall be restricted to slopes of 30% and less, and only occur during dry soil conditions. See Clause H-140 for further harvest requirements. A detailed felling and yarding plan shall be required prior to any harvest activities and approved in writing by the Contract Administrator.

Cable harvest activities, including hand-felling, yarding, processing, sorting, and haul may occur between August 16th and December 31st. Ground-based harvest activities, including ground-based felling and skidding, may occur between August 16th and October 31st.

Harvest operations are not permitted to begin until 2 hours after sunrise and shall end 2 hours before sunset between August 16th and September 15th due to wildlife protections.

Haul may occur between August 16th and December 31st. Haul occurring between November 1st and December 31st requires a wet-weather haul agreement to be approved and signed by the Contract Administrator.

ROADS: 04+42 stations of temporary new construction. 70+46 stations of reconstruction. 06+93 stations of maintenance.

Road construction and reconstruction may occur between August 16th and October 31st. Road construction and reconstruction is not permitted to begin until occur 2 hours after sunrise and shall end 2 hours before sunset between August 16th and September 15th due to wildlife protections.

A temporary closure of the 2900000 Road at milepost 2.8 may occur for approximately two weeks during the contract term due to expected road repairs: actual timing and duration is unknown. In such an event, a contract term adjustment may be granted without charge in accordance with G-040, if needed.

ACREAGE DETERMINATION

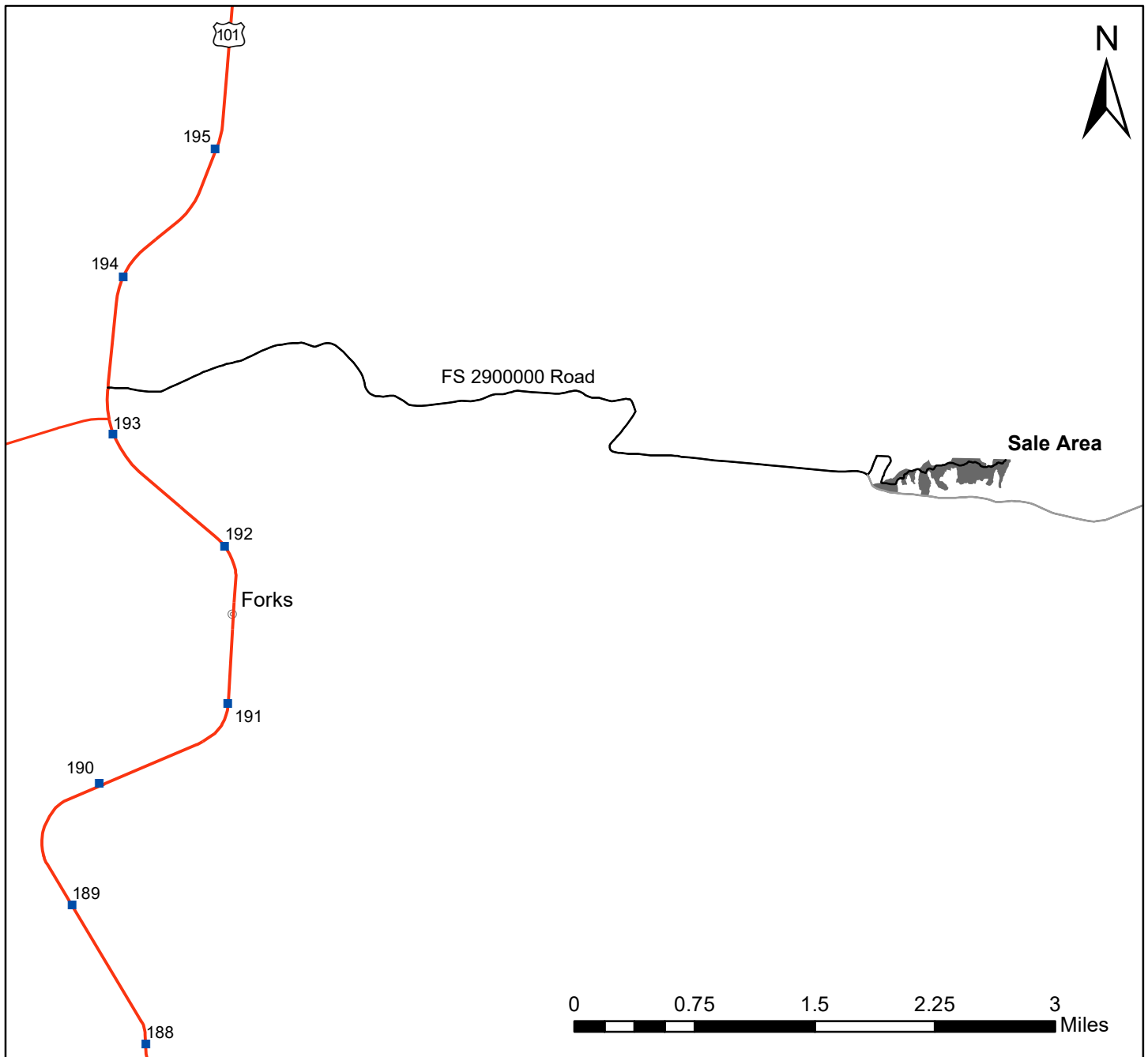
CRUISE METHOD: *Acres determined by GPS traverse. 57 harvestable acres of commercial thinning. Unit 1 cruised using variable plot sample method. Expansion factors of 40 and 54.44 used, see cruise. Sighting height was 4.5 feet. A total of 27 plots were taken. Unit 2 ROW was cruised using a 100% cruise method.*






Shapefiles are available upon request.

GOOD NEIGHBOR AUTHORITY DRIVING MAP

SALE NAME: KLAHANIE
AGREEMENT #:36-105255

NATIONAL FOREST: OLYMPIC
COUNTY: CLALLAM



-  Sale Area
-  Highway
-  Haul Route
-  Other Road
-  Mile Marker

Directions:

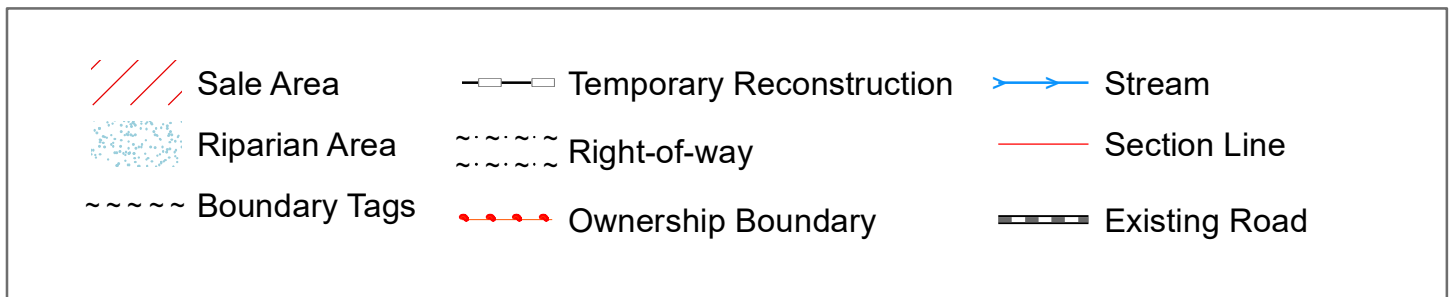
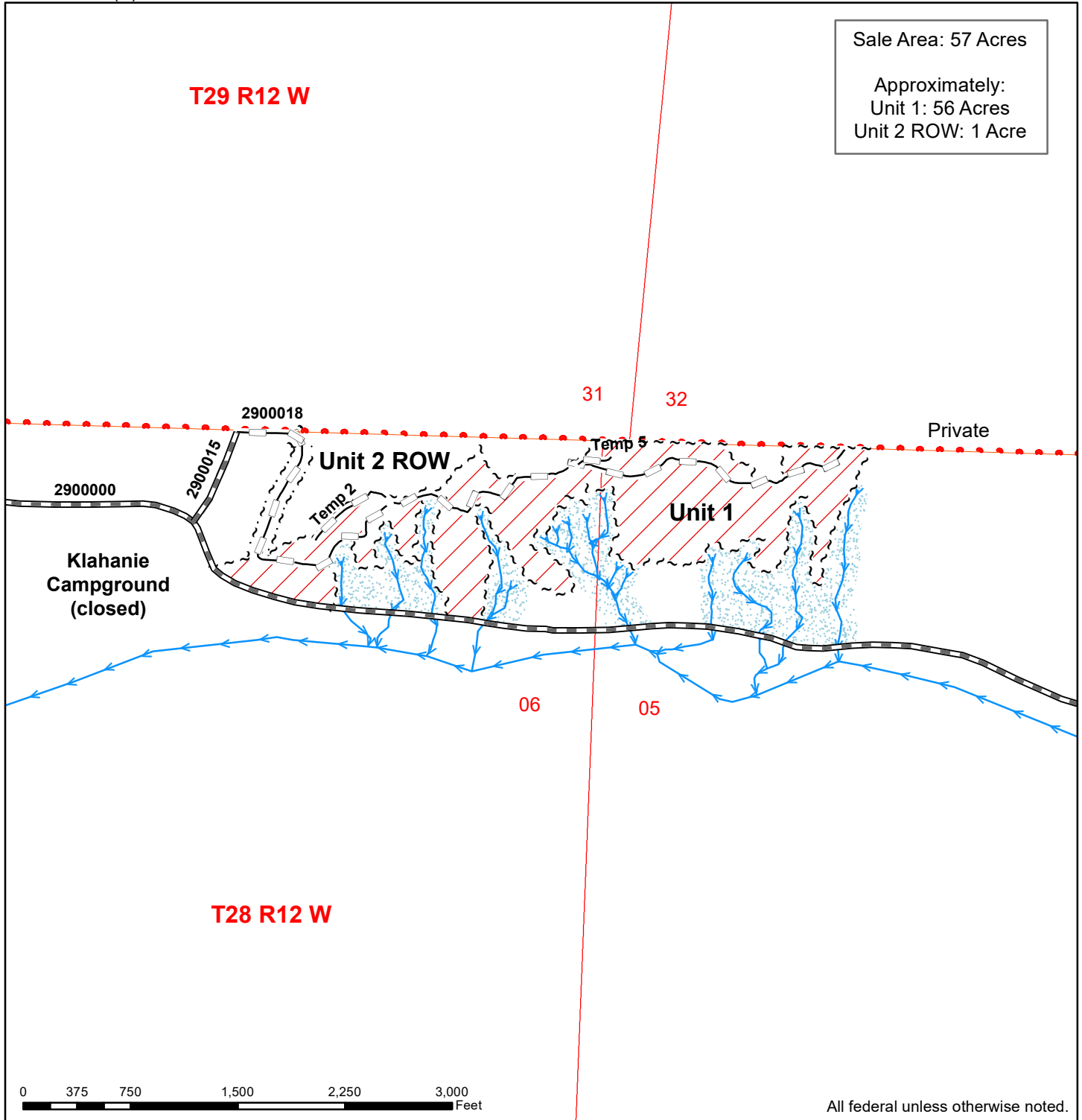
From Forks, drive North 2 miles on Highway 101. Turn right onto the FS 2900000 Road. Continue for 5.5 miles to Sale Area on the left.

GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

SALE NAME: KLAHANIE
 AGREEMENT #: 36-105255
 TOWNSHIP(S): T28 R12 W

FOREST: OLYMPIC NATIONAL FOREST
 COUNTY: CLALLAM
 ELEVATION RANGE: 400' - 960'

Sale Area: 57 Acres
 Approximately:
 Unit 1: 56 Acres
 Unit 2 ROW: 1 Acre



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR
GOOD NEIGHBOR AGREEMENT FOREST PRODUCTS**

Export Restricted MBF Scale AGREEMENT NO. 36-105255

SALE NAME: Klahanie

This Bill of Sale and Contract for Good Neighbor Agreement Forest Products (Contract) is entered into between the Washington State Department of Natural Resources (DNR), acting as the agent for the United States Department of Agriculture Forest Service (U.S. Forest Service) pursuant to the authority granted in 16 USC § 2113a, and [TBD] Purchaser, herein collectively referred to as the “Parties” or individually as a “Party.”

In consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the State and Purchaser hereby agree to the following terms and conditions for the Contract.

SECTION G: GENERAL TERMS

G-001 Definitions

The following definitions apply throughout this contract;

Bill of Sale and Contract for Forest Products: The 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.

Contract Administrator: DNR’s State Forester’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 the Contract with the State for the right to harvest and remove forest products from the timber sale area.

Road Construction: Includes construction of new temporary roads, reconstruction and maintenance of existing forest roads, and associated work as authorized and described in the Road Plan.

State: The State of Washington represented by the Washington State Department of Natural Resources (Seller), acting under an agreement with the U.S. Forest Service to act as their agent in the selling of Forest Products from the timber sale area, located on

U.S. Forest Service land, under the Good Neighbor Authority in 16 USC § 2113a. The State is represented by the State Forester as designated on the contract signature page. Contractual obligations of the Purchaser under the Contract are enforced by the State Forester 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 Contract. The Purchaser is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

United States Forest Service (U.S. Forest Service): An agency of the U.S. Department of Agriculture responsible for administering the nation's national forests.

G-010 Products Sold and Sale Area

Purchaser was the successful bidder on DATA MISSING and the sale was confirmed on _____. The State, as the U.S. Forest Service's agent, agrees to sell to Purchaser, and Purchaser agrees to purchase, cut, and remove the following forest products:

Unit 1: All timber as described for removal in Schedule B, bounded by white timber sale boundary tags and pink flagging, or the 2900000 Road, or the 2900018 Road.

Unit 2 ROW: All timber as described for removal in Schedule B, bounded by orange right-of-way tags.

The above described products, located on approximately 57 acres on part(s) of: Township 28, Range 12 West, Sections 5 and 6, in Clallam County, Washington as shown on the attached timber sale map and as designated on the sale area.

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 or U.S. Forest Service.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

| Schedule | Title |
|----------|-----------------------|
| A | Unit Name Crosswalk |
| B | Thinning Prescription |

G-030 Contract Term

Unless terminated earlier as authorized under the Contract, Purchaser shall remove the forest products conveyed and complete all work required by this contract prior to December 31st, 2026 (Termination Date), unless this termination date is adjusted pursuant to G-040, or extended pursuant to G-050, in which case the new Termination Date shall be as established by the State.

G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term due to an interruption or delay in operations. A request for an adjustment must be submitted in writing and received by the State within 30 days after the start of the interruption or delay and describe Purchaser's reason for seeking a contract term adjustment. The request 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 (force majeure). A force majeure includes, but is not limited to acts of God, acts of the public enemy, acts of the Government, labor disputes, fires, insurrections, floods; road and bridge failures that deny Purchaser access to, or out of, the sale area; access road closures imposed by a road owner; excessive suspensions as provided in clause G-220; and regulatory actions, that do not arise from Purchaser's failure to comply with the Contract and which will prevent timber harvest for a period of less than 6 months.

The State shall adjust the term of the Contract to provide for additional calendar days equal to the actual time lost for the period that such force majeure continues in effect. All other terms and conditions of the Contract shall remain in effect during periods of force majeure. Lack of funds on the part of Purchaser, adverse market conditions, state approval or assistance delays, and/or similar conditions shall not constitute force majeure.

G-050 Contract Term Extension – Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and has diligently performed in accordance with contract provisions and the approved Plan of Operations. The term of this Contract may be extended for a reasonable time by the State, at the State's sole discretion, if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the Termination Date of the Contract.

- b. Purchaser has completed all required roads and is in compliance with all contract and regulatory requirements (e.g., applicable Federal, state, and local laws).
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the contract value based on the contract payment rate and advertised volume.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the contract value based on the contract payment rate base and advertised volume.

The payments shall not include the initial deposit which shall be held until Purchaser has completed all obligations under this Contract.

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

To determine the unpaid portion of the timber value of the contract, multiply the contract payment rate for each item by the remaining volume for each item based on the volumes from the Timber Notice of Sale. In addition, all cash deposits that can be used for timber payments, except the initial deposit, will be deducted from the unpaid portion of the contract.

- e. Payment of [INSERT UPON AWARD OF CONTRACT] 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 \$500.00.
- g. Extension payments are non-refundable.

G-051 Contract Term Extension – Market Related Conditions

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52 as determined by the U.S. Forest Service, and the Purchaser makes a written request for additional time to perform the Contract. The Producer Price Index used to determine when a drastic reduction in price has occurred shall be the Softwood Lumber Commodity Index Series (Index Code 0811) as set forth in 36 CFR 223.52(b)(i). If the drastic reduction criteria specified in 36 CFR 223.52 are met for two consecutive calendar quarters, after Contract award date, the Contract Administrator will add one year to the Contract term upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, the Contract Administrator will, upon written request, add an additional three months to the term during the operating season, except that no single three month addition shall extend the term of the Contract by more than one year. For each additional consecutive quarter such a drastic reduction occurs, the Contract Administrator will, upon written request, add an additional three months to the term

during the operating season. The total amount of contract term addition is limited to the lesser of twice the length of the original Contract or three years. The Contract Administrator must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract. Additional contract time may not be granted for those portions of the contract: (i) with a required completion date; where the U.S. Forest Service determines that the timber is in need of urgent removal; where timber deterioration or resource damage may result from delay; or (iv) where the timber is designated by diameter and delay may change the treatment as a result of trees growing into or out of the specified diameter ranges(s).

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 FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies.
- g. 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 or U.S. Forest Service that relate to Purchaser's operation. Any permits obtained by the State shall be transferred to Purchaser. Purchaser is responsible for all permits, amendments and renewals.

G-066 Termination Due to Governmental Regulatory Actions, Harm to the Environment or Administrative Appeal or Litigation

The State may terminate the Contract, in whole or in part, for any of the following reasons: (1) to prevent actual or potential harm to the environment including without limitation, harm to the land, water, air, habitat, animals, cave resources, or cultural resources; (2) to ensure consistency with U.S. Forest Service land and resource management plans; requirements for the timber sale imposed in any documents prepared pursuant to the National Environmental Policy Act of 1969, 42 USC 1531, et seq.; or compliance with any state or Federal law; (3) to conduct environmental analysis, including but not limited to, the Endangered Species Act of 1973, 16 USC 1531, et seq.; or (4) due to an existing or threatened administrative appeal or litigation involving the U.S. Forest Service or State that might affect or involve the timber sale, regardless of whether the Forest Service or State is required by an administrative or court order to terminate this Contract, or this Contract is named in such a proceeding.

In the event of termination for a reason stated above, Purchaser shall be entitled to a refund, or release of advanced deposits for timber cut but not removed from the sale area, and reimbursement of out-of-pocket expenses incurred as a direct result of the termination of operations; provided, however, that Purchaser shall not be entitled to any compensation provided herein when the Contract is terminated under this clause due to Purchaser's violation of any provision of the Contract. Out-of-pocket expenses do not include, lost profits, attorney's fees, replacement cost of timber, cost or expenses of running a sawmill or other processing facility, expectancy damages, or any other anticipatory expenses suffered by Purchaser.

G-066.1 Termination Due to Catastrophic Damage

The Contract may be terminated by the State, in whole or in part, or the Purchaser may request in writing that the Contract be terminated in whole or in part, if the value of timber remaining to be cut is diminished materially because of catastrophic damage caused by forces beyond the control of the Purchaser. Catastrophic damage is defined as a major change or damage to timber on the sale area, or access to the sale area, or a combination thereof: (a) caused by forces beyond the control of Purchaser, occurring within a 12 month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic (except as provided below), or other major natural phenomenon; and (b) affecting the value of any trees or products authorized for sale

under the Contract estimated to total (i) either more than half of the estimated timber volume stated in Notice of Sale; or (ii) more than 1.5 MMBF or equivalent.

A forest pest epidemic shall not be considered catastrophic damage under this clause when the major change or damage to timber is caused by insect or disease that occurs after felling of the timber unless Purchaser is prevented from removing such timber for reasons that would qualify for a Contract Term Adjustment in G-040.

In the event of termination for the reasons stated above, Purchaser shall be entitled to a refund, or release of advanced deposits for timber cut but not removed from the sale area, and reimbursement of out-of-pocket expenses incurred as a direct result of termination of operations. Out-of-pocket expenses do not include, lost profits, attorney's fees, replacement cost of timber, cost or expenses of running a sawmill or other processing facility, expectancy damages, or any other anticipatory expenses suffered by Purchaser.

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 and any unapplied payments; credit for unamortized improvements made by Purchaser; and payment of out-of-pocket expenses, but only under the circumstances where the Contract is terminated under G-066 or G-066.1 and the State is required to pay such out-of-pocket expenses. The State or U.S. Forest Service shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State or U.S. Forest Service Advice

No advice by any agent, employee, or representative of the State or U.S. Forest Service regarding the method or manner of performing operations 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 or U.S. Forest Service 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 or U.S. Forest Service shall not be liable for any injuries resulting from Purchaser's reliance on any State or U.S. Forest Service advice regarding the method or manner of performance.

G-090 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary due to the circumstances specified in G-066.1 or G-066. 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 excluded from harvest due to the circumstances to be measured. 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 is unable to 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-100 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this Contract.

G-110 Title and Risk of Loss

Title. All right, title, and interest in, and to any timber, shall remain in the U.S. Forest Service, until it has been cut, measured, and removed from the sale area, at which time title shall vest in Purchaser. Any right of Purchaser to cut and remove the timber from the sale area shall end at the time this Contract terminates. Any timber not removed by the termination date remains the property of the U.S. Forest Service.

Risk of Loss. If timber is destroyed or damaged by an “unexpected event” that significantly changes the nature of the timber, the party with title, right and interest to the timber shall bear the timber value loss resulting from such destruction or damage. An “unexpected event” is defined to mean fire, wind, flood, insects or disease, or any similar cause; except that such losses caused by insect or disease after felling of timber shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for a Contract Term Adjustment in G-040.

Except as provided above, Purchaser will not be obligated to remove and pay for destroyed timber for which the U.S. Forest Service holds title. If timber is damaged by an unexpected event, and the U.S. Forest Service holds title and risk of loss for the damaged timber, the Contract Administrator shall make an appraisal to determine for each species the difference between the appraised unit value of the timber immediately prior to the value loss and the appraised unit value of timber after the loss. Current contract rates in effect at the time for the value loss shall be adjusted by differences to become the re-determined rates for the affected timber.

There shall be no obligation for the State to supply Federal timber, or for the Purchaser to accept and pay for other Federal timber, in lieu of that destroyed or damaged. Neither this contract provision, nor any other provision of the Contract, shall be construed to relieve Purchaser of liability for negligence resulting from its operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser.

So far as practicable, Purchaser shall protect roads and other improvements (e.g., trails, telephone lines, ditches, fences) existing in the sale area. When Purchaser's operations are adjacent to properties of railway, telephone, or power companies, or other property, work shall not begin until Purchaser has identified actions necessary to prevent damage to such property. Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner such that utility duplication rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted. In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service until the service is restored.

Any damage to roads and 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. Road is defined as the road bed, including but not limited to its component parts, such as subgrade, ditches, culverts, bridges, and cattle guards. Improvement is defined to include trails, telephone and utility lines, gates, fences, buildings or any other type of structure.

G-121 Exceptions

Exceptions to Purchaser's responsibility for repairs in clause G-120 shall be limited exclusively to the following:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction or reconstruction 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.

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 repair work identified by the State shall be promptly completed by Purchaser at an agreed price. If the Parties are unable to reach an agreement on price, Purchaser shall complete the repairs based on DNR's determination of the price. Purchaser shall be entitled to challenge the costs through the dispute resolution process in clause G-240.

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 the State, U.S. Forest Service, agencies of the State or U.S. Forest Service, and all officials, agents and employees of the State or U.S. Forest, from and against all claims arising out of, or in any way whatsoever resulting from, 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 brought against the State, including without limitation claims brought against the State by Purchasers' agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless the State or U.S. Forest Service 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 the State or U.S. Forest Service shall not be eliminated or reduced by any actual or alleged concurrent negligence of the State, U.S. Forest Service, or their 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 or U.S. Forest Service 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's 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 Product Sales and Leasing Division in Olympia, WA 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 the 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, U.S. Forest Service, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, umbrella, and property insurance policies.

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

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

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

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and 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 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 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 or U.S. Forest Service for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-152 Pollution Legal Liability

Pollution Legal Liability (or Contractor's Pollution Liability). Purchaser and/or contractor(s) shall at its cost and expense, buy and maintain insurance of the types and

amounts listed below for coverage of pollution legal liability, including investigation and defense costs, for bodily injury and property damage, including loss of use of damaged property or of property that has been physically damaged or destroyed. 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. Insurance coverage shall be obtained by the Purchaser and/or contractor(s) prior to operations commencing and continually maintained in full force until all contract obligations have been satisfied or an operating release is signed by the State.

Such coverage must provide coverage for both on-site and off-site cleanup costs and cover gradual and sudden pollution, and includes in its scope of coverage, natural resource damage claims. The U.S. Forest Service, State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as additional insured. Coverage shall be maintained in an amount of at least:

1. \$1,000,000 each occurrence for contractor's operations at the site(s) identified above, and
2. If the policy contains a general aggregate limit or policy limit, it shall be at least \$5,000,000.

Such insurance may be provided on an occurrence or claims-made basis. If such coverage is obtained as an endorsement to the CGL and is provided on a claims-made basis, the following additional conditions must be met:

- a. The Insurance Certificate must state that the insurer is covering hazardous substance removal.
- b. The policy must contain no retroactive date, or the retroactive date must precede abatement services.
- c. Coverage must be continuously maintained with the same insurance carrier throughout the entire term of the Contract.
- d. The extended reporting period (tail) must be purchased to cover a minimum of 36 months beyond completion of work.

G-160 Agents

The State's rights and duties will be exercised by the State Forester of the state of Washington. The State Forester will notify Purchaser in writing who is responsible for administering the Contract (Contract Administrator). The State Forester 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 or U.S. Forest Service has any authority to bind the State or U.S. Forest Service to any affirmation, representation, or warranty concerning the forest products conveyed

beyond the terms of this contract. The Contract Administrator shall be the State's authorized agent for purposes of receipt of notices under G-200.

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 under G-160, from the State, and any limits to this person's authority.

G-170 Assignment of Rights; Delegation of Performance (Subcontracting)

No rights or interest in this Contract shall be assigned by Purchaser without the prior written permission of the State, which approval shall be at the sole discretion of the State. Such approval shall not relieve the Purchaser of his or her responsibilities or liabilities under the Contract and may be given only if the third party assignee (assignee) has not been debarred or suspended from bidding on the award of U.S. Forest Service timber sale contracts in accordance with 36 CFR § 223.130 through 36 CFR § 223.145 and: (a) the assignee acquiring the rights of the Purchaser is acceptable to the State under the conditions and requirements then in effect for similar GNA timber sales, and assumes in writing all of the obligations to the State under the terms of the Contract as to the uncompleted portion; or (b) the rights are acquired by the assignee in trust as security and subject to such conditions as may be necessary for the protection of the public interests. 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 (i.e., subcontractor), but Purchaser is not thereby relieved of any duty to perform or any liability under this contract. Any 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 and 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

All notices required to be given under this Contract shall be in writing and personally delivered to the Party's authorized agent as provided in G-160; or sent by U.S. mail (certified mail requested), or personally delivered to a Party at the address listed below:

Department of Natural Resources

Purchaser

Attn: Annette Mesman
Northwest Region
919 N Township Street
Sedro-Wooley, WA 98284

A party can designate a different authorized agent or address in writing by serving notice of such change as provided in this clause.

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 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. Purchaser shall not be entitled to any compensation if the Contract is terminated by the State as provided in this clause.
- b. If the Contract expires pursuant to clause G-030 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 for any of the reasons stated in G-066, for any other reason as provided for in the Contract or, if deemed necessary in the public interest.

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 or U.S. Forest Service, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State or U.S. Forest Service 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 all terms and conditions of this contract, then the State may elect to terminate the Contract under G-066 just as if the harvest was prevented by a governmental statute, 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 Federal law, is unauthorized. Purchaser agrees to pay two times the current contract rates for any unauthorized cutting, removal or damage of forest products.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this Contract. The Parties agree that these procedures must be followed before a lawsuit can be initiated against the State. Purchaser's failure to submit a request for resolution of a dispute under the procedures set forth shall relieve the State of any obligations whatsoever arising under the Contract regarding the dispute. As used herein, a dispute means a demand or assertion by Purchaser seeking, as a legal right, the extension or adjustment of the term of the Contract, or any other relief under the Contract, including a claim for the payment of any money.

- a. In the event of a dispute, Purchaser must submit a written request to the State Forester for resolution of any dispute prior to seeking other relief. If the dispute involves a claim for money owed by the State, Purchaser shall submit with the written request a demand for the amount owed and any appropriate data necessary to establish that the amount requested accurately reflects what Purchaser claims is owing under the Contract for which the State is liable.
- b. The State Forester will issue a written decision on Purchaser's request within ten business days for matters not involving a claim for money. In the case of a claim by Purchaser for money owed under the Contract, the State Forester shall render a decision within 30 days, or notify Purchaser of the date when a decision will be issued. The State Forester's decision shall be final unless Purchaser submits a request under c.

c. Within ten business days of receipt of the State Forester's decision, Purchaser may submit a written request for resolution of the dispute to the Department Supervisor of the Department of Natural Resources.

d. Unless otherwise agreed, a conference will be held by the Department Supervisor within 30 calendar days of the receipt of Purchaser's request for review of the State Forester's written decision. Purchaser and the State Forester will have an opportunity to present their positions. The Department Supervisor will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser is responsible for completing all operations in compliance with all applicable statutes, regulations and laws; and in compliance with all applicable requirements of the U.S. Forest Service, Decision Notice and Finding of No Significant Impact (DN), Olympic National Forest, Sitkum Commercial Thinning Project Environmental Assessment, including all applicable Mitigation Measures and Design Criteria in the DN Appendices, and applicable Best Management Practices contained in the Environmental Assessment. Failure to comply may result in suspension, and/or termination 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 and Personal Property Left on U.S. Forest Service Land

All equipment and personal property owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other U.S. Forest Service land by the termination date of this contract. Any equipment or personal property remaining on U.S. Forest Service land 60 days after the expiration of the contract may be removed and disposed of by the State. Purchaser shall pay to the State all costs of moving, storing, and disposing of such personal property and equipment. The State and the U.S. Forest Service shall not be responsible for any damages to or loss of the personal property or equipment, or damage caused by the moving, storing or disposal of the personal property or 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 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 U.S. Forest Service roads, State roads, and roads for which the State has acquired easements and road use permits; The 2900000 Road, the 2900015 Road, 2900018 Road, Temp 2, Temp 3, Temp 4, and Temp 5. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

The U.S. Forest Service shall have the right to use any road constructed by Purchaser during the term of the Contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser when the Contract Administrator determines that such use will not materially interfere with Purchaser's Operations. The State may grant others the right to use the roads constructed by Purchaser during the term of the Contract if such uses are authorized by the U.S. Forest Service and will not materially interfere with Purchaser's operations.

G-320 Erosion Control

Reference Road Plan for revegetation measures. To reduce soil damage from logging operations, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, slash mats to be constructed, silt fence to be installed, cross-drains to be installed, or other mitigation measures to be taken by the Purchaser, in addition to what is already required under this contract.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this Contract and examine the sale area before beginning any operations. Purchaser shall furnish the State a written Plan of Operations at the pre-work conference that includes the Harvest Plan required in H-040, and sets forth planned periods for road construction and completion of all other contractual requirements. The State's written approval of the Plan of Operations is a prerequisite to commencement of Purchaser's operations. A revised Plan of Operations shall be submitted by Purchaser for the Contract Administrator's approval to accommodate a contract adjustment under G-040, a contract extension under G-050, or if determined necessary by the Contract Administrator. 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

Purchaser shall protect all survey monuments, witness corners, reference monuments, and bearing trees (hereinafter collectively referred to as “survey markers”) against destruction, obliteration, or damage during operations performed under the Contract. If any survey markers are destroyed, obliterated, or damaged by such operations, Purchaser shall hire an appropriate county surveyor or registered land surveyor to reestablish or restore the survey markers at the same location, using surveying procedures in accordance with the *Manual of Instruction for the Survey of the Public Lands of the United States* as required by the U.S. Forest Service under federal law and the State under RCW 58.24, and shall record such survey in appropriate county records. The Contract Administrator may prescribe in writing additional requirements for protection of monuments, corners, and bearing trees.

G-370 Blocking Roads

Purchaser shall not block the 2900000 for more than 2 hours unless authority is granted in writing by the Contract Administrator.

G-396 County Hauling Permit

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

G-430 Open Fires

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

SECTION P: PAYMENTS AND SECURITIES

P-010 Initial Deposit and Periodic Payment Schedule

Purchaser paid [TO BE DETERMINED ON DAY OF SALE] as an initial deposit to the State, which will be maintained until Purchaser has completed all obligations under this Contract. Purchaser shall not be entitled to any interest earned on the initial deposit. However, all or a portion of the initial deposit may be applied as the final payment for the timber if the State determines that adequate security exists for the performance or fulfillment of any remaining obligations of the Purchaser under the Contract. If the Contract expires without Purchaser's payment of the full amount specified in P-021, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-021 Payment for Forest Products

Purchaser agrees to pay the following rates per MBF Scribner net log scale for forest products conveyed and cut or removed from the sale area.

[TO BE DETERMINED ON DAY OF SALE]

Species that are conveyed but are not listed in the table above shall be paid for at a rate to be determined by the State.

Utility logs, special cull and peelable cull logs of all species, included on loads of logs that are required to be removed and scaled per clause H-150 will be paid for on an adjusted gross scale basis at the rate of \$20.00 per MBF plus fees.

P-027 Payment for Removal of Optional Forest Products

Purchaser agrees to weigh all loads and pay the rate of \$2.00 per ton for forest product approved for removal from the sale area under clause H-157.

P-040 Weighing and Scaling Costs

Purchaser agrees to pay for all scaling and weighing costs for logs and other products sold under this Contract. Purchaser also agrees to pay for all costs associated with the transmission and reporting of scale or weight data.

P-045 Guarantee of Payment

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

P-052 Billing and Payment Procedure

The State will compute and forward to the Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to DNR's Forest Health and Resiliency Division in Olympia, WA on or before the date shown on the billing statement.

Payment will be based on the contract rate multiplied by the tons (tonnage contracts) or volume (mbf contracts) removed during the month or payment period. Included with the payment will be a summary report along with all related load tickets and the corresponding certified weight tickets for the payment period. The summary report will be generated using a computer spreadsheet and list the load tickets in ascending numerical order with the corresponding ticket number and weight or volume for each load.

P-070 Payment for Products: Damage, Theft, Loss or Mismatch

Forest products included in this agreement which are destroyed, damaged, stolen, lost, or mismatched shall be paid for by Purchaser on demand of the State. The rates contained in clause P-021 shall apply. If such material is not listed in P-021, the State shall establish the rates to be paid.

P-080 Payment Account Refund

Advance payments made under P-045 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Interest shall accrue at the rate of five percent per month, or fraction thereof, on any balance owed after expiration of the thirty days.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date of the sale, security acceptable to the State in the amount of \$ ___ [INCLUDE ON EXECUTION OF CONTRACT]. 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 62A.5 (Letters of Credit) 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 until all contractual obligations of the Purchaser are satisfied. 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 amount of the performance security required under the Contract after an operating release has been issued if the State determines that adequate security exists for any remaining obligations of Purchaser.

SECTION L: LOG DEFINITIONS AND ACCOUNTABILITY

L-010 Forest Products Conveyed

Forest products conveyed are all logs or parts of logs described by the 'Products Sold and Sale Area' (G-010) clause meeting the removal requirements listed in the 'Required Removal of Forest Products' (H-150) clause.

L-020 Short Logs - Peeler Blocks

Logs or parts of logs which are removed from the sale area that fail to meet the minimum gross length requirements shall be scaled and graded as short logs or peeler blocks. Such material shall be paid for at the forest products rates specified in this contract.

L-040 Utility Logs

Utility logs are logs that meet the minimum utility log standards as described by the log scaling rules applicable for this contract.

L-060 Load Tickets

Purchaser shall complete and use load tickets as directed by the Contract Administrator and, if required, use other identification as directed by the State to ensure accounting of forest products removed from the sale area. A load ticket must be fixed, as designated by the Contract Administrator, to each truck and trailer load prior to leaving the landing.

Purchaser shall account for all load tickets issued by the Contract Administrator and return unused tickets at termination of the contract, or as otherwise required by the Contract Administrator. Unused tickets not returned shall be subject to liquidated damages per clause D-030.

The State may also treat load tickets either not accounted for or not returned as lost forest products per clause P-070. All costs associated with computing the billings for lost forest products shall be borne by Purchaser.

L-070 Purchaser to Furnish Log Scale Information

Purchaser agrees to furnish the State with scaling information, supplied by a third party scaling organization showing the scale, count, and measure of forest products removed during each billing period unless the scale, count, and measure is performed by the State.

L-071 Log and Load Reporting Service

This contract requires the use of a State approved third party Log and Load Reporting Service (LLRS). Purchaser shall ensure log volume measurement data and/or load and weight data is received by the LLRS within one (1) business day of logs being

measured or weighed. Purchaser agrees to pay the LLRS for log and load data supplied to the State.

If during the term of this contract, the State discontinues use of the LLRS, the State will notify the Purchaser in writing and the Purchaser will then be responsible to send log scale and/or weight information to the State.

L-080 Scaling Rules

Determination of volume and grade of any forest products shall be conducted by a state approved third party scaling organization and in accordance with the Westside log scaling and grading rules and Scribner Volume Table, revised July 1, 1972, contained in the Northwest Log Rules Eastside and Westside Log Scaling Handbook (developed and produced by the Northwest Log Rules Advisory Group) and in effect on the date of confirmation of this contract.

Special scaling specifications shall be noted on the State's Brand Designation form which is hereby incorporated to this contract by reference.

L-110 State Approval of Log Scaling and Weighing Locations

Forest Product measurement and weighing facilities required by this Contract must be approved by the State. Forest products sold under the Contract which require log scaling shall be scaled, measured, or counted by a State approved third party log scaling organization.

Prior to forest products being hauled, the Contract Administrator must authorize in writing the use of State approved measurement and/or weighing facilities that are at or enroute to final destinations. Forest products from this sale shall be measured or weighed at facilities, which are currently approved for use by the State and are currently authorized for this sale. The State reserves the right to verify load volume and weights with State employees or contractors at the State's own expense. The State reserves the right to revoke the authorization of previously approved measurement locations.

L-120 Long Log Taper Distribution

Forest products over 40 feet long plus trim shall be segment scaled and the lower segment diameters shall be determined using actual taper. In order to utilize taper rules for determining segment diameters for poles and pilings greater than 40 feet in length plus trim, Purchaser must request use of a Pole and Piling Scaling Specification Agreement on file in the region office. Approval for usage of a special Pole and Piling Scaling Specification Agreement may be granted at the sole discretion of the State.

Following State approval for usage of the Pole and Piling Scaling Specification Agreement, the Brand Designation form shall be amended to incorporate the long log

taper rules. The volume reported by the scaling organization for forest products over 40 feet plus trim will be expanded by 5 percent and the additional 5 percent volume shall be billed to the purchaser at the contract rate.

L-130 Conversion Factors

Forest products removed from the sale area that are not measured in units specified in the 'Payment for Forest Products' clause of this contract shall be converted to board feet using Department of Natural Resources' standard conversion factors.

SECTION H: HARVESTING OPERATIONS

H-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

Cable harvest activities, including hand-felling, yarding, processing, sorting, and haul shall occur between August 16th and December 31st. Ground-based harvest activities, including ground-based felling and skidding, shall occur between August 16th and October 31st.

H-011 Certification of Fallers and Yarder Operators

All persons engaged in the felling and yarding of timber must receive certification in writing from the Contract Administrator. Certification may be revoked when the Contract Administrator determines that non-compliance of leave tree selection criteria or cut tree selection criteria is occurring, or excessive damage to leave trees or skid trails is occurring.

Excessive damage for leave trees is defined in clause H-012.

Excessive skid trail damage is defined in clause H-016.

When leave tree damage exceeds the limits set forth in clause H-012, Purchaser shall be subject to liquidated damages (clause D-040).

H-012 Leave Tree Damage Definition

Leave trees are trees required for retention within the sale area. Purchaser shall protect leave trees from being cut, damaged, or removed during operations.

Leave tree damage exists when more than 10 percent of leave tree stems over 16 inches DBH, or 15 percent of leave tree stems total exhibit operationally-caused damage, as

determined by the Contract Administrator. Individual tree damage will be determined using the following criteria:

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 16 square inches.
- b. A leave tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A leave tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a leave tree has been cut or damaged, the Purchaser may be required to pay liquidated damages for Excessive Leave Tree Damage as detailed in clause D-040.

H-016 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. A skid trail shall not exceed 12 feet in width when possible, including rub trees.
- b. Skid trails shall be no closer than 110 feet apart center to center, except where converging.
- c. Landings, skid trails, skyline corridors, and roads shall not cover more than 20 percent of the total acreage on any given thinning unit.
- d. Skid trails shall be located outside of all no harvest buffers.
- e. Skid trails should be re-established at previous skid trail locations, except where existing skid trails are causing detrimental soil or hydrologic conditions that could be avoided with alternative skid trail locations.
- f. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- g. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.
- h. Purchaser shall not have more than two skid trails open to active skidding at any one time. All other skid trails used for skidding timber shall be closed.

i. Once a skid trail is closed, Purchaser will not reopen a skid trail unless approved in writing by the Contract Administrator.

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

k. Skid trails shall be covered in slash matting as thick and continuous as practicable prior to use.

l. Heavily impacted skid trails, including those subjected to multiple passes of heavy equipment, those lacking sufficient slash cover, and/or those running parallel to stream courses, will be decompacted to a depth of at least 12 inches and logging slash will be placed across the decompacted surface at the discretion of the Contract Administrator.

m. Skid trails and equipment shall not be within 25' of riparian buffers.

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, in all or in part, by the Contract Administrator, for such periods as may be deemed necessary to avoid damage when soil rutting exceeds 10 inches as measured from the natural ground line, or when ground conditions are unfavorable.

To reduce soil damage, the Contract Administrator may require water bars to be constructed, weed-free certified grass seed to be placed on exposed soils, or other mitigation measures to be taken by the Purchaser, in addition to what is already required under this Contract. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

H-025 Timing Requirements for Timber Removal

All timber shall be removed within 30 days of being felled.

H-030 Timber Falling

Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization of forest products and other valuable materials conveyed.

H-035 Fall Trees Into Sale Area

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

H-040 Purchaser Harvest Plan

Purchaser shall, as part of the Plan of Operations, prepare an acceptable Harvest Plan for each operating season for planned units. The Harvest Plan shall address the harvest and haul operations and be presented to the Contract Administrator at the pre-work conference. The Harvest Plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the Harvest Plan without prior written approval by the Contract Administrator.

H-050 Rub Trees

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

H-052 Branding and Painting

All timber shall be painted with a spot of highway yellow paint not less than three square inches in size, and branded on each end with a hammer brand approved by the State prior to removal from the sale area. Purchaser shall not use the brand pattern selected to mark timber for another source in violation of the requirements set forth in 36 CFR § 223.195.

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 shall 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 and shall not exceed 18 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 felled by hand or mechanical means and yarded by ground-based equipment on slopes of 30% or less. Forest products sold under this contract shall be felled by hand and yarded by cable-based equipment on slopes greater than 30%. Authority to use other equipment or to operate outside the

equipment specifications detailed above shall be approved in writing by the Contract Administrator.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-131 Hauling Schedule

Haul shall occur between August 16th and December 31st; haul occurring between November 1st and December 31st requires a wet-weather haul agreement to be approved and signed by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

1. A copy of the timber sale prospectus map and contract shall be present onsite during active operations.
2. Tops and limbs shall be redistributed in the unit to the satisfaction of the Contract Administrator.
3. Maintain legacy features wherever practical and safe, including remnant trees, snags, and large down woody debris.
4. If trees greater than 36 inches DBH must be cut for road construction, reconstruction, maintenance, or clearing, written approval shall be given by the Contract Administrator prior to felling.
5. Immediately following their use, temporary roads, spur roads and landings shall be “rehabilitated” by decompacting the road surface to a depth of 18 inches or greater. Rehabilitation shall not occur during times of excessive wet conditions and/or when soil has reached saturation. Equipment shall not travel across the decompacted surface. Native seed and mulch composed of certified weed free straw or onsite forest debris shall be applied to the disturbed ground. Seed shall be provided by the Forest Service.
6. Certified weed free straw bale catchments, silt fences, or other mitigation measures at the discretion of the Contract Administrator, shall be located to intercept runoff from landings prior to reaching any road ditch or stream. Any sediment that is captured and deposited behind sediment catchments shall be removed annually and deposited out on the forest floor to ensure it does not have a direct flow path to a system road ditch or stream.
7. Hazard trees that are felled along haul routes shall be retained to add to large woody debris on the ground, unless otherwise approved by the Contract Administrator.

8. Coarse Woody Debris may be moved for access, however disturbance should be minimized. Large, old stumps shall be kept intact and not uprooted wherever possible.
9. Fall and yard away from all waters when possible. Portions of trees falling into riparian or no-cut buffers shall be left on the ground where they were felled.
10. Yarding / skidding activities shall be planned to make as few trips as possible.
11. Feller-bunchers / mechanical harvesters shall not operate like a skidder and travel while bearing the weight of trees except in some occasions at the ends of a skid trail where it may cause less disturbance than a skidder.
12. Areas of gouging or soil displacement resulting from logging systems shall be treated to prevent rill and gully erosion and potential sediment delivery to stream courses. Off-road trails used for equipment fueling and servicing shall be rehabilitated post use by moving the soil back to the natural contour of the hillslope (re-contour) and placing slash or vegetation on exposed mineral soils. Steep slopes will not be decompacted to prevent further soil disturbance. Erosion control treatment may include, but is not limited to, repositioning displaced soil to restore the hillslope contour of disturbed sites, creating small ditches or diversions to redirect surface water movement, seeding, and scattering slash material to disrupt flow and provide soil surface stability. Seed shall be provided by the Forest Service.
13. No fuel storage or refueling shall occur in riparian buffers.
14. If active raptor, spotted owl, or marbled murrelet nest activity is discovered within the unit during operations, any tree(s) containing the nest(s) shall not be felled, and the Contract Administrator shall be notified.
15. Workers shall properly store and dispose of food and garbage while working on site to minimize nest predation by corvids.
16. Legacy snags marked with orange paint and snags greater than 30" DBH and at least 12' in height shall not be felled unless permitted by the Contract Administrator. If legacy snags cannot be operated around safely a no-cut and equipment limitation zone buffer equal to 1.5 times the height of the snag shall be applied, including when those buffers encompass proposed gaps.
17. Locations of skid trails and skyline corridors shall be approved by the Contract Administrator prior to the felling of timber. Permission to do otherwise shall be granted in writing by the Contract Administrator. Skyline logging anchors outside of unit boundaries shall be approved of in writing by the Contract Administrator prior to use.

18. Activity-generated slash piles shall not be left within 66 feet of the 2900000 Road, or any private property boundary. Activity-generated slash within 66 feet of the 2900000 Road, or any private property boundary, may be required to be redistributed within the sale area at the discretion of the Contract Administrator.
19. If subsurface archaeological evidence is discovered in the project area, operations shall cease until permission is granted to resume in writing by the Contract Administrator.
20. A temporary closure of the 2900000 Road at milepost 2.8 may occur for approximately two weeks during the contract term due to expected road repairs: actual timing and duration is unknown. In such an event, a contract term adjustment may be granted without charge in accordance with G-040, if needed.

H-142 Wildlife Timing Restrictions

Harvest operations are not permitted to begin until 2 hours after sunrise and shall end 2 hours before sunset between August 16th and September 15th due to wildlife protections.

H-150 Required Removal of Forest Products

Purchaser shall remove from the sale area and present for scaling or weighing all forest products conveyed in G-010 that meet the following minimum net scale dimensions:

| Species | Net bd ft | Log length (ft) | Log dib |
|---------|-----------|-----------------|---------|
| All | 10 | 12 | 5 |

The State may treat failure to remove forest products left on the sale area that meet the above specifications as a breach of this Contract. At the State's option, forest products left on the sale area upon termination of the Contract that meet the above specifications may be scaled for volume or measured and converted to weight by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling, measuring and computing the billing will be borne by the Purchaser.

H-157 Optional Removal of Forest Products Not Designated

If in the course of operations, Purchaser decides to remove forest products that are below the minimum designated removal specifications per the 'Required Removal of Forest Products' (H-150), the payment rates in clause P-027 shall apply.

Forest products designated as optional shall be decked separately from forest products designated as required for removal. Prior to removal from the sale area,

optional forest products as described in this clause must be inspected and approved by the Contract Administrator. Optional forest products may not be mixed with forest products that are required for removal by this contract and shall be removed from the sale area in separate truck loads using load tickets specified by the Contract Administrator.

All material removed under this clause is subject to the same log and load accountability rules as defined in the Log Definitions and Accountability section of this contract. Purchaser shall follow the payment procedures as required in the P-052 clause and will submit a separate summary report for all forest products removed from the sale area under the authority of this clause.

H-160 Mismanufacture

Mismanufacture is defined as forest products remaining on the sale area that would have met the specifications in clause H-150 if bucking lengths had been varied to include such products.

The State may treat mismanufacture as a breach of this Contract. At the State's option, forest products that are left on the sale area may be scaled for volume by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling and computing the billing will be borne by Purchaser.

H-170 Utility Log Removal

All utility logs shall be yarded concurrently with the yarding of other logs and shall be removed from the sale area.

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 otherwise 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 40 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 Area

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

H-240 Lop and Scatter

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

H-260 Fall Leaners

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

SECTION C: CONSTRUCTION AND MAINTENANCE

C-040 Road Plan

Purchaser shall comply with all of the road construction, associated work provisions, and all other terms and conditions of the Road Plan for this sale, dated 05/01/2023 which is hereby made a part of this Contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform road maintenance and repair work at its own expense on 2900000 Road, 2900015 Road, and 2900018 Road. 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-090 Landing Location

Landings should be located where past landings were located, unless a new location would cause less resource effect or where no past landings were used to harvest the unit.

New landings will be located outside of all no harvest buffers and preferably not near riparian buffers. Avoid placing landings adjacent to streams, no-cut buffers, wet areas and unstable slopes.

Landings will be limited to the area needed for safe and efficient yarding and loading operations and have proper drainage.

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, a plan for the prevention and reporting of wildfires within the sale are; a communication plan for reporting wildfires; a description of fire prevention and control measures on the logging unit; and a list of qualified personnel and equipment available for implementing the plan. The ERP shall include the valid contact numbers for qualified personnel available for implementing the ERP, and the equipment available, and procedures for responding to, medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity occurring 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 to the Contract Administrator for inspection and approval at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations. Purchaser shall make any revisions to the ERP required by the Contract Administrator, either upon initial inspection or anytime thereafter, required for operations within the sale area during the Contract.

S-010 Fire Hazardous Conditions

Fire Precautionary Period. The fire precautionary period or “closed season” for this Contract is April 15 to October 15. The Contract Administrator may change the dates of the closed season by advance written notice. Required tools and equipment shall be kept in serviceable condition and immediately available for fire-fighting at all times during Purchaser’s Operations in Fire Precautionary Period.

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this Contract 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. Purchaser shall, both independently and in cooperation with the U.S. Forest Service, take the highest degree of care to prevent fires resulting from Purchaser’s Operations. Purchaser shall furnish and maintain in good and serviceable conditions such wildland firefighting tools and equipment, and take such fire prevention measures as may be required by the U.S. Forest Service or the State to meet the fire protection requirements of the Contract and

the existing fire danger. The requirements shall not be less than are required under the laws of the State of Washington (i.e., WAC 332-24-401 through .411).

In the event of an uncontrolled fire, Purchaser shall immediately report the incident to the appropriate authorities specified in the ERP. Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity. Purchaser agrees to reimburse the State and U.S. Forest Service for the cost of fire suppression incurred as the result of the negligence or willful acts of its employees, agents, subcontractors, etc.

The Contract Administrator may require the Purchaser to suspend any or all of Purchaser's Operations when ignition conditions identified in the ERP are met, or when fire is within or threatening the Operational Area. 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; generally, landings shall be decompacted to a depth of 18 inches after use.

S-035 Logging Debris Clean Up

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

S-040 Noxious Weed Control

Purchaser shall thoroughly pressure wash all equipment prior to entry onto U.S. Forest Service land, or before moving equipment between infested sites, to remove all contaminated soils, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. Equipment shall be considered free of soil seed, and other such debris when a visual inspection does not disclose such material. The Contract Administrator reserves the right to require additional cleaning of equipment to prevent noxious weed spread between sites on U.S. Forest Service lands.

Purchaser shall notify the Contract Administrator in advance of moving all off-road logging and construction equipment onto U.S. Forest Service lands. Notification will include a location approved by the Contract Administrator where the equipment will be cleaned by the Purchaser, and made available for inspection by the State at a time agreed by the Parties. Only logging and construction equipment cleaned as required under this clause, and inspected by the Contract Administrator (or designee), will be allowed to operate on Federal lands within the sale area. All subsequent move-ins of equipment to the sale area shall be treated in the same manner as the initial move in.

“Off-road equipment” includes all logging and construction machinery, except for log trucks, chip vans, pickup trucks or vehicles used to transport personnel on a daily basis.

All material (e.g. soil, gravel, sand borrow, mulch, aggregate, etc.) transported onto National Forest System land or incorporated into the work shall be certified weed-free. The contractor shall provide the Contract Administrator written notification of proposed material sources 14 days prior to use. If weed species are present in the proposed source, appropriate mitigation measures may allow conditional use of the source as required by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

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

S-060 Pump Truck or Pump Trailer

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

S-120 Stream Protection

No timber shall be felled into, across, or yarded through any stream without written approval by the Contract Administrator.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

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

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that prevents the release of hazardous materials, including petroleum products, into the environment (water, air or land). If the total oil or oil products storage exceeds 1320 gallons or if any single container exceeds a capacity of 660 gallons, the purchaser will prepare and provide the Contract Administrator a Spill Prevention Control and

Counter measures Plan prior to commencing operations. The plan shall meet EPA requirements including certification by a registered professional engineer.

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 4 to 6 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. Spill kit must also contain one or more oil-absorbing floating booms to contain a spill if it gets into a stream or other waterbody and plastic garbage bags for disposal of used pads and booms off-Forest. 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 and recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29 CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

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

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

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000

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

ECY - Southwest Region:

1-360-407-6300

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

ECY - Central Region:

1-509-575-2490

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

ECY - Eastern Region:

1-509-329-3400

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

In addition to the above, Purchaser shall immediately notify the Contract Administrator if any leakage or spillage enters any stream, water course or area of open water.

S-131 Refuse Disposal

All Purchaser generated refuse shall be removed from state or U.S. Forest Service lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on state or U.S. Forest Service lands. All refuse shall be transported in a manner such that it is in compliance with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

SECTION D: DAMAGES

D-010 Liquidated Damages

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

D-020 Failure to Remove Forest Products

Purchaser's failure to remove all or part of the forest products sold in this agreement prior to the expiration of the contract term results in substantial injury to the State and the U.S. Forest Service. The value of the forest products sold at the time of breach is not readily ascertainable. Purchaser's failure to perform disrupts National Forest management plans and the state's role in implementing such plans, the actual cost of which is difficult to assess. A resale involves additional time and expense and is not an adequate remedy. Therefore, Purchaser agrees to pay the State as liquidated damages a sum calculated using the following formula:

$$LD = .35V-ID-P+C+A$$

Where:

- LD = Liquidated Damage value.
- V = The unremoved value at the date of breach of contract. The value is determined by subtracting the removal volume to date from the State's cruise volume multiplied by the contract bid rates.
- ID = Initial Deposit paid at date of contract that has not been applied to timber payments.
- P = Advance payments received but not yet applied to specific contract requirements.
- C = Charges assessed for contract requirements completed prior to breach of contract but not paid for.
- A = Administrative Fee = \$2,500.00.

The above formula reflects the Purchaser's forfeiture of the initial deposit in accordance with clause P-010 by deducting the initial deposit from the amount owed. In no event shall the liquidated damages be less than zero. Interest on the liquidated damage is owed from the date of breach until final payment, calculated using the following formula: $\text{Interest} = r \times \text{LD} \times N$.

Where:

- r = daily equivalent of an annual interest at current interest rate as established by WAC 332-100-030.
- LD = Liquidated damage value.
- N = Number of days from date of breach to date payment is received.

D-030 Inadequate Log Accountability

Removal of forest products from the sale area without adequate branding and/or valid load tickets attached to the load and scaling forest products in a location other than the facility approved by the State can result in substantial injury to the State or U.S. Forest Service. Failure to properly account for loads and scaling and/or weighing information can result in loss to the State or U.S. Forest Service. The potential loss from not having proper branding, ticketing, scaling and/or weighing location and accountability is not readily ascertainable. Purchaser's failure to perform results in a loss of log weight and scale accountability, increases the potential for unauthorized removal of forest products, and increases the State's administration costs, the actual costs of which are difficult to assess.

Enforcement actions for unauthorized removal of forest products for each improperly branded load, improperly ticketed load, lost or unaccounted for tickets, or use of a facility not authorized for this sale or improper submission of scaling data are impractical, expensive, time consuming and are not an adequate remedy. Therefore, Purchaser agrees to pay the State, as liquidated damages, a sum of \$100 each time a load of logs does not have branding as required in the contract, \$250 each time a load of logs does not have a load ticket as required by the contract, \$250 each time a load ticket has not been filled out as required by the plan of operations, \$250 each time a

load is weighed or scaled at a location not approved as required under this contract, \$250 each time a log ticket summary report is not submitted properly, and if a third party Log and Load Reporting Service is required, \$250 each time scaling or weight data is not properly submitted to the Log and Load Reporting Service per clause L-071, and \$250 each unused ticket that is not returned to the State, for any reason.

D-040 Leave Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-012, Leave Tree Damage Definition, the trees damaged result in substantial injury to the National Forest. The value of the damaged leave trees at the time of the breach is not readily ascertainable. Therefore, Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged trees in the sale area.

SECTION M: MISCELLANEOUS

M-010 Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (ESA), 16 USC § 1531 et seq. prohibits a person from taking any Federally listed threatened or endangered species. Taking under the Federal ESA may include alteration of habitat. Neither this Contract, or the State's approval of Purchaser's Plan of Operations, is certification that Purchaser's operations under the plan are lawful under the ESA. Purchaser's compliance with the plan is not in lieu of compliance with any Federal requirements under the ESA or its implementing regulations.

M-020 Forest Resources Conservation and Shortage Relief Act of 1990

Purchaser must comply with the provisions of the Forest Resources Conservation and Shortage Relief Act of 1990 (Act), (16 USC 620 *et seq.*), and its implementing regulations (36 CFR § 223.185 *et seq.*), as the Act and rules now exist or are hereafter amended. Prior to award, during the life of this contract, and for a period of three years from the Contract Termination Date, Purchaser shall upon request furnish to the State and the U.S. Forest Service records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Purchaser or affiliates. Prior to delivering unprocessed timber to another party, Purchaser shall require each buyer, exchange, or recipient to execute an acceptable agreement that will: (i) identify the Federal origin of the timber; (ii) specify domestic processing for the timber involved; (iii) require the execution of such agreements between the parties to any subsequent transactions involving the timber; (iv) require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and (v) otherwise comply with the requirements of the Act, 16 USC 620(d). No later than 10 (ten) days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to U. S. Forest Service a copy of each such agreement. Purchaser shall retain, for three years from the Termination Date, the records of all sales, exchanges, or

dispositions of all timber. For breach of this Subsection, the State may terminate this contract and the U.S. Forest Service may take such other action as may be provided by statute or regulation, including the imposition of penalties. When the Contract is terminated by the State for a violation of the Act or rules under this clause, the State shall not be liable for any Claim submitted by Purchaser relating to the termination.

M-030 Debarment, Suspension, Ineligibility, and Exclusion.

Purchaser is a corporation organized and existing under the laws of the State of [insert State] and certifies by execution of the Contract that it is not, nor are its principals, presently debarred, suspended, proposed for debarment or suspension, declared ineligible, or excluded from participation in any transaction with the Federal government. Purchaser shall immediately notify the State without undue delay if it receives a notice from the Federal government that it or its principals are proposed for debarment or suspension, or are debarred, suspended, declared ineligible, or excluded from participating in a transaction with the Federal government.

Purchaser shall require all subcontractors to provide written certification that they are not debarred, suspended, ineligible, or excluded from participating in a transaction with the Federal government. (Execution of Department of Agriculture Form AD-1048 is sufficient to satisfy this requirement.) Purchaser shall maintain a file of certifications and provide a copy to the Contract Administrator upon request.

M-040 Certification Regarding Felony Conviction and Tax Delinquent Status.

Purchaser, by signature below, certifies that: (1) Neither the corporation or its principals have been convicted of a felony violation under any Federal law within the preceding 24 months of the effective date of the Contract; and (2) Neither the corporation or its principals have failed to file all Federal tax returns required during the three years preceding the Contract; have been convicted of a criminal offense under the Internal Revenue Code; or have been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default.

M-050 Human Remains, Artifacts, and Other Cultural and Historic Items

In the event that human remains, burials, funerary items, sacred objects, object of cultural patrimony, prehistoric artifacts (i.e., arrowheads, spear points, motors, pestles, other ground stone tools, knives, scrapers, or flakes from the manufacture of tools, fire pits, peeled trees, etc.) or historic period artifacts or features (i.e., fragments of old plates or ceramic vessels, weathered glass, dumps of old cans, cabins, root cellars, etc.) are found during project implementation, work on the site shall cease immediately to protect the find from further damage or disruption and the U.S. Forest Service Archeologist will be notified. No further work shall be allowed on the site until the

Forest Archeologist has approved a plan for managing or preserving the remains or items.

M-060 Payment of Taxes

The State makes no representations concerning tax liability or consequences arising from the purchase of Federal timber under the Contract. It is Purchaser's sole responsibility to pay all taxes owed, including any forest excise taxes under RCW 84.33.

M-070 Non-Discrimination in Employment

In connection with the performance of work under this Contract, Purchaser agrees not to discriminate against any applicant for employment, employee, or independent contractor on the basis of race, color, national origin, sex, religion, age, disability, sexual orientation, or marital status. This shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment, layoff or termination; rates of pay, or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to comply with all Federal and state laws governing non-discrimination in employment applicable to the work performed under the Contract.

M-080 Records

Purchaser shall maintain all reports, data, correspondence, other and information pertaining to this Contract for a period of 6 years, and provide copies to the State upon request.

M-090 Waiver

Any provision of the Contract that is determined to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision of the Contract, such other provisions remaining in full force and effect.

M-100 Severability Clause

Any provision of the Contract that is determined to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision of the Contract, such other provisions remaining in full force and effect.

M-110 Effective Date

This Contract shall be effective upon the date signed by the State of Washington, Department of Natural Resources.

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

State Forester

Print Name

State Forester

Date: _____

Date: _____

Address:

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

STATE OF _____)

COUNTY OF _____)

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

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

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

Notary Public in and for the State of

My appointment expires _____

Klahanie
Schedule A – Unit Name Crosswalk

| Klahanie Sale Unit # | Sitkum EA Unit # |
|---------------------------------|-----------------------------|
| 1 | 49 |
| 2 ROW | 49 |

Klahanie

Schedule B - Thinning Prescription

Cut designated species to Basal Area Target in accordance with Table 1, starting at smallest diameter and working up to max DBH limits ensuring that smaller diameter trees are harvested first to meet target basal area requirements.

Table 1.

| Unit | Current BA | Target BA | DBH Max Cut Limit | Designated Cut Species (In Order of Preference) | Preferred No-Cut Species |
|-------|------------|-----------|-------------------|---|--------------------------|
| 1 | 375 | 170 | 36" | WH, DF, GF, RA | RC, MA, SS |
| 2 ROW | 223 | 0 | 36" | All | N/A |

DF = Douglas-fir, WH = Western hemlock, SS = Sitka spruce, RC = Western redcedar, PSF = Pacific silver fir, MA = Bigleaf maple, RA = Red alder, GF = Grand fir

Basal Area Target – Target of residual basal area to be left, excluding landings, temporary roads, skips, and gaps. All live conifers within the DBH limits, regardless of species, may be counted toward the leave target. Variability of +/- 40 square feet per acre within the treatment unit of the target is permitted, but the average for the unit needs to be within +/- 10% of Target Basal Area. Post-harvest basal area shall be measured by the Contract Administrator.

Designated Cut Species – These are species to be removed if they are within the diameter limit in order of preference.

Preferred No Cut Species -All preferred non-cut tree species are to be left, as are all trees outside of the diameter limits except on landings, skid trails, skyline corridors, temporary roads or otherwise approved by the Contract Administrator.

DBH – Diameter Breast Height is 4.5 feet on the uphill side.

Right-of-Way – In areas of reconstruction and new construction all timber 20’ from centerline in right-of-way may be harvested for a total of 40’ width right-of-way removal. In areas of pre-haul maintenance, all timber 20’ from centerline may be harvested on either side of the existing road prism for a total of 40’ width right-of-way as approved by Contract Administrator in writing.

In general, only cut live trees. Leave hardwoods (vine maple, bigleaf maple, and black cottonwood), unless specifically included as a designated cut species. Legacy snags marked with orange paint and snags greater than 30” DBH and at least 12’ in height shall not be felled unless permitted by the Contract Administrator.

Structurally unique trees over 15” DBH, such as those with mistletoe brooms, broken tops, spike knots, cavities, and forked tops, will be favored as leave trees if available, though they should not be preferred over larger well-formed trees every time in a concentration such as a root rot pocket.

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region:

Timber Sale Name:

Application Number:

EXCISE TAX APPLICABLE ACTIVITIES

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

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

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

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

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

EXCISE TAX EXEMPT ACTIVITIES

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

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

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

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

(Revised 6/13)

Timber Sale Cruise Report Klahanie

Sale Name: Klahanie

Sale Type: MBF SCALE

Region: N/A

District: Olympic

Lead Cruiser: Dakota Truitt

Other Cruisers: Bret McNamara, Salvador Silahua

Cruise Narrative:

Location:

The GNA Sale Klahanie is located 2 miles N of Forks on the FS 29 road. Drive 5.5 miles up the FS 29 road next to the Klahanie Campground (now closed) and the Calawah Pit. The sale is easily accessible.

Cruise Design:

BAFs 54.45 for major species and 40 for minor species. Cruise 1 : Count 1. ROW: 100% Cruise, 1 in 10 THT, FF, BL, Defect

Timber Quality:

HQ-B DF observed in Stand

Logging and Stand Conditions:

24% ground

76% uphill cable

Conditions are rocky and steep.

General Remarks: Notice Volume table rounded to nearest MBF

Timber Sale Notice Volume (MBF)

| Sp | DBH | Rings/In | Age | MBF Volume by Grade | | | | |
|-----|------|----------|-----|---------------------|-------|-------|-------|---------|
| | | | | All | 2 Saw | 3 Saw | 4 Saw | Utility |
| RC | | | | | | | | |
| WH | 12.5 | | | 677 | 82 | 428 | 146 | 21 |
| DF | 14.9 | | | 580 | 85 | 398 | 87 | 10 |
| RA | 12.3 | | | 154 | 14 | 15 | 116 | 9 |
| GF | 16.9 | | | 125 | 79 | 35 | 8 | 3 |
| SS | 13.9 | | | 0 | 0 | 0 | 0 | 0 |
| ALL | 13.3 | | | 1,536 | 260 | 876 | 357 | 43 |

Timber Sale Notice Weight (tons)

| Sp | Tons by Grade | | | | |
|----|---------------|-------|-------|-------|---------|
| | All | 2 Saw | 3 Saw | 4 Saw | Utility |
| WH | 5,751 | 573 | 3,513 | 1,380 | 284 |
| DF | 4,976 | 682 | 3,282 | 813 | 199 |

| Sp | Tons by Grade | | | | |
|-----|---------------|-------|-------|-------|---------|
| | All | 2 Saw | 3 Saw | 4 Saw | Utility |
| RA | 1,226 | 94 | 103 | 975 | 55 |
| GF | 861 | 500 | 267 | 76 | 17 |
| SS | 3 | 2 | 1 | 1 | |
| RC | 0 | | | 0 | |
| ALL | 12,816 | 1,850 | 7,167 | 3,244 | 555 |

Timber Sale Overall Cruise Statistics

| BA (sq ft/acre) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR SE (%) | Net Vol (bf/acre) | Vol SE (%) |
|--------------------|--------------|---------------------|-----------------|----------------------|---------------|
| 373.7 | 5.6 | 132.5 | 3.9 | 49,433 | 6.9 |

Timber Sale Unit Cruise Design

| Unit | Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---------------|--|-----------------|--------------|------------|-------------------|-----------------|
| Unit 1 | B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft | 56.0 | | 27 | 14 | 0 |
| Unit 2 ROW | ST: Strip/Percent Sample (1 tree expansion) | 1.0 | | 1 | 1 | 0 |
| All | | 57.0 | | 28 | 15 | 0 |

Timber Sale Log Grade x Sort Summary

| Sp | Status | Grade | Sort | Dia | Len | BF Gross | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|----------|------|-----|----------|--------|----------|---------|---------|
| DF | LIVE | 2 SAW | Domestic | 12.4 | 40 | 1,581 | 1,481 | 6.3 | 681.5 | 84.4 |
| DF | LIVE | 3 SAW | Domestic | 8.7 | 39 | 7,275 | 6,981 | 4.0 | 3,282.5 | 397.9 |
| DF | LIVE | 4 SAW | Domestic | 5.4 | 27 | 1,591 | 1,533 | 3.6 | 812.9 | 87.4 |
| DF | LIVE | UTILITY | Pulp | 2.2 | 16 | 170 | 170 | 0.0 | 198.8 | 9.7 |
| GF | LIVE | 2 SAW | Domestic | 12.6 | 34 | 1,426 | 1,389 | 2.6 | 500.3 | 79.2 |
| GF | LIVE | 3 SAW | Domestic | 8.7 | 34 | 606 | 606 | 0.0 | 267.3 | 34.6 |
| GF | LIVE | 4 SAW | Domestic | 5.6 | 32 | 139 | 139 | 0.0 | 75.5 | 7.9 |
| GF | LIVE | UTILITY | Pulp | 5.0 | 13 | 50 | 50 | 0.0 | 17.4 | 2.8 |
| RA | LIVE | 2 SAW | Domestic | 12.5 | 30 | 251 | 251 | 0.0 | 93.7 | 14.3 |
| RA | LIVE | 3 SAW | Domestic | 11.9 | 30 | 259 | 259 | 0.0 | 102.9 | 14.7 |
| RA | LIVE | 4 SAW | Domestic | 6.8 | 29 | 2,054 | 2,038 | 0.8 | 974.4 | 116.2 |
| RA | LIVE | CULL | Cull | 5.4 | 40 | 1 | 0 | 100.0 | 0.0 | 0.0 |
| RA | LIVE | UTILITY | Pulp | 5.0 | 17 | 159 | 159 | 0.0 | 54.6 | 9.1 |
| RC | LIVE | 4 SAW | Domestic | 5.0 | 25 | 0 | 0 | 0.0 | 0.1 | 0.0 |

| Sp | Status | Grade | Sort | Dia | Len | BF Gross | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|----------|------|-----|----------|--------|----------|---------|---------|
| SS | LIVE | 2 SAW | Domestic | 15.7 | 32 | 5 | 5 | 0.0 | 1.7 | 0.3 |
| SS | LIVE | 3 SAW | Domestic | 7.7 | 40 | 1 | 1 | 0.0 | 0.9 | 0.1 |
| SS | LIVE | 4 SAW | Domestic | 5.3 | 30 | 2 | 2 | 0.0 | 0.8 | 0.1 |
| WH | LIVE | 2 SAW | Domestic | 13.7 | 36 | 1,517 | 1,443 | 4.9 | 573.3 | 82.3 |
| WH | LIVE | 3 SAW | Domestic | 9.3 | 37 | 7,568 | 7,516 | 0.7 | 3,513.2 | 428.4 |
| WH | LIVE | 4 SAW | Domestic | 5.4 | 27 | 2,583 | 2,568 | 0.6 | 1,380.0 | 146.4 |
| WH | LIVE | UTILITY | Pulp | 2.4 | 16 | 365 | 365 | 0.0 | 284.2 | 20.8 |

Timber Sale Log Grade x Diameter Bin Summary

| Sp | Bin | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|---------|------|-----|--------|----------|---------|---------|
| DF | < 5 | LIVE | UTILITY | 2.2 | 16 | 170 | 0.0 | 198.8 | 9.7 |
| DF | 5 - 8 | LIVE | 4 SAW | 5.4 | 27 | 1,533 | 3.6 | 812.9 | 87.4 |
| DF | 5 - 8 | LIVE | 3 SAW | 7.3 | 40 | 2,635 | 6.9 | 1,453.0 | 150.2 |
| DF | 9 - 11 | LIVE | 3 SAW | 10.5 | 38 | 4,346 | 2.2 | 1,829.4 | 247.7 |
| DF | 12 - 14 | LIVE | 2 SAW | 12.4 | 39 | 1,417 | 6.6 | 661.9 | 80.8 |
| DF | 15 - 19 | LIVE | 2 SAW | 17.1 | 32 | 37 | 0.0 | 12.3 | 2.1 |
| DF | 20+ | LIVE | 2 SAW | 23.5 | 32 | 27 | 0.0 | 7.3 | 1.5 |
| GF | 5 - 8 | LIVE | UTILITY | 5.0 | 13 | 50 | 0.0 | 17.4 | 2.8 |
| GF | 5 - 8 | LIVE | 4 SAW | 5.5 | 29 | 137 | 0.0 | 74.6 | 7.8 |
| GF | 5 - 8 | LIVE | 3 SAW | 7.5 | 36 | 231 | 0.0 | 115.8 | 13.1 |
| GF | 9 - 11 | LIVE | 3 SAW | 10.0 | 32 | 366 | 0.0 | 148.4 | 20.9 |
| GF | 9 - 11 | LIVE | 4 SAW | 10.6 | 19 | 2 | 0.0 | 0.9 | 0.1 |
| GF | 12 - 14 | LIVE | 2 SAW | 12.7 | 34 | 1,221 | 3.0 | 447.9 | 69.6 |
| GF | 12 - 14 | LIVE | 3 SAW | 13.1 | 26 | 3 | 0.0 | 0.9 | 0.2 |
| GF | 15 - 19 | LIVE | 3 SAW | 16.0 | 40 | 7 | 0.0 | 2.1 | 0.4 |
| GF | 15 - 19 | LIVE | 2 SAW | 18.8 | 32 | 69 | 0.0 | 22.6 | 3.9 |
| GF | 20+ | LIVE | 2 SAW | 21.6 | 32 | 99 | 0.0 | 29.7 | 5.6 |
| RA | 5 - 8 | LIVE | UTILITY | 5.0 | 17 | 159 | 0.0 | 54.6 | 9.1 |
| RA | 5 - 8 | LIVE | CULL | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | 5 - 8 | LIVE | 4 SAW | 6.7 | 29 | 2,030 | 0.8 | 971.1 | 115.7 |
| RA | 9 - 11 | LIVE | 4 SAW | 9.5 | 32 | 8 | 0.0 | 3.3 | 0.5 |
| RA | 9 - 11 | LIVE | 3 SAW | 11.6 | 31 | 259 | 0.0 | 102.9 | 14.7 |
| RA | 12 - 14 | LIVE | 2 SAW | 12.5 | 30 | 251 | 0.0 | 93.7 | 14.3 |
| RC | 5 - 8 | LIVE | 4 SAW | 5.0 | 25 | 0 | 0.0 | 0.1 | 0.0 |
| SS | 5 - 8 | LIVE | 4 SAW | 5.3 | 30 | 2 | 0.0 | 0.8 | 0.1 |
| SS | 5 - 8 | LIVE | 3 SAW | 7.7 | 40 | 1 | 0.0 | 0.9 | 0.1 |
| SS | 15 - 19 | LIVE | 2 SAW | 15.7 | 32 | 5 | 0.0 | 1.7 | 0.3 |

| Sp | Bin | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|---------|------|-----|--------|----------|---------|---------|
| WH | < 5 | LIVE | UTILITY | 2.1 | 16 | 177 | 0.0 | 206.1 | 10.1 |
| WH | 5 - 8 | LIVE | 4 SAW | 5.4 | 27 | 2,568 | 0.6 | 1,380.0 | 146.4 |
| WH | 5 - 8 | LIVE | UTILITY | 5.4 | 21 | 188 | 0.0 | 78.1 | 10.7 |
| WH | 5 - 8 | LIVE | 3 SAW | 7.8 | 36 | 1,754 | 0.0 | 896.1 | 100.0 |
| WH | 9 - 11 | LIVE | 3 SAW | 10.1 | 36 | 5,759 | 0.9 | 2,616.2 | 328.3 |
| WH | 12 - 14 | LIVE | 3 SAW | 12.0 | 28 | 2 | 0.0 | 0.8 | 0.1 |
| WH | 12 - 14 | LIVE | 2 SAW | 13.6 | 36 | 1,426 | 5.0 | 566.9 | 81.3 |
| WH | 15 - 19 | LIVE | 2 SAW | 16.6 | 32 | 17 | 0.0 | 6.3 | 1.0 |

Timber Sale Log Sort x Diameter Bin Summary

| Sp | Bin | Status | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|----------|------|-----|--------|----------|---------|---------|
| DF | < 5 | LIVE | Pulp | 2.2 | 16 | 170 | 0.0 | 198.8 | 9.7 |
| DF | 5 - 8 | LIVE | Domestic | 6.2 | 32 | 4,167 | 5.7 | 2,265.9 | 237.5 |
| DF | 9 - 11 | LIVE | Domestic | 10.5 | 38 | 4,346 | 2.2 | 1,829.4 | 247.7 |
| DF | 12 - 14 | LIVE | Domestic | 12.4 | 39 | 1,417 | 6.6 | 661.9 | 80.8 |
| DF | 15 - 19 | LIVE | Domestic | 17.1 | 32 | 37 | 0.0 | 12.3 | 2.1 |
| DF | 20+ | LIVE | Domestic | 23.5 | 32 | 27 | 0.0 | 7.3 | 1.5 |
| GF | 5 - 8 | LIVE | Pulp | 5.0 | 13 | 50 | 0.0 | 17.4 | 2.8 |
| GF | 5 - 8 | LIVE | Domestic | 6.3 | 32 | 367 | 0.0 | 190.5 | 20.9 |
| GF | 9 - 11 | LIVE | Domestic | 10.1 | 31 | 368 | 0.0 | 149.4 | 21.0 |
| GF | 12 - 14 | LIVE | Domestic | 12.7 | 34 | 1,224 | 3.0 | 448.9 | 69.8 |
| GF | 15 - 19 | LIVE | Domestic | 18.5 | 33 | 76 | 0.0 | 24.7 | 4.3 |
| GF | 20+ | LIVE | Domestic | 21.6 | 32 | 99 | 0.0 | 29.7 | 5.6 |
| RA | 5 - 8 | LIVE | Pulp | 5.0 | 17 | 159 | 0.0 | 54.6 | 9.1 |
| RA | 5 - 8 | LIVE | Cull | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | 5 - 8 | LIVE | Domestic | 6.7 | 29 | 2,030 | 0.8 | 971.1 | 115.7 |
| RA | 9 - 11 | LIVE | Domestic | 11.4 | 31 | 267 | 0.0 | 106.2 | 15.2 |
| RA | 12 - 14 | LIVE | Domestic | 12.5 | 30 | 251 | 0.0 | 93.7 | 14.3 |
| RC | 5 - 8 | LIVE | Domestic | 5.0 | 25 | 0 | 0.0 | 0.1 | 0.0 |
| SS | 5 - 8 | LIVE | Domestic | 5.9 | 33 | 3 | 0.0 | 1.7 | 0.2 |
| SS | 15 - 19 | LIVE | Domestic | 15.7 | 32 | 5 | 0.0 | 1.7 | 0.3 |
| WH | < 5 | LIVE | Pulp | 2.1 | 16 | 177 | 0.0 | 206.1 | 10.1 |
| WH | 5 - 8 | LIVE | Pulp | 5.4 | 21 | 188 | 0.0 | 78.1 | 10.7 |
| WH | 5 - 8 | LIVE | Domestic | 5.9 | 29 | 4,323 | 0.3 | 2,276.1 | 246.4 |
| WH | 9 - 11 | LIVE | Domestic | 10.1 | 36 | 5,759 | 0.9 | 2,616.2 | 328.3 |
| WH | 12 - 14 | LIVE | Domestic | 13.6 | 36 | 1,428 | 4.9 | 567.8 | 81.4 |
| WH | 15 - 19 | LIVE | Domestic | 16.6 | 32 | 17 | 0.0 | 6.3 | 1.0 |

Cruise Unit Report Unit 1

Unit Sale Notice Volume (MBF): Unit 1

| Sp | DBH | Rings/In | Age | MBF Volume by Grade | | | | |
|-----|------|----------|-----|---------------------|-------|-------|-------|---------|
| | | | | All | 2 Saw | 3 Saw | 4 Saw | Utility |
| WH | 12.5 | | | 670 | 79 | 425 | 145 | 21 |
| DF | 14.8 | | | 574 | 80 | 397 | 87 | 10 |
| RA | 12.3 | | | 147 | 14 | 13 | 111 | 9 |
| GF | 15.8 | | | 110 | 67 | 33 | 7 | 3 |
| ALL | 13.3 | | | 1,501 | 240 | 868 | 350 | 42 |

Unit Sale Notice Weight (tons): Unit 1

| Sp | Tons by Grade | | | | |
|-----|---------------|-------|-------|-------|---------|
| | All | 2 Saw | 3 Saw | 4 Saw | Utility |
| WH | 5,690 | 553 | 3,488 | 1,365 | 284 |
| DF | 4,940 | 657 | 3,276 | 809 | 199 |
| RA | 1,173 | 91 | 94 | 934 | 54 |
| GF | 768 | 427 | 256 | 67 | 17 |
| ALL | 12,572 | 1,728 | 7,114 | 3,175 | 555 |

Unit Cruise Design: Unit 1

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|--|--------------|-----------|---------|----------------|--------------|
| B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 0 ft | 56.0 | | 27 | 14 | 0 |

Unit Cruise Summary: Unit 1

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|-----|---------------|-----------|------------|------------------|
| SS | | 2 | 0.1 | 0 |
| DF | 18 | 92 | 3.4 | 0 |
| WH | 23 | 65 | 2.4 | 0 |
| GF | 2 | 13 | 0.5 | 0 |
| RA | 10 | 20 | 0.7 | 0 |
| ALL | 53 | 192 | 7.1 | 0 |

Unit Cruise Statistics: Unit 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 (%) |
|-----|--------------------|--------------|--------------|---------------------|-----------------|-----------------|----------------------|---------------|---------------|
| SS | 4.0 | 360.3 | 69.3 | | | | | | |
| DF | 185.5 | 81.1 | 15.6 | 120.9 | 26.1 | 6.2 | 22,434 | 85.2 | 16.8 |
| WH | 131.1 | 100.6 | 19.4 | 141.3 | 27.6 | 5.8 | 18,516 | 104.3 | 20.2 |
| GF | 26.2 | 218.4 | 42.0 | 194.5 | 8.7 | 6.1 | 5,099 | 218.5 | 42.5 |
| RA | 29.6 | 181.9 | 35.0 | 104.4 | 25.1 | 7.9 | 3,093 | 183.6 | 35.9 |
| ALL | 376.4 | 29.8 | 5.7 | 132.0 | 29.0 | 4.0 | 49,674 | 41.6 | 7.0 |

Unit Summary: Unit 1

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|-----|--------|-----|----|-----|------|----|-----|-------------|-----------|-------------|-------|-------|------|------------|
| DF | LIVE | CUT | 18 | ALL | 14.5 | 72 | 90 | 10,701 | 10,242 | 4.3 | 73.9 | 84.7 | 22.2 | 573.5 |
| DF | LIVE | LEA | 26 | ALL | 23.6 | 92 | 117 | 12,740 | 12,193 | 4.3 | 33.2 | 100.8 | 20.8 | 682.8 |
| GF | LIVE | CUT | 2 | ALL | 15.9 | 92 | 118 | 1,999 | 1,961 | 1.9 | 7.3 | 10.1 | 2.5 | 109.8 |
| GF | LIVE | LEA | 4 | ALL | 21.4 | 92 | 119 | 3,199 | 3,138 | 1.9 | 6.5 | 16.1 | 3.5 | 175.7 |
| RA | LIVE | CUT | 10 | ALL | 12.2 | 57 | 70 | 2,645 | 2,629 | 0.6 | 31.0 | 25.2 | 7.2 | 147.2 |
| RA | LIVE | LEA | 1 | ALL | 9.7 | 47 | 56 | 467 | 464 | 0.6 | 8.7 | 4.4 | 1.4 | 26.0 |
| SS | LIVE | LEA | 2 | ALL | 11.6 | 28 | 31 | | | | 5.5 | 4.0 | 1.2 | |
| WH | LIVE | CUT | 23 | ALL | 12.4 | 64 | 79 | 12,107 | 11,964 | 1.2 | 101.0 | 84.7 | 24.0 | 670.0 |
| WH | LIVE | LEA | 11 | ALL | 21.2 | 88 | 110 | 6,630 | 6,552 | 1.2 | 18.9 | 46.4 | 10.1 | 366.9 |
| ALL | LIVE | CUT | 53 | ALL | 13.3 | 67 | 83 | 27,453 | 26,796 | 2.4 | 213.2 | 204.6 | 56.0 | 1,500.6 |
| ALL | LIVE | LEA | 44 | ALL | 20.8 | 81 | 102 | 23,035 | 22,346 | 3.0 | 72.8 | 171.8 | 36.9 | 1,251.4 |
| ALL | ALL | ALL | 97 | ALL | 15.5 | 70 | 88 | 50,488 | 49,142 | 2.7 | 286.0 | 376.4 | 92.9 | 2,752.0 |

Unit Stand Table: Unit 1

| Sp | D | Status | Rx | N | DBH | BL | THT | BF Net | Defect % | TPA | BA | RD | MBF Net |
|----|----|--------|-----|----|------|----|-----|--------|----------|------|------|-----|---------|
| DF | 10 | LIVE | CUT | 5 | 10.1 | 67 | 84 | 1,235 | 3.4 | 18.1 | 10.1 | 3.2 | 69.2 |
| DF | 12 | LIVE | CUT | 4 | 12.2 | 67 | 83 | 936 | 2.1 | 10.0 | 8.1 | 2.3 | 52.4 |
| DF | 14 | LIVE | CUT | 7 | 14.0 | 71 | 89 | 1,779 | 3.9 | 13.2 | 14.1 | 3.8 | 99.6 |
| DF | 16 | LIVE | CUT | 11 | 15.9 | 72 | 91 | 2,630 | 4.5 | 16.0 | 22.2 | 5.6 | 147.3 |
| DF | 18 | LIVE | CUT | 12 | 18.0 | 80 | 101 | 2,936 | 4.6 | 13.7 | 24.2 | 5.7 | 164.4 |
| DF | 20 | LIVE | CUT | 3 | 19.1 | 91 | 116 | 725 | 7.3 | 3.0 | 6.0 | 1.4 | 40.6 |
| DF | 18 | LIVE | LEA | 1 | 17.6 | | | 206 | 4.3 | 1.2 | 2.0 | 0.5 | 11.6 |
| DF | 20 | LIVE | LEA | 6 | 20.4 | 89 | 113 | 1,336 | 4.1 | 5.3 | 12.1 | 2.7 | 74.8 |
| DF | 22 | LIVE | LEA | 14 | 21.8 | 88 | 112 | 3,268 | 6.4 | 10.9 | 28.2 | 6.0 | 183.0 |
| DF | 24 | LIVE | LEA | 10 | 24.0 | 96 | 122 | 2,493 | 8.5 | 6.4 | 20.2 | 4.1 | 139.6 |

| Sp | D | Status | Rx | N | DBH | BL | THT | BF Net | Defect % | TPA | BA | RD | MBF Net |
|----|----|--------|-----|----|------|-----|-----|--------|----------|------|------|-----|---------|
| DF | 26 | LIVE | LEA | 7 | 26.0 | 94 | 120 | 2,007 | 2.3 | 3.8 | 14.1 | 2.8 | 112.4 |
| DF | 28 | LIVE | LEA | 10 | 28.1 | 97 | 124 | 2,363 | 2.7 | 4.7 | 20.2 | 3.8 | 132.3 |
| DF | 30 | LIVE | LEA | 2 | 29.3 | 98 | 125 | 520 | 10.1 | 0.9 | 4.0 | 0.7 | 29.1 |
| GF | 14 | LIVE | CUT | 1 | 14.2 | | | 0 | | 1.8 | 2.0 | 0.5 | 0.0 |
| GF | 16 | LIVE | CUT | 3 | 16.0 | 92 | 118 | 1,961 | 1.9 | 4.4 | 6.0 | 1.5 | 109.8 |
| GF | 18 | LIVE | CUT | 1 | 17.8 | | | 0 | | 1.2 | 2.0 | 0.5 | 0.0 |
| GF | 14 | LIVE | LEA | 1 | 13.0 | 85 | 109 | 560 | 0.0 | 2.2 | 2.0 | 0.6 | 31.4 |
| GF | 20 | LIVE | LEA | 1 | 19.5 | | | 0 | | 1.0 | 2.0 | 0.5 | 0.0 |
| GF | 24 | LIVE | LEA | 3 | 24.0 | 101 | 130 | 742 | 0.0 | 1.9 | 6.0 | 1.2 | 41.6 |
| GF | 26 | LIVE | LEA | 1 | 25.5 | | | 0 | | 0.6 | 2.0 | 0.4 | 0.0 |
| GF | 30 | LIVE | LEA | 1 | 29.2 | 105 | 135 | 912 | 0.0 | 0.4 | 2.0 | 0.4 | 51.1 |
| GF | 32 | LIVE | LEA | 1 | 31.4 | 106 | 137 | 924 | 0.0 | 0.4 | 2.0 | 0.4 | 51.7 |
| RA | 10 | LIVE | CUT | 3 | 10.6 | 60 | 73 | 482 | 2.3 | 7.3 | 4.4 | 1.4 | 27.0 |
| RA | 12 | LIVE | CUT | 7 | 11.6 | 57 | 69 | 1,027 | 0.2 | 14.1 | 10.4 | 3.0 | 57.5 |
| RA | 14 | LIVE | CUT | 5 | 13.3 | 52 | 63 | 730 | 0.4 | 7.7 | 7.4 | 2.0 | 40.9 |
| RA | 16 | LIVE | CUT | 2 | 16.0 | 66 | 81 | 390 | 0.0 | 2.1 | 3.0 | 0.7 | 21.8 |
| RA | 10 | LIVE | LEA | 3 | 9.7 | 47 | 56 | 464 | 0.4 | 8.7 | 4.4 | 1.4 | 26.0 |
| SS | 10 | LIVE | LEA | 1 | 9.0 | 17 | 17 | | | 4.6 | 2.0 | 0.7 | |
| SS | 20 | LIVE | LEA | 1 | 20.0 | 80 | 102 | | | 0.9 | 2.0 | 0.5 | |
| WH | 8 | LIVE | CUT | 5 | 8.4 | 37 | 43 | 1,017 | 0.7 | 26.4 | 10.1 | 3.5 | 57.0 |
| WH | 10 | LIVE | CUT | 5 | 10.3 | 71 | 88 | 1,404 | 1.0 | 17.4 | 10.1 | 3.1 | 78.6 |
| WH | 12 | LIVE | CUT | 7 | 12.3 | 70 | 87 | 2,006 | 0.3 | 17.0 | 14.1 | 4.0 | 112.3 |
| WH | 14 | LIVE | CUT | 12 | 14.1 | 75 | 94 | 3,479 | 1.5 | 22.3 | 24.2 | 6.4 | 194.8 |
| WH | 16 | LIVE | CUT | 9 | 15.9 | 76 | 95 | 2,561 | 1.6 | 13.1 | 18.1 | 4.5 | 143.4 |
| WH | 18 | LIVE | CUT | 4 | 17.9 | 93 | 118 | 1,497 | 1.3 | 4.6 | 8.1 | 1.9 | 83.8 |
| WH | 16 | LIVE | LEA | 1 | 16.4 | 87 | 109 | 309 | 0.0 | 1.4 | 2.0 | 0.5 | 17.3 |
| WH | 18 | LIVE | LEA | 5 | 18.1 | 85 | 107 | 1,452 | 2.4 | 5.6 | 10.1 | 2.4 | 81.3 |
| WH | 20 | LIVE | LEA | 4 | 19.9 | 85 | 106 | 1,181 | 0.3 | 3.7 | 8.1 | 1.8 | 66.2 |
| WH | 22 | LIVE | LEA | 7 | 21.7 | 96 | 121 | 2,022 | 1.4 | 5.5 | 14.1 | 3.0 | 113.3 |
| WH | 24 | LIVE | LEA | 1 | 24.8 | | | 250 | 1.2 | 0.6 | 2.0 | 0.4 | 14.0 |
| WH | 26 | LIVE | LEA | 1 | 26.7 | | | 250 | 1.2 | 0.5 | 2.0 | 0.4 | 14.0 |
| WH | 28 | LIVE | LEA | 1 | 27.3 | 102 | 129 | 337 | 10.3 | 0.5 | 2.0 | 0.4 | 18.9 |
| WH | 30 | LIVE | LEA | 1 | 30.2 | | | 250 | 1.2 | 0.4 | 2.0 | 0.4 | 14.0 |
| WH | 32 | LIVE | LEA | 2 | 32.2 | | | 500 | 1.2 | 0.7 | 4.0 | 0.7 | 28.0 |

Unit Log Grade Summary: Unit 1

| Sp | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|------|-----|--------|----------|---------|---------|
| DF | LIVE | 2 SAW | 12.4 | 40 | 1,426 | 6.6 | 656.5 | 79.9 |
| DF | LIVE | 3 SAW | 8.7 | 39 | 7,090 | 4.0 | 3,276.2 | 397.0 |
| DF | LIVE | 4 SAW | 5.4 | 27 | 1,553 | 3.7 | 808.9 | 87.0 |
| DF | LIVE | UTILITY | 2.2 | 16 | 173 | 0.0 | 198.8 | 9.7 |
| GF | LIVE | 2 SAW | 12.6 | 34 | 1,194 | 3.1 | 427.3 | 66.8 |
| GF | LIVE | 3 SAW | 8.7 | 34 | 588 | 0.0 | 256.0 | 32.9 |
| GF | LIVE | 4 SAW | 5.6 | 32 | 129 | 0.0 | 67.0 | 7.2 |
| GF | LIVE | UTILITY | 5.0 | 13 | 51 | 0.0 | 17.4 | 2.8 |
| RA | LIVE | 2 SAW | 12.5 | 30 | 249 | 0.0 | 91.4 | 14.0 |
| RA | LIVE | 3 SAW | 11.9 | 30 | 237 | 0.0 | 93.5 | 13.3 |
| RA | LIVE | 4 SAW | 6.8 | 29 | 1,982 | 0.8 | 934.3 | 111.0 |
| RA | LIVE | UTILITY | 5.0 | 17 | 161 | 0.0 | 54.2 | 9.0 |
| WH | LIVE | 2 SAW | 13.7 | 36 | 1,417 | 5.1 | 553.3 | 79.4 |
| WH | LIVE | 3 SAW | 9.3 | 37 | 7,591 | 0.7 | 3,487.9 | 425.1 |
| WH | LIVE | 4 SAW | 5.4 | 27 | 2,585 | 0.6 | 1,364.7 | 144.7 |
| WH | LIVE | UTILITY | 2.4 | 16 | 372 | 0.0 | 284.2 | 20.8 |

Unit Log Sort Summary: Unit 1

| Sp | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|----------|-----|-----|--------|----------|---------|---------|
| DF | LIVE | Domestic | 7.5 | 34 | 10,069 | 4.4 | 4,741.5 | 563.9 |
| DF | LIVE | Pulp | 2.2 | 16 | 173 | 0.0 | 198.8 | 9.7 |
| GF | LIVE | Domestic | 9.6 | 34 | 1,911 | 1.9 | 750.3 | 107.0 |
| GF | LIVE | Pulp | 5.0 | 13 | 51 | 0.0 | 17.4 | 2.8 |
| RA | LIVE | Domestic | 7.2 | 29 | 2,468 | 0.6 | 1,119.2 | 138.2 |
| RA | LIVE | Pulp | 5.0 | 17 | 161 | 0.0 | 54.2 | 9.0 |
| WH | LIVE | Domestic | 7.4 | 32 | 11,592 | 1.2 | 5,405.9 | 649.2 |
| WH | LIVE | Pulp | 2.4 | 16 | 372 | 0.0 | 284.2 | 20.8 |

Unit Log Grade x Sort Summary: Unit 1

| Sp | Status | Grade | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|----------|------|-----|--------|----------|---------|---------|
| DF | LIVE | 2 SAW | Domestic | 12.4 | 40 | 1,426 | 6.6 | 656.5 | 79.9 |
| DF | LIVE | 3 SAW | Domestic | 8.7 | 39 | 7,090 | 4.0 | 3,276.2 | 397.0 |
| DF | LIVE | 4 SAW | Domestic | 5.4 | 27 | 1,553 | 3.7 | 808.9 | 87.0 |
| DF | LIVE | UTILITY | Pulp | 2.2 | 16 | 173 | 0.0 | 198.8 | 9.7 |
| GF | LIVE | 2 SAW | Domestic | 12.6 | 34 | 1,194 | 3.1 | 427.3 | 66.8 |

| Sp | Status | Grade | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|----------|------|-----|--------|----------|---------|---------|
| GF | LIVE | 3 SAW | Domestic | 8.7 | 34 | 588 | 0.0 | 256.0 | 32.9 |
| GF | LIVE | 4 SAW | Domestic | 5.6 | 32 | 129 | 0.0 | 67.0 | 7.2 |
| GF | LIVE | UTILITY | Pulp | 5.0 | 13 | 51 | 0.0 | 17.4 | 2.8 |
| RA | LIVE | 2 SAW | Domestic | 12.5 | 30 | 249 | 0.0 | 91.4 | 14.0 |
| RA | LIVE | 3 SAW | Domestic | 11.9 | 30 | 237 | 0.0 | 93.5 | 13.3 |
| RA | LIVE | 4 SAW | Domestic | 6.8 | 29 | 1,982 | 0.8 | 934.3 | 111.0 |
| RA | LIVE | UTILITY | Pulp | 5.0 | 17 | 161 | 0.0 | 54.2 | 9.0 |
| WH | LIVE | 2 SAW | Domestic | 13.7 | 36 | 1,417 | 5.1 | 553.3 | 79.4 |
| WH | LIVE | 3 SAW | Domestic | 9.3 | 37 | 7,591 | 0.7 | 3,487.9 | 425.1 |
| WH | LIVE | 4 SAW | Domestic | 5.4 | 27 | 2,585 | 0.6 | 1,364.7 | 144.7 |
| WH | LIVE | UTILITY | Pulp | 2.4 | 16 | 372 | 0.0 | 284.2 | 20.8 |

Unit Log Grade x Diameter Bin Summary: Unit 1

| Sp | Bin | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|---------|------|-----|--------|----------|---------|---------|
| DF | < 5 | LIVE | UTILITY | 2.2 | 16 | 173 | 0.0 | 198.8 | 9.7 |
| DF | 5 - 8 | LIVE | 4 SAW | 5.4 | 27 | 1,553 | 3.7 | 808.9 | 87.0 |
| DF | 5 - 8 | LIVE | 3 SAW | 7.3 | 40 | 2,681 | 6.9 | 1,452.4 | 150.1 |
| DF | 9 - 11 | LIVE | 3 SAW | 10.5 | 38 | 4,409 | 2.2 | 1,823.9 | 246.9 |
| DF | 12 - 14 | LIVE | 2 SAW | 12.4 | 40 | 1,426 | 6.6 | 656.5 | 79.9 |
| GF | 5 - 8 | LIVE | UTILITY | 5.0 | 13 | 51 | 0.0 | 17.4 | 2.8 |
| GF | 5 - 8 | LIVE | 4 SAW | 5.6 | 32 | 129 | 0.0 | 67.0 | 7.2 |
| GF | 5 - 8 | LIVE | 3 SAW | 7.5 | 36 | 235 | 0.0 | 115.8 | 13.1 |
| GF | 9 - 11 | LIVE | 3 SAW | 9.9 | 32 | 353 | 0.0 | 140.2 | 19.8 |
| GF | 12 - 14 | LIVE | 2 SAW | 12.6 | 34 | 1,194 | 3.1 | 427.3 | 66.8 |
| RA | 5 - 8 | LIVE | UTILITY | 5.0 | 17 | 161 | 0.0 | 54.2 | 9.0 |
| RA | 5 - 8 | LIVE | 4 SAW | 6.8 | 29 | 1,982 | 0.8 | 934.3 | 111.0 |
| RA | 9 - 11 | LIVE | 3 SAW | 11.9 | 30 | 237 | 0.0 | 93.5 | 13.3 |
| RA | 12 - 14 | LIVE | 2 SAW | 12.5 | 30 | 249 | 0.0 | 91.4 | 14.0 |
| WH | < 5 | LIVE | UTILITY | 2.1 | 16 | 180 | 0.0 | 206.1 | 10.1 |
| WH | 5 - 8 | LIVE | 4 SAW | 5.4 | 27 | 2,585 | 0.6 | 1,364.7 | 144.7 |
| WH | 5 - 8 | LIVE | UTILITY | 5.4 | 21 | 192 | 0.0 | 78.1 | 10.7 |
| WH | 5 - 8 | LIVE | 3 SAW | 7.8 | 36 | 1,767 | 0.0 | 887.4 | 99.0 |
| WH | 9 - 11 | LIVE | 3 SAW | 10.1 | 37 | 5,823 | 0.9 | 2,600.5 | 326.1 |
| WH | 12 - 14 | LIVE | 2 SAW | 13.7 | 36 | 1,417 | 5.1 | 553.3 | 79.4 |

Unit Log Sort x Diameter Bin Summary: Unit 1

| Sp | Bin | Status | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|----------|------|-----|--------|----------|---------|---------|
| DF | < 5 | LIVE | Pulp | 2.2 | 16 | 173 | 0.0 | 198.8 | 9.7 |
| DF | 5 - 8 | LIVE | Domestic | 6.2 | 32 | 4,234 | 5.7 | 2,261.2 | 237.1 |
| DF | 9 - 11 | LIVE | Domestic | 10.5 | 38 | 4,409 | 2.2 | 1,823.9 | 246.9 |
| DF | 12 - 14 | LIVE | Domestic | 12.4 | 40 | 1,426 | 6.6 | 656.5 | 79.9 |
| GF | 5 - 8 | LIVE | Pulp | 5.0 | 13 | 51 | 0.0 | 17.4 | 2.8 |
| GF | 5 - 8 | LIVE | Domestic | 6.5 | 34 | 364 | 0.0 | 182.9 | 20.4 |
| GF | 9 - 11 | LIVE | Domestic | 9.9 | 32 | 353 | 0.0 | 140.2 | 19.8 |
| GF | 12 - 14 | LIVE | Domestic | 12.6 | 34 | 1,194 | 3.1 | 427.3 | 66.8 |
| RA | 5 - 8 | LIVE | Pulp | 5.0 | 17 | 161 | 0.0 | 54.2 | 9.0 |
| RA | 5 - 8 | LIVE | Domestic | 6.8 | 29 | 1,982 | 0.8 | 934.3 | 111.0 |
| RA | 9 - 11 | LIVE | Domestic | 11.9 | 30 | 237 | 0.0 | 93.5 | 13.3 |
| RA | 12 - 14 | LIVE | Domestic | 12.5 | 30 | 249 | 0.0 | 91.4 | 14.0 |
| WH | < 5 | LIVE | Pulp | 2.1 | 16 | 180 | 0.0 | 206.1 | 10.1 |
| WH | 5 - 8 | LIVE | Pulp | 5.4 | 21 | 192 | 0.0 | 78.1 | 10.7 |
| WH | 5 - 8 | LIVE | Domestic | 5.9 | 29 | 4,352 | 0.3 | 2,252.1 | 243.7 |
| WH | 9 - 11 | LIVE | Domestic | 10.1 | 37 | 5,823 | 0.9 | 2,600.5 | 326.1 |
| WH | 12 - 14 | LIVE | Domestic | 13.7 | 36 | 1,417 | 5.1 | 553.3 | 79.4 |

Cruise Unit Report Unit 2 ROW

Unit Sale Notice Volume (MBF): Unit 2 ROW

| Sp | DBH | Rings/In | Age | MBF Volume by Grade | | | | Utility |
|-----|------|----------|-----|---------------------|-------|-------|-------|---------|
| | | | | All | 2 Saw | 3 Saw | 4 Saw | |
| GF | 24.8 | | | 15 | 12 | 2 | 1 | |
| WH | 13.0 | | | 8 | 3 | 3 | 2 | |
| RA | 11.5 | | | 7 | 0 | 2 | 5 | 0 |
| DF | 22.0 | | | 6 | 5 | 1 | 0 | |
| SS | 13.9 | | | 1 | 0 | 0 | 0 | |
| RC | 7.3 | | | 0 | | | 0 | |
| ALL | 15.2 | | | 36 | 20 | 7 | 8 | 0 |

Unit Sale Notice Weight (tons): Unit 2 ROW

| Sp | Tons by Grade | | | | Utility |
|-----|---------------|-------|-------|-------|---------|
| | All | 2 Saw | 3 Saw | 4 Saw | |
| GF | 93 | 73 | 11 | 9 | |
| WH | 61 | 20 | 25 | 15 | |
| RA | 52 | 2 | 9 | 40 | 0 |
| DF | 35 | 25 | 6 | 4 | |
| SS | 3 | 2 | 1 | 1 | |
| RC | 0 | | | 0 | |
| ALL | 244 | 122 | 53 | 69 | 0 |

Unit Cruise Design: Unit 2 ROW

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|--------------|-----------|---------|----------------|--------------|
| ST: Strip/Percent Sample (1 tree expansion) | 1.0 | | 1 | 1 | 0 |

Unit Cruise Summary: Unit 2 ROW

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|----|---------------|-----------|------------|------------------|
| GF | 23 | 24 | 24.0 | 0 |
| WH | 51 | 57 | 57.0 | 0 |
| RA | 58 | 84 | 84.0 | 0 |
| DF | 10 | 10 | 10.0 | 0 |

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|-----|---------------|-----------|------------|------------------|
| SS | 4 | 4 | 4.0 | 0 |
| RC | 1 | 1 | 1.0 | 0 |
| ALL | 147 | 180 | 180.0 | 0 |

Unit Cruise Statistics: Unit 2 ROW

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|-----|--------------------|--------------|--------------|---------------------|-----------------|-----------------|----------------------|---------------|---------------|
| GF | 80.7 | 0.0 | 0.0 | 181.4 | 31.5 | 6.6 | 14,645 | 31.5 | 6.6 |
| WH | 51.3 | 0.0 | 0.0 | 154.0 | 27.1 | 3.8 | 7,902 | 27.1 | 3.8 |
| RA | 60.2 | 0.0 | 0.0 | 117.6 | 23.0 | 3.0 | 7,085 | 23.0 | 3.0 |
| DF | 26.3 | 0.0 | 0.0 | 222.2 | 23.3 | 7.4 | 5,839 | 23.3 | 7.4 |
| SS | 4.2 | 0.0 | 0.0 | 108.6 | 34.9 | 17.4 | 456 | 34.9 | 17.4 |
| RC | 0.3 | 0.0 | 0.0 | 93.1 | 0.0 | 0.0 | 27 | 0.0 | 0.0 |
| ALL | 223.0 | 0.0 | 0.0 | 161.2 | 29.6 | 2.4 | 35,953 | 29.6 | 2.4 |

Unit Summary: Unit 2 ROW

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|-----|--------|-----|-----|-----|------|-----|-----|-------------|-----------|-------------|-------|-------|------|------------|
| DF | LIVE | CUT | 10 | ALL | 22.0 | 102 | 119 | 5,839 | 5,839 | 0.0 | 10.0 | 26.3 | 5.6 | 5.8 |
| GF | LIVE | CUT | 23 | ALL | 24.8 | 84 | 95 | 14,645 | 14,645 | 0.0 | 24.1 | 80.7 | 16.2 | 14.6 |
| RA | LIVE | CUT | 58 | ALL | 11.5 | 53 | 72 | 7,128 | 7,085 | 0.6 | 83.5 | 60.2 | 17.8 | 7.1 |
| RC | LIVE | CUT | 1 | ALL | 7.3 | 40 | 49 | 27 | 27 | 0.0 | 1.0 | 0.3 | 0.1 | 0.0 |
| SS | LIVE | CUT | 4 | ALL | 13.9 | 46 | 57 | 456 | 456 | 0.0 | 4.0 | 4.2 | 1.1 | 0.5 |
| WH | LIVE | CUT | 51 | ALL | 12.8 | 58 | 76 | 7,902 | 7,902 | 0.0 | 57.4 | 51.3 | 14.3 | 7.9 |
| ALL | LIVE | CUT | 147 | ALL | 15.1 | 61 | 78 | 35,997 | 35,953 | 0.1 | 180.0 | 223.0 | 55.1 | 36.0 |
| ALL | ALL | ALL | 147 | ALL | 15.1 | 61 | 78 | 35,997 | 35,953 | 0.1 | 180.0 | 223.0 | 55.1 | 36.0 |

Unit Stand Table: Unit 2 ROW

| Sp | D | Status | Rx | N | DBH | BL | THT | BF Net | Defect % | TPA | BA | RD | MBF Net |
|----|----|--------|-----|---|------|-----|-----|--------|----------|-----|-----|-----|---------|
| DF | 14 | LIVE | CUT | 2 | 14.7 | 71 | 91 | 324 | 0.0 | 2.0 | 2.4 | 0.6 | 0.3 |
| DF | 16 | LIVE | CUT | 2 | 16.0 | 90 | 109 | 495 | 0.0 | 2.0 | 2.8 | 0.7 | 0.5 |
| DF | 18 | LIVE | CUT | 1 | 18.8 | 119 | 131 | 456 | 0.0 | 1.0 | 1.9 | 0.4 | 0.5 |
| DF | 22 | LIVE | CUT | 1 | 21.4 | 101 | 118 | 464 | 0.0 | 1.0 | 2.5 | 0.5 | 0.5 |
| DF | 24 | LIVE | CUT | 2 | 24.1 | 110 | 127 | 1,341 | 0.0 | 2.0 | 6.3 | 1.3 | 1.3 |
| DF | 26 | LIVE | CUT | 1 | 26.9 | 120 | 135 | 907 | 0.0 | 1.0 | 4.0 | 0.8 | 0.9 |
| DF | 34 | LIVE | CUT | 1 | 34.3 | 139 | 153 | 1,852 | 0.0 | 1.0 | 6.4 | 1.1 | 1.9 |

| Sp | D | Status | Rx | N | DBH | BL | THT | BF Net | Defect % | TPA | BA | RD | MBF Net |
|----|----|--------|-----|----|------|-----|-----|--------|----------|------|------|-----|---------|
| GF | 10 | LIVE | CUT | 1 | 10.1 | 32 | 45 | 33 | 0.0 | 1.0 | 0.6 | 0.2 | 0.0 |
| GF | 14 | LIVE | CUT | 1 | 14.7 | 51 | 64 | 111 | 0.0 | 1.0 | 1.2 | 0.3 | 0.1 |
| GF | 16 | LIVE | CUT | 3 | 16.3 | 74 | 85 | 649 | 0.0 | 3.0 | 4.3 | 1.1 | 0.6 |
| GF | 18 | LIVE | CUT | 1 | 17.6 | 62 | 74 | 187 | 0.0 | 1.0 | 1.7 | 0.4 | 0.2 |
| GF | 20 | LIVE | CUT | 1 | 19.4 | 68 | 80 | 229 | 0.0 | 1.0 | 2.1 | 0.5 | 0.2 |
| GF | 22 | LIVE | CUT | 1 | 21.3 | 105 | 113 | 667 | 0.0 | 1.0 | 2.5 | 0.5 | 0.7 |
| GF | 26 | LIVE | CUT | 6 | 26.2 | 91 | 104 | 4,923 | 0.0 | 7.0 | 26.3 | 5.1 | 4.9 |
| GF | 28 | LIVE | CUT | 3 | 27.9 | 90 | 100 | 2,300 | 0.0 | 3.0 | 12.8 | 2.4 | 2.3 |
| GF | 30 | LIVE | CUT | 5 | 29.5 | 93 | 103 | 4,441 | 0.0 | 5.0 | 23.7 | 4.4 | 4.4 |
| GF | 32 | LIVE | CUT | 1 | 32.3 | 98 | 108 | 1,105 | 0.0 | 1.0 | 5.7 | 1.0 | 1.1 |
| RA | 8 | LIVE | CUT | 8 | 8.3 | 37 | 62 | 423 | 0.0 | 11.0 | 4.1 | 1.4 | 0.4 |
| RA | 10 | LIVE | CUT | 20 | 9.9 | 47 | 66 | 1,657 | 2.6 | 31.9 | 17.2 | 5.4 | 1.7 |
| RA | 12 | LIVE | CUT | 15 | 11.8 | 56 | 75 | 2,057 | 0.0 | 23.0 | 17.4 | 5.1 | 2.1 |
| RA | 14 | LIVE | CUT | 9 | 14.0 | 67 | 84 | 1,571 | 0.0 | 11.0 | 11.7 | 3.1 | 1.6 |
| RA | 16 | LIVE | CUT | 6 | 15.7 | 69 | 85 | 1,096 | 0.0 | 6.0 | 8.1 | 2.0 | 1.1 |
| RA | 18 | LIVE | CUT | 1 | 17.9 | 79 | 93 | 280 | 0.0 | 1.0 | 1.8 | 0.4 | 0.3 |
| RC | 8 | LIVE | CUT | 1 | 7.3 | 40 | 49 | 27 | 0.0 | 1.0 | 0.3 | 0.1 | 0.0 |
| SS | 10 | LIVE | CUT | 3 | 9.9 | 33 | 43 | 100 | 0.0 | 3.0 | 1.6 | 0.5 | 0.1 |
| SS | 22 | LIVE | CUT | 1 | 21.8 | 83 | 96 | 356 | 0.0 | 1.0 | 2.6 | 0.6 | 0.4 |
| WH | 8 | LIVE | CUT | 9 | 7.8 | 31 | 53 | 325 | 0.0 | 10.0 | 3.3 | 1.2 | 0.3 |
| WH | 10 | LIVE | CUT | 15 | 9.8 | 41 | 60 | 821 | 0.0 | 17.0 | 8.8 | 2.8 | 0.8 |
| WH | 12 | LIVE | CUT | 8 | 12.0 | 58 | 76 | 840 | 0.0 | 8.0 | 6.2 | 1.8 | 0.8 |
| WH | 14 | LIVE | CUT | 8 | 13.6 | 73 | 91 | 1,462 | 0.0 | 9.0 | 9.1 | 2.5 | 1.5 |
| WH | 16 | LIVE | CUT | 6 | 16.2 | 83 | 99 | 1,434 | 0.0 | 6.0 | 8.6 | 2.1 | 1.4 |
| WH | 18 | LIVE | CUT | 2 | 18.2 | 88 | 104 | 657 | 0.0 | 2.0 | 3.6 | 0.8 | 0.7 |
| WH | 20 | LIVE | CUT | 3 | 19.7 | 92 | 105 | 1,216 | 0.0 | 3.0 | 6.4 | 1.4 | 1.2 |
| WH | 22 | LIVE | CUT | 2 | 22.0 | 101 | 118 | 1,146 | 0.0 | 2.0 | 5.3 | 1.1 | 1.1 |

Unit Log Grade Summary: Unit 2 ROW

| Sp | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|-------|------|-----|--------|----------|------|---------|
| DF | LIVE | 2 SAW | 16.7 | 31 | 4,579 | 0.0 | 25.0 | 4.6 |
| DF | LIVE | 3 SAW | 10.2 | 32 | 894 | 0.0 | 6.2 | 0.9 |
| DF | LIVE | 4 SAW | 5.5 | 31 | 366 | 0.0 | 4.0 | 0.4 |
| GF | LIVE | 2 SAW | 17.3 | 32 | 12,323 | 0.0 | 73.0 | 12.3 |
| GF | LIVE | 3 SAW | 11.4 | 31 | 1,633 | 0.0 | 11.3 | 1.6 |
| GF | LIVE | 4 SAW | 5.7 | 23 | 689 | 0.0 | 8.5 | 0.7 |
| RA | LIVE | 2 SAW | 12.6 | 32 | 355 | 0.0 | 2.3 | 0.4 |

| Sp | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|------|-----|--------|----------|------|---------|
| RA | LIVE | 3 SAW | 10.8 | 32 | 1,451 | 0.0 | 9.4 | 1.5 |
| RA | LIVE | 4 SAW | 6.1 | 30 | 5,205 | 0.0 | 40.2 | 5.2 |
| RA | LIVE | CULL | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | LIVE | UTILITY | 5.0 | 34 | 73 | 0.0 | 0.4 | 0.1 |
| RC | LIVE | 4 SAW | 5.0 | 25 | 27 | 0.0 | 0.1 | 0.0 |
| SS | LIVE | 2 SAW | 15.7 | 32 | 284 | 0.0 | 1.7 | 0.3 |
| SS | LIVE | 3 SAW | 7.7 | 40 | 72 | 0.0 | 0.9 | 0.1 |
| SS | LIVE | 4 SAW | 5.3 | 30 | 100 | 0.0 | 0.8 | 0.1 |
| WH | LIVE | 2 SAW | 14.1 | 32 | 2,888 | 0.0 | 20.0 | 2.9 |
| WH | LIVE | 3 SAW | 9.2 | 32 | 3,343 | 0.0 | 25.3 | 3.3 |
| WH | LIVE | 4 SAW | 5.2 | 28 | 1,671 | 0.0 | 15.3 | 1.7 |

Unit Log Sort Summary: Unit 2 ROW

| Sp | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|----------|------|-----|--------|----------|------|---------|
| DF | LIVE | Domestic | 11.4 | 31 | 5,839 | 0.0 | 35.3 | 5.8 |
| GF | LIVE | Domestic | 12.2 | 28 | 14,645 | 0.0 | 92.8 | 14.6 |
| RA | LIVE | Cull | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | LIVE | Domestic | 6.6 | 30 | 7,011 | 0.0 | 51.8 | 7.0 |
| RA | LIVE | Pulp | 5.0 | 34 | 73 | 0.0 | 0.4 | 0.1 |
| RC | LIVE | Domestic | 5.0 | 25 | 27 | 0.0 | 0.1 | 0.0 |
| SS | LIVE | Domestic | 7.9 | 32 | 456 | 0.0 | 3.4 | 0.5 |
| WH | LIVE | Domestic | 7.7 | 30 | 7,902 | 0.0 | 60.5 | 7.9 |

Unit Log Grade x Sort Summary: Unit 2 ROW

| Sp | Status | Grade | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|---------|----------|------|-----|--------|----------|------|---------|
| DF | LIVE | 2 SAW | Domestic | 16.7 | 31 | 4,579 | 0.0 | 25.0 | 4.6 |
| DF | LIVE | 3 SAW | Domestic | 10.2 | 32 | 894 | 0.0 | 6.2 | 0.9 |
| DF | LIVE | 4 SAW | Domestic | 5.5 | 31 | 366 | 0.0 | 4.0 | 0.4 |
| GF | LIVE | 2 SAW | Domestic | 17.3 | 32 | 12,323 | 0.0 | 73.0 | 12.3 |
| GF | LIVE | 3 SAW | Domestic | 11.4 | 31 | 1,633 | 0.0 | 11.3 | 1.6 |
| GF | LIVE | 4 SAW | Domestic | 5.7 | 23 | 689 | 0.0 | 8.5 | 0.7 |
| RA | LIVE | 2 SAW | Domestic | 12.6 | 32 | 355 | 0.0 | 2.3 | 0.4 |
| RA | LIVE | 3 SAW | Domestic | 10.8 | 32 | 1,451 | 0.0 | 9.4 | 1.5 |
| RA | LIVE | 4 SAW | Domestic | 6.1 | 30 | 5,205 | 0.0 | 40.2 | 5.2 |
| RA | LIVE | CULL | Cull | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | LIVE | UTILITY | Pulp | 5.0 | 34 | 73 | 0.0 | 0.4 | 0.1 |
| RC | LIVE | 4 SAW | Domestic | 5.0 | 25 | 27 | 0.0 | 0.1 | 0.0 |

| Sp | Status | Grade | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|--------|-------|----------|------|-----|--------|----------|------|---------|
| SS | LIVE | 2 SAW | Domestic | 15.7 | 32 | 284 | 0.0 | 1.7 | 0.3 |
| SS | LIVE | 3 SAW | Domestic | 7.7 | 40 | 72 | 0.0 | 0.9 | 0.1 |
| SS | LIVE | 4 SAW | Domestic | 5.3 | 30 | 100 | 0.0 | 0.8 | 0.1 |
| WH | LIVE | 2 SAW | Domestic | 14.1 | 32 | 2,888 | 0.0 | 20.0 | 2.9 |
| WH | LIVE | 3 SAW | Domestic | 9.2 | 32 | 3,343 | 0.0 | 25.3 | 3.3 |
| WH | LIVE | 4 SAW | Domestic | 5.2 | 28 | 1,671 | 0.0 | 15.3 | 1.7 |

Unit Log Grade x Diameter Bin Summary: Unit 2 ROW

| Sp | Bin | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|---------|------|-----|--------|----------|------|---------|
| DF | 5 - 8 | LIVE | 4 SAW | 5.5 | 31 | 366 | 0.0 | 4.0 | 0.4 |
| DF | 5 - 8 | LIVE | 3 SAW | 8.2 | 32 | 70 | 0.0 | 0.7 | 0.1 |
| DF | 9 - 11 | LIVE | 3 SAW | 10.5 | 31 | 824 | 0.0 | 5.6 | 0.8 |
| DF | 12 - 14 | LIVE | 2 SAW | 13.6 | 30 | 927 | 0.0 | 5.4 | 0.9 |
| DF | 15 - 19 | LIVE | 2 SAW | 17.1 | 32 | 2,126 | 0.0 | 12.3 | 2.1 |
| DF | 20+ | LIVE | 2 SAW | 23.5 | 32 | 1,526 | 0.0 | 7.3 | 1.5 |
| GF | 5 - 8 | LIVE | 4 SAW | 5.3 | 23 | 560 | 0.0 | 7.6 | 0.6 |
| GF | 9 - 11 | LIVE | 3 SAW | 10.6 | 31 | 1,076 | 0.0 | 8.3 | 1.1 |
| GF | 9 - 11 | LIVE | 4 SAW | 10.6 | 19 | 129 | 0.0 | 0.9 | 0.1 |
| GF | 12 - 14 | LIVE | 3 SAW | 13.1 | 26 | 157 | 0.0 | 0.9 | 0.2 |
| GF | 12 - 14 | LIVE | 2 SAW | 13.5 | 32 | 2,767 | 0.0 | 20.7 | 2.8 |
| GF | 15 - 19 | LIVE | 3 SAW | 16.0 | 40 | 400 | 0.0 | 2.1 | 0.4 |
| GF | 15 - 19 | LIVE | 2 SAW | 18.8 | 32 | 3,916 | 0.0 | 22.6 | 3.9 |
| GF | 20+ | LIVE | 2 SAW | 21.6 | 32 | 5,640 | 0.0 | 29.7 | 5.6 |
| RA | 5 - 8 | LIVE | UTILITY | 5.0 | 34 | 73 | 0.0 | 0.4 | 0.1 |
| RA | 5 - 8 | LIVE | CULL | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | 5 - 8 | LIVE | 4 SAW | 5.9 | 30 | 4,733 | 0.0 | 36.9 | 4.7 |
| RA | 9 - 11 | LIVE | 4 SAW | 9.5 | 32 | 472 | 0.0 | 3.3 | 0.5 |
| RA | 9 - 11 | LIVE | 3 SAW | 10.8 | 32 | 1,451 | 0.0 | 9.4 | 1.5 |
| RA | 12 - 14 | LIVE | 2 SAW | 12.6 | 32 | 355 | 0.0 | 2.3 | 0.4 |
| RC | 5 - 8 | LIVE | 4 SAW | 5.0 | 25 | 27 | 0.0 | 0.1 | 0.0 |
| SS | 5 - 8 | LIVE | 4 SAW | 5.3 | 30 | 100 | 0.0 | 0.8 | 0.1 |
| SS | 5 - 8 | LIVE | 3 SAW | 7.7 | 40 | 72 | 0.0 | 0.9 | 0.1 |
| SS | 15 - 19 | LIVE | 2 SAW | 15.7 | 32 | 284 | 0.0 | 1.7 | 0.3 |
| WH | 5 - 8 | LIVE | 4 SAW | 5.2 | 28 | 1,671 | 0.0 | 15.3 | 1.7 |
| WH | 5 - 8 | LIVE | 3 SAW | 7.8 | 32 | 1,035 | 0.0 | 8.7 | 1.0 |
| WH | 9 - 11 | LIVE | 3 SAW | 10.2 | 32 | 2,169 | 0.0 | 15.7 | 2.2 |
| WH | 12 - 14 | LIVE | 3 SAW | 12.0 | 28 | 139 | 0.0 | 0.8 | 0.1 |

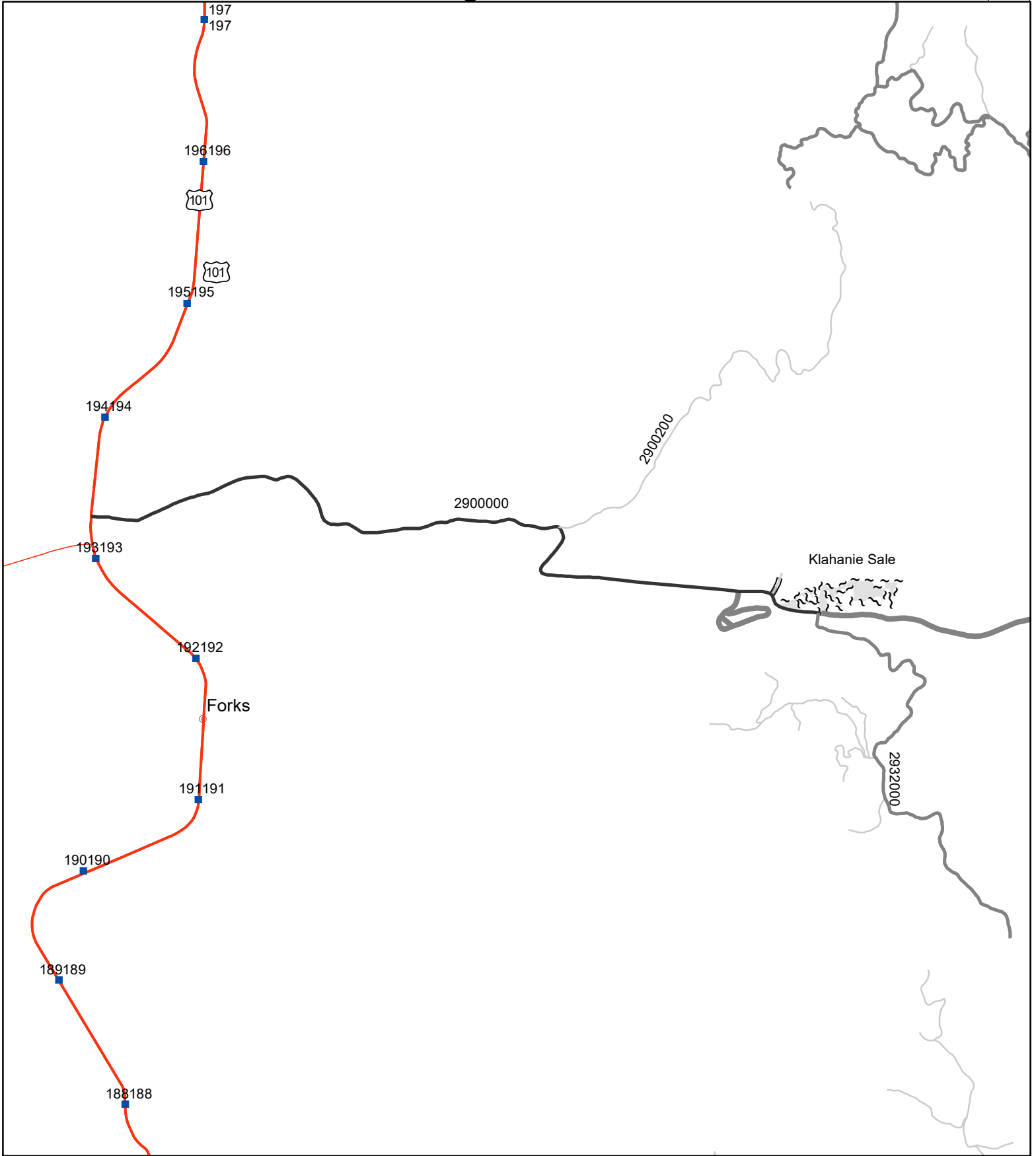
| Sp | Bin | Status | Grade | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|-------|------|-----|--------|----------|------|---------|
| WH | 12 - 14 | LIVE | 2 SAW | 13.3 | 32 | 1,898 | 0.0 | 13.7 | 1.9 |
| WH | 15 - 19 | LIVE | 2 SAW | 16.6 | 32 | 990 | 0.0 | 6.3 | 1.0 |

Unit Log Sort x Diameter Bin Summary: Unit 2 ROW

| Sp | Bin | Status | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|----|---------|--------|----------|------|-----|--------|----------|------|---------|
| DF | 5 - 8 | LIVE | Domestic | 5.7 | 31 | 436 | 0.0 | 4.7 | 0.4 |
| DF | 9 - 11 | LIVE | Domestic | 10.5 | 31 | 824 | 0.0 | 5.6 | 0.8 |
| DF | 12 - 14 | LIVE | Domestic | 13.6 | 30 | 927 | 0.0 | 5.4 | 0.9 |
| DF | 15 - 19 | LIVE | Domestic | 17.1 | 32 | 2,126 | 0.0 | 12.3 | 2.1 |
| DF | 20+ | LIVE | Domestic | 23.5 | 32 | 1,526 | 0.0 | 7.3 | 1.5 |
| GF | 5 - 8 | LIVE | Domestic | 5.3 | 23 | 560 | 0.0 | 7.6 | 0.6 |
| GF | 9 - 11 | LIVE | Domestic | 10.6 | 29 | 1,205 | 0.0 | 9.2 | 1.2 |
| GF | 12 - 14 | LIVE | Domestic | 13.4 | 32 | 2,924 | 0.0 | 21.6 | 2.9 |
| GF | 15 - 19 | LIVE | Domestic | 18.5 | 33 | 4,316 | 0.0 | 24.7 | 4.3 |
| GF | 20+ | LIVE | Domestic | 21.6 | 32 | 5,640 | 0.0 | 29.7 | 5.6 |
| RA | 5 - 8 | LIVE | Pulp | 5.0 | 34 | 73 | 0.0 | 0.4 | 0.1 |
| RA | 5 - 8 | LIVE | Cull | 5.4 | 40 | 0 | 100.0 | 0.0 | 0.0 |
| RA | 5 - 8 | LIVE | Domestic | 5.9 | 30 | 4,733 | 0.0 | 36.9 | 4.7 |
| RA | 9 - 11 | LIVE | Domestic | 10.4 | 32 | 1,923 | 0.0 | 12.7 | 1.9 |
| RA | 12 - 14 | LIVE | Domestic | 12.6 | 32 | 355 | 0.0 | 2.3 | 0.4 |
| RC | 5 - 8 | LIVE | Domestic | 5.0 | 25 | 27 | 0.0 | 0.1 | 0.0 |
| SS | 5 - 8 | LIVE | Domestic | 5.9 | 33 | 172 | 0.0 | 1.7 | 0.2 |
| SS | 15 - 19 | LIVE | Domestic | 15.7 | 32 | 284 | 0.0 | 1.7 | 0.3 |
| WH | 5 - 8 | LIVE | Domestic | 5.8 | 29 | 2,705 | 0.0 | 24.0 | 2.7 |
| WH | 9 - 11 | LIVE | Domestic | 10.2 | 32 | 2,169 | 0.0 | 15.7 | 2.2 |
| WH | 12 - 14 | LIVE | Domestic | 13.2 | 31 | 2,037 | 0.0 | 14.5 | 2.0 |
| WH | 15 - 19 | LIVE | Domestic | 16.6 | 32 | 990 | 0.0 | 6.3 | 1.0 |

Klahanie Vicinity Map

Page 1 of 3



Legend

OPER_MAINT

1 - BASIC CUSTODIAL CARE (CLOSED)

2 - HIGH CLEARANCE VEHICLES

3 - SUITABLE FOR PASSENGER CARS

4 - MODERATE DEGREE OF USER COMFORT

■ WSDOT - Milepost Markers

101

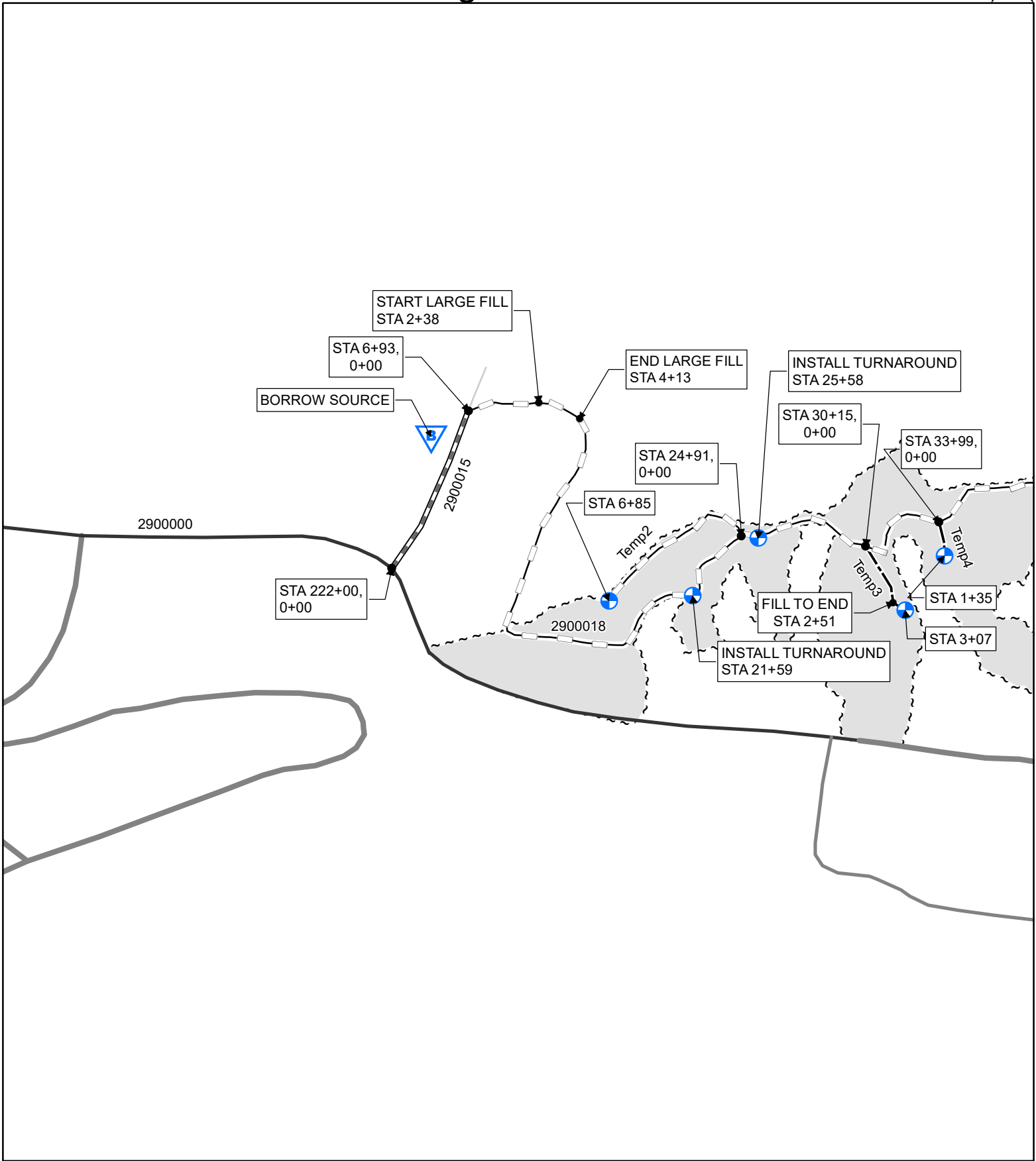
U.S.

State

Klahanie Unit Boundary

0 0.25 0.5 1 Miles

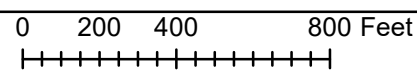
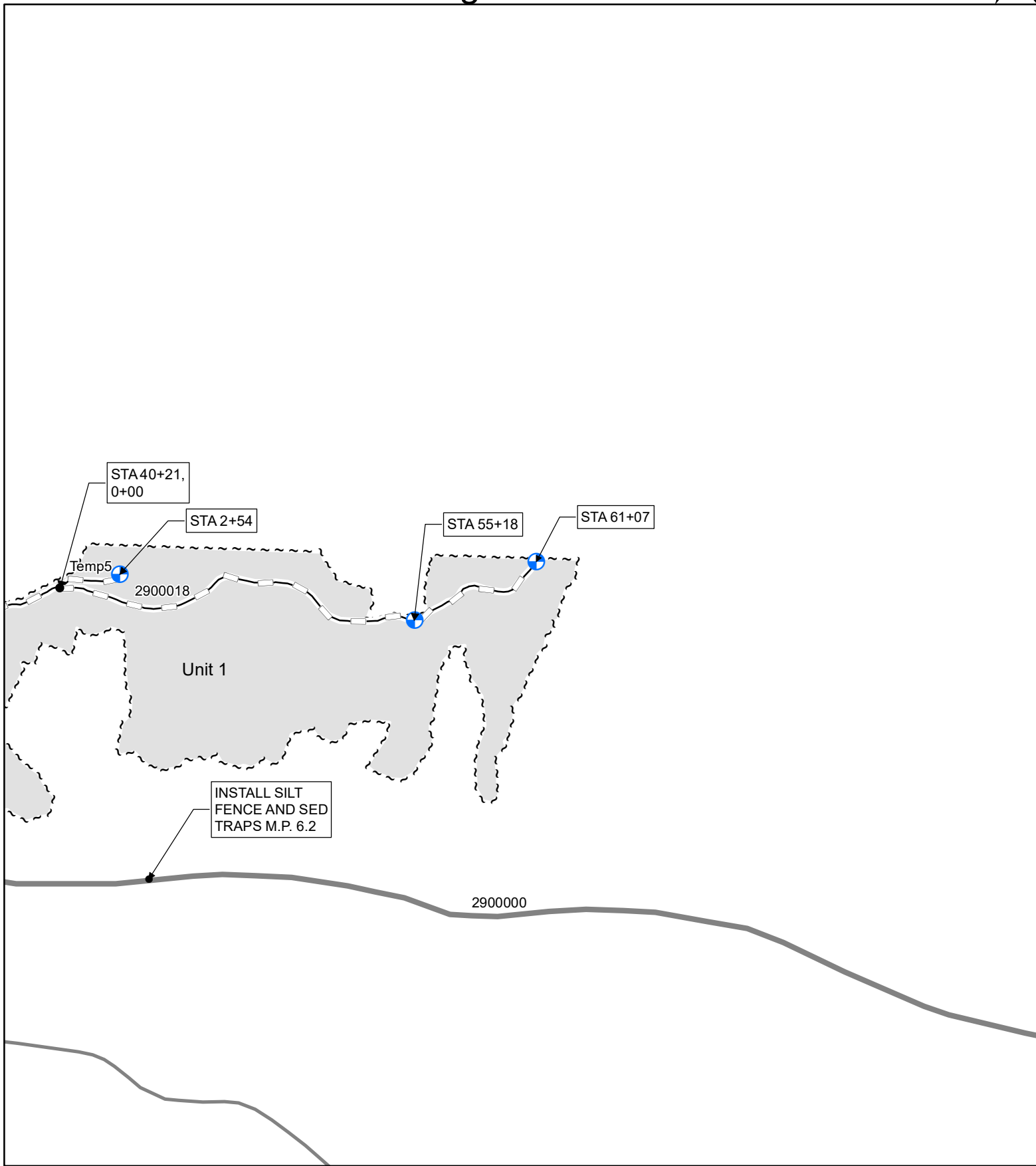
Klahanie Detail Maps



Legend

- | | | | | | | | | | | | | | | | | | |
|--|---------------------|--|---------|--|-------------------------|--|-----------------------------------|--|------------------------|--|-----------------------------------|--|-----------------------------|--|---------------------------------|--|-------------------------------------|
| | Borrow | | POI | | Optional Reconstruction | | Optional Construction | | Klahanie Unit Boundary | | 1 - BASIC CUSTODIAL CARE (CLOSED) | | 2 - HIGH CLEARANCE VEHICLES | | 3 - SUITABLE FOR PASSENGER CARS | | 4 - MODERATE DEGREE OF USER COMFORT |
| | Landing | | Station | | Optional Construction | | 1 - BASIC CUSTODIAL CARE (CLOSED) | | Klahanie Unit Boundary | | 1 - BASIC CUSTODIAL CARE (CLOSED) | | 2 - HIGH CLEARANCE VEHICLES | | 3 - SUITABLE FOR PASSENGER CARS | | 4 - MODERATE DEGREE OF USER COMFORT |
| | Prehaul Maintenance | | | | | | | | | | | | | | | | |

0 200 400 800 Feet



Legend

- Landing
- Station
- Klahanie Unit Boundary
- POI
- Optional Reconstruction
- Klahanie Timber Sale Agreement # 36-105255
- FS System Roads**
 - 3 - SUITABLE FOR PASSENGER CARS
 - 2 - HIGH CLEARANCE VEHICLES

GOOD NEIGHBOR AUTHORITY
OLYMPIC NATIONAL FOREST
PACIFIC RANGER DISTRICT

KLAHANIE TIMBER SALE ROAD PLAN
CLALLAM COUNTY

AGREEMENT NO.: 36-105255

STAFF ENGINEER: SCOTT HANNA

DESIGN ENGINEER: CHAD VANDEHEY

DATE: 05/01/2023

DRAWN & COMPILED BY: CHAD VANDEHEY

SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

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

0-2 REQUIRED ROADS

The specified work on the following roads is required.

| <u>Road</u> | <u>Stations/M.P.</u> | <u>Type</u> | <u>Maintenance Level</u> |
|-------------|----------------------|----------------------|--------------------------|
| 2900000 | M.P. 6.2 | Pre-haul Maintenance | 4 |
| 2900015 | 0+00 to 6+93 | Pre-haul Maintenance | 1 |

0-3 OPTIONAL ROADS

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

| <u>Road</u> | <u>Stations</u> | <u>Type</u> | <u>Maintenance Class</u> |
|-------------|-----------------|----------------|--------------------------|
| 2900018 | 0+00 to 61+07 | Reconstruction | 1 |
| Temp2 | 0+00 to 6+85 | Reconstruction | Non-System Road |
| Temp3 | 0+00 to 3+07 | Construction | Non-System Road |
| Temp4 | 0+00 to 1+35 | Construction | Non-System Road |
| Temp5 | 0+00 to 2+54 | Reconstruction | Non-System Road |

0-4 CONSTRUCTION

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

| <u>Road</u> | <u>Stations</u> |
|--------------|-----------------|
| Temp3 | 0+00 to 3+07 |
| Temp4 | 0+00 to 1+35 |
| TOTAL | 4+42 |

- Clearing, Grubbing, and Right-of-way debris disposal;
- Construct road in accordance to the TYPICAL SECTION SHEET;
- Excavation and/or embankment to subgrade;
- Compaction of embankment, subgrade, and rock as listed in the COMPACTION LIST.
- Turnaround and turnout construction;
- Construction of drivable dips in accordance with the DRIVABLE DIP DETAIL as listed in the CULVERT AND DRIANAGE LIST and directed by the Contract Administrator.
- Acquisition and application of rock as listed in the ROCK LIST;
- Creating positive drainage using a combination of insloping, outsloping, and ditchouts as needed or as designated by the Contract Administrator.
- If overwintered, roads must be waterbarred by September 30. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.
- Decommissioning according to CLAUSE 9-20 ROAD DECOMMISSIONING.

0-5 RECONSTRUCTION

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

| <u>Road</u> | <u>Stations</u> | <u>Additional Requirements</u> |
|--------------|-----------------|---|
| 2900018 | 0+00 to 61+07 | Large Fill (Approx. 7000 CY), Turnarounds. |
| Temp2 | 0+00 to 6+85 | |
| Temp5 | 0+00 to 2+54 | |
| TOTAL | 70+46 | |

- Reconstruct road in accordance to the TYPICAL SECTION SHEET;
- De-sod running surface;
- Grade shape and compact as listed in the COMPACTION LIST.
- Turnaround and turnout construction;
- Construction of drivable dips as according to the DRIVABLE DIP DETAIL as listed in the CULVERT AND DRIANAGE LIST.
- Acquisition, application, and compaction of rock as listed in the ROCK LIST;
- Creating positive drainage using a combination of insloping, outsloping, and ditchouts as needed or as designated by the Contract Administrator.
- If overwintered, Culverts must be removed and roads must be waterbarred by September 30. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

- Decommissioning according to CLAUSE 9-20 ROAD DECOMMISSIONING.

0-6 PRE-HAUL MAINTENANCE

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

| <u>Road</u> | <u>Stations</u> | <u>Requirements</u> |
|--------------|-----------------|---------------------------------------|
| 2900000 | M.P. 6.2 | Install sediment traps and silt fence |
| 2900015 | 0+00 to 6+93 | Grade and Compact |
| TOTAL | 6+93 | |

0-7 POST-HAUL MAINTENANCE

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

0-8 CLOSURE

This project includes road closure listed in Clause 9-15 ROAD CLOSURE.

0-9 DECOMMISSIONING

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

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

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

1-2 UNFORESEEN CONDITIONS

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

1-3 ROAD DIMENSIONS

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

1-4 ROAD TOLERANCES

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

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

1-6 ORDER OF PRECEDENCE

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

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

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

1-7 TEMPORARY ROAD CLOSURE

Purchaser shall notify the Contract Administrator a minimum of 5 business days before the closure of any road. Construction may not close the following roads for more than the specified number of hours.

| <u>Road</u> | <u>Number of Allowable Closed Hours</u> |
|-------------|---|
| 2900000 | 2 |

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation, and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

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

1-10 WSDOT STANDARD SPECIFICATION REFERENCE

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

SUBSECTION ROAD MARKING

1-15 ROAD MARKING

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

- Orange flags for centerline and points of interest.

1-18 REFERENCE POINT DAMAGE

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

SUBSECTION TIMING

1-20 COMPLETE BY DATE

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

1-21 HAUL APPROVAL

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

1-22 WORK NOTIFICATIONS

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

1-23 ROAD WORK PHASE APPROVAL

Purchaser shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:

- Subgrade construction and compaction
- Drainage installation
- Rock application and compaction

SUBSECTION RESTRICTIONS

1-25 ACTIVITY TIMING RESTRICTION

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

| <u>Road</u> | <u>Stations</u> | <u>Activity</u> | <u>Closure Period</u> |
|-------------|-----------------|--------------------------|---|
| All | All | All Road Work Activities | November 1 st to August 15 th , and cannot start until 2 hours after official sunrise and must stop 2 hours before official sunset 08/16 - 09/15. |

1-26 OPERATING DURING CLOSURE PERIOD

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

1-29 SEDIMENT RESTRICTION

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

1-30 CLOSURE TO PREVENT DAMAGE

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

- Wheel track rutting exceeds 6 inches on jaw run or pit run roads.
- Wheel track rutting exceeds 2 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.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

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

1-32 BRIDGE OR ASPHALT SURFACE RESTRICTION

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

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

1-33 SNOW PLOWING RESTRICTION

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

SUBSECTION OTHER INFRASTRUCTURE

1-40 ROAD APPROACHES TO COUNTY ROADS, USFS PAVED 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

It is the Purchaser's responsibility to identify any utilities. 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.

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

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

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

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

2-4 PASSAGE OF LIGHT VEHICLES

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

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION CLEARING

3-5 CLEARING

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

3-7 RIGHT-OF-WAY DECKING

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

3-8 PROHIBITED DECKING AREAS

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

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

SUBSECTION GRUBBING

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET and within waste areas. Purchaser shall also remove stumps with undercut roots outside the grubbing limits.

SUBSECTION ORGANIC DEBRIS

3-20 ORGANIC DEBRIS DEFINITION

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

3-21 DISPOSAL COMPLETION

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

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

Waste areas for organic debris are located at areas approved in writing by the Contract Administrator.

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 20 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 45%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

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

SUBSECTION PILE

3-31 PILING AND SCATTERING

Right-of-way debris shall be scattered unless debris amounts are significant enough to produce piles a minimum of 4' tall by 6' wide. 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 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. No piling within the Riparian Habitat Conservation Area (RHCA).

SECTION 4 – EXCAVATION

4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. Pioneering may not extend more than 1000 feet beyond

completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

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

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 percent adverse.
- Minimum curve radius is 50 feet at centerline.
- Maximum grade change for sag vertical curves is 12% in 100 feet.
- Maximum grade change for crest vertical curves is 10% in 100 feet.

4-4 SWITCHBACK STANDARDS

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

Purchaser shall follow these standards for switchbacks:

- Maximum adverse grades for switchbacks is 12%.
- Maximum favorable grades for switchbacks is 15%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must be constructed on the tangents preceding and departing from the switchbacks.

4-5 CUT SLOPE RATIO

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

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

4-6 EMBANKMENT SLOPE RATIO

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

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

4-7 SHAPING CUT AND FILL SLOPE

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

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

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

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

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

4-10 WIDEN THE EXISTING SUBGRADE

Purchaser shall widen the subgrade and fill slopes to the dimensions shown on the TYPICAL SECTION SHEET. If necessary, Purchaser shall reconstruct excavation slopes to provide sufficient width for the road surface.

4-12 FULL BENCH CONSTRUCTION

Where side slopes exceed 55%, Purchaser shall use full bench construction for the entire subgrade width. Purchaser shall end haul waste material to the location specified by the Contract Administrator.

SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

4-21 TURNOUTS

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

4-22 TURNAROUNDS

Turnarounds must be no larger than 30 feet long and 30 feet wide. Locations are shown on Klahanie Detail Maps and subject to written approval by the Contract Administrator.

SUBSECTION DITCH CONSTRUCTION

4-29 DITCHOUTS

Purchaser shall construct ditchouts as needed and as directed by the Contract Administrator. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio.

SUBSECTION WASTE MATERIAL (DIRT)

4-35 WASTE MATERIAL DEFINITION

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

4-36 DISPOSAL OF WASTE MATERIAL

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

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- Within 20 feet of a cross drain culvert.
- Within 20 feet of any ditchout or drivable dip.
- Within 100 feet of a live stream or wetland.
- Within a riparian habitat conservation zone.
- Within a wetland management zone.
- On side slopes steeper than 55%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

SUBSECTION BORROW

4-47 BORROW MATERIAL

Borrow material may not contain more than 5% organic debris, or trash by volume.

4-48 NATIVE MATERIAL

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

4-49 BORROW SOURCE

Purchaser shall obtain borrow material from the listed borrow source. Development of the borrow source must be in accordance with a written BORROW SOURCE

DEVELOPMENT PLAN to be submitted by the Purchaser and approved in writing by the Contract Administrator.

| <u>Source</u> | <u>Location</u> | <u>Type</u> |
|---------------|-----------------|-----------------|
| Rock Pit | | Borrow Material |
| 2900018 Road | Embankment | Borrow Material |

4-50 BORROW APPLICATION

Purchaser shall apply borrow in accordance with quantities shown below. Borrow must be spread, shaped, and compacted full width concurrent with hauling operations.

| <u>Road</u> | <u>Stations</u> | <u>Cubic Yards</u> | <u>Comments</u> |
|-------------|-----------------|--------------------|---|
| 2900018 | 2+38 to 4+13 | 7000 | Use material in pit and/or reconstruction generated material. |

SUBSECTION SHAPING

4-55 ROAD SHAPING

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

SUBSECTION COMPACTION

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. A plate compactor must be used for segments too narrow to accommodate equipment.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before timber haul.

4-63 EXISTING SURFACE COMPACTION

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

SUBSECTION CULVERTS

5-5 CULVERTS

Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts may be new or used material and must meet the specifications in Clauses 10-15 through 10-24.

5-7 USED CULVERT MATERIAL

On temporary roads, Purchaser may install used culverts. All other roads must have new culverts installed. Purchaser shall obtain approval from the Contract Administrator for the quality of the used culverts before installation. Culverts must meet the specifications in Clauses 10-15 through 10-24.

SUBSECTION CULVERT INSTALLATION

5-15 CULVERT INSTALLATION

Culvert installation must 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". Culverts must be installed in a manner consistent with the manufacturer's recommendations. Precautions will be taken to ensure no sediment is delivered to live water.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

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

SUBSECTION ENERGY DISSIPATERS

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT AND DRAINAGE LIST that specify the placement of rock.

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 with heavy-duty steel posts, and fastened securely to the posts with No. 10 galvanized smooth wire.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

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

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

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

5-27 ARMORING FOR CULVERTS

Purchaser shall place riprap in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the CULVERT AND DRAINAGE LIST or as directed by the Contract Administrator. Rock shall not restrict the flow of water into culvert inlets or catch basins. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed

SUBSECTION SURFACE DRAINAGE

5-31 ROLLING DIP CONSTRUCTION

Purchaser shall construct drivable dips in accordance with the DRIVABLE DIP DETAIL and as specified on the CULVERT AND DRAINAGE LIST. Drivable dips must be installed concurrently with construction of the subgrade and must be maintained in an operable condition.

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by September 30. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources are subject to written approval by the Contract Administrator before their use. Commercial rock sources must be certified USFS weed-free.

| <u>Possible Source</u> | <u>Location</u> |
|--------------------------|-------------------|
| Hillcar & Fletcher, INC. | Forks, Washington |

SUBSECTION ROCK MANUFACTURE

6-21 IN-PLACE PROCESSING

Purchaser may use in-place processing, such as a grid roller or other method, if suitable crushing can be demonstrated to meet the surfacing size-specified in Clause 6-38 4-INCH IN-PLACE ROCK. Purchaser shall use in-place processing, such as a grid roller, mobile linear crusher, or other method of in-place processing to produce 4-inch in-place rock. Rock must meet the surfacing size specified in Clause 6-38 4-INCH IN-PLACE ROCK. Purchaser shall remove any existing organic debris before the start of in-place crushing operations. The use of in-place processing methods is subject to written approval by the Contract Administrator.

| <u>Road</u> | <u>Stations</u> | <u>Remarks</u> |
|-------------|-----------------|----------------|
| 2900018 | 0+00 to 61+07 | |

6-23 ROCK GRADATION TYPES

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

SUBSECTION ROCK GRADATIONS

6-28 1 ¼-INCH MINUS CRUSHED ROCK

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

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

6-37 4-INCH JAW RUN ROCK

| | |
|---------------------------|-------------|
| % Passing 4" square sieve | 95% |
| % Passing U.S. #40 sieve | 16% maximum |
| % Passing U.S. #200 sieve | 5% maximum |

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

6-38 4-INCH IN-PLACE ROCK

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

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

SUBSECTION ROCK MEASUREMENT

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are loose yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction. Unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

6-56 ROCK MEASUREMENT BY TRUCK VOLUME

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

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade shape, and subgrade compaction before rock application on temporary construction or reconstruction roads.

6-71 ROCK APPLICATION

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

6-73 ROCK FOR WIDENED PORTIONS

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way unless otherwise specified in the ROCK LIST.

6-75 OPTIONAL ROCK EXCEPTION

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

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

| <u>Road</u> | <u>Stations</u> | <u>Options</u> |
|-------------|-----------------|-------------------------------|
| Temp2 | 0+00 to 6+85 | 4" In Place Instead of 4" Jaw |
| Temp3 | 0+00 to 3+07 | 4" In Place Instead of 4" Jaw |
| Temp4 | 0+00 to 1+35 | 4" In Place Instead of 4" Jaw |
| Temp5 | 0+00 to 2+54 | 4" In Place Instead of 4" Jaw |

SUBSECTION ASPHALT

6-93 ASPHALT REPAIR

If hauled upon, asphalt could deteriorate. Any damage or wear, including but not limited to depressions, sags, cracks, and alligatoring, must be replaced with new material. All pavement repair areas must be saw-cut before removal. The cutting line must be a minimum of 6 inches beyond the damaged area. Damaged areas exceeding 25 square

feet must have asphalt placed with an approved paving machine. The replacement asphalt must be Hot Mix Asphalt or equivalent and installed per Clause 5-04.3(5)E of the WSDOT Standard Specifications. Purchaser shall notify the Contract Administrator at least 5 working days before starting any asphalt road repairs. Purchaser shall obtain written approval from the Contract Administrator for all completed repairs.

6-94 HMA WEATHER LIMITATIONS (WSDOT 5-04.3(16))

HMA may not be placed on any wet surface, or when the average surface temperatures are less than 45°F, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

When in the opinion of the Contract Administrator the weather is such that satisfactory results cannot be obtained in any phase of operations, the Purchaser shall suspend operations until the weather is favorable.

6-96 TEMPORARY TRAFFIC CONTROL

Purchaser shall provide temporary traffic control for all work performed on the following roads. Purchaser shall provide all flaggers, pilot car, signs, and barricades necessary for the protection of traffic. Partial road closures are allowed for up to 1 Hour.

Before starting work Purchaser shall submit to the Contract Administrator, for approval, a traffic control plan describing temporary warning signs and other traffic control measures to be used by the Purchaser.

| |
|-------------|
| <u>Road</u> |
| 2900000 |

SECTION 7 – STRUCTURES

SUBSECTION SIGNS

7-1 SIGN INSTALLATION

Purchaser shall install and maintain the following road signs. Signs must comply with the Federal Highway Administration’s Manual on Uniform Traffic Control Devices.

| <u>Road</u> | <u>Station</u> | <u>Sign</u> |
|-------------|----------------|--------------------------------------|
| 2900000 | M.P. 5.6 and 7 | Forest Operations Ahead (or Similar) |

SUBSECTION GATE CLOSURE

7-70 GATE CLOSURE

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

| <u>Road</u> | <u>Station</u> |
|-------------|----------------|
| 2900015 | 1+89 |

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

Purchaser shall install sediment traps listed in the CULVERT AND DRAINAGE LIST in accordance with the SEDIMENT TRAP DETAIL.

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 3-inch layer of straw to all exposed soils within 50 feet of a stream or wetland. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

SUBSECTION REVEGETATION

8-15 REVEGETATION

On the following road(s), Purchaser shall spread grass seed on all exposed soil resulting from road work activities.

| <u>Road</u> | <u>Location</u> | <u>Qty (lbs)*</u> |
|-------------|-----------------|-------------------|
| 2900018 | 0+00 to 61+07 | 38 |
| Temp2 | 0+00 to 6+85 | 8 |
| Temp3 | 0+00 to 3+07 | 4 |
| Temp4 | 0+00 to 1+35 | 2 |
| Temp6 | 0+00 to 2+54 | 3 |

*Quantities are estimates only.

8-16 REVEGETATION SUPPLY

The Forest Service will provide the grass seed.

8-17 REVEGETATION TIMING

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

8-18 PROTECTION FOR SEED

Purchaser shall provide a protective cover for seed on all exposed soils within 50 feet of streams or wetlands. The protective cover may consist of a 4-Inch layer of weed free straw. Seed must be covered before the first anticipated storm event.

8-19 ASSURANCE FOR SEEDED AREA

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

SUBSECTION SEED, FERTILIZER, AND MULCH

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil inside the grubbing limits at a rate of 25 pounds per acre of exposed soil.

SECTION 9 – POST-HAUL ROAD WORK

SUBSECTION STRUCTURES

9-1 EARTHEN BARRICADES

Purchaser shall construct barricades in accordance with the EARTHEN BARRICADE DETAIL.

| <u>Road</u> | <u>Stations</u> |
|-------------|-----------------|
| 2900018 | 0+00 |
| | 4+13 |

9-3 CULVERT MATERIAL REMOVED FROM FEDERAL LAND

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

SUBSECTION POST-HAUL MAINTENANCE

9-5 POST-HAUL MAINTENANCE

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

| <u>Road</u> | <u>Stations</u> |
|-------------|-----------------|
| 2900015 | 0+00 to 6+93 |

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

SUBSECTION DECOMMISSIONING

9-15 ROAD CLOSURE

Purchaser shall close the following roads at the termination of use.

| <u>Road</u> | <u>Stations</u> | <u>Requirements</u> |
|---------------------------|-----------------|------------------------------------|
| 2900018 | 0+00 to 61+07 | Large fill removal. Spread in pit. |
| Total Road Closure | 61+07 | |

9-16 CLOSURE

- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.
- Remove culverts.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Slope all trench walls and approach embankments no steeper than 1.5:1.
- Apply grass seed concurrently with abandonment and in accordance with Section 8 EROSION CONTROL.
- Cover, concurrently with abandonment, all exposed soils within 50 feet of any live stream, with a 4-inch deep layer of straw.

9-20 ROAD DECOMMISSIONING

Purchaser shall decommission the following roads at the termination of use before the termination of this contract.

| <u>Road</u> | <u>Stations</u> | <u>Type</u> |
|------------------------------------|-----------------|-------------|
| Temp2 | 0+00 to 6+85 | Light |
| Temp3 | 0+00 to 3+07 | Light |
| Temp4 | 0+00 to 1+35 | Light |
| Temp5 | 0+00 to 2+54 | Light |
| Total Light Decommissioning | 13+81 | |

9-22 LIGHT DECOMMISSIONING

- Rip the surface to a minimum depth of 12 inches
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.
- Remove culverts.
- Remove ditch cross drain culverts and leave the resulting trench open.
- Slope all trench walls and approach embankments no steeper than 1.5:1.
- Apply grass seed concurrently with decommissioning and in accordance with Section 8 EROSION CONTROL.
- Cover, concurrently with decommissioning, all exposed soils within 50 feet of any live stream, with a 4-inch deep layer of straw.

SECTION 10 MATERIALS

SUBSECTION GEOTEXTILES

10-6 GEOTEXTILE FOR TEMPORARY SILT FENCE

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for filtration. Woven slit-film geotextiles are not allowed. Material must be free of defects, cuts, and tears.

| | <u>ASTM Test</u> | <u>Requirements</u> |
|-------------------------|------------------|--|
| Type | -- | Unsupported between posts |
| Apparent opening size | D 4751 | No. 30 max., No. 100 min. |
| Water permittivity | D 4491 | 0.02 sec ⁻¹ |
| Grab tensile strength | D 4632 | 180 lb in machine direction, 100lb in cross-machine direction |
| Grab tensile elongation | D 4632 | 30% max. at 180 lb or more |
| Ultraviolet stability | D 4355 | 70% retained after 500 hours of exposure |

SUBSECTION CULVERTS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be galvanized (zinc coated meeting AASHTO M-218) except culverts over 24 inches must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

10-16 CORRUGATED ALUMINUM CULVERT

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

10-17 CORRUGATED PLASTIC CULVERT

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

10-20 FLUME AND DOWNPOUT

Downspouts and flumes must meet the AASHTO specification designated for the culvert. Plastic downspouts and flumes must be Type C – corrugated single walled pipe.

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.

10-22 PLASTIC BAND

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

10-23 RUBBER CULVERT GASKETS

Rubber gaskets must be continuous closed cell, synthetic expanded rubber gaskets conforming to the requirements of ASTM D 1056. Rubber gaskets must be used with all corrugated metal pipe coupling bands.

10-24 GAUGE AND CORRUGATION

Unless otherwise stated in the CULVERT LIST Metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

| <u>Diameter</u> | <u>Gauge</u> | <u>Corrugation</u> |
|-----------------|--------------|--------------------|
| 18" | 16 (0.064") | 2 2/3" X 1/2" |
| 24" to 48" | 14 (0.079") | 2 2/3" X 1/2" |

SECTION 11 SPECIAL NOTES

11-1 BRIDGE LOAD RESTRICTIONS

Vehicles exceeding Highway legal load limits shall not pass over bridges without obtaining an overload permit from the Forest Service.

11-2 NOXIOUS WEED CONTROL

Purchaser shall thoroughly pressure wash all equipment prior to entry onto U.S. Forest Service land, or before moving equipment between infested sites, to remove all contaminated soils, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. Equipment shall be considered free of soil, seed, and other such debris when a visual inspection does not disclose such material. The Contract Administrator reserves the right to also require the cleaning of equipment as required by this clause in cases where equipment is being moved onto non-federal lands.

Purchaser shall notify the Contract Administrator in advance of moving all off-road construction equipment onto U.S. Forest Service lands. Notification will include a location approved by the Contract Administrator where the equipment will be cleaned by the Purchaser, and made available for inspection by the State at a time agreed by the Parties. Only logging and construction equipment cleaned as required under this clause, and inspected by the Contract Administrator (or designee), will be allowed to operate on Federal lands within the sale area. All subsequent move-ins of equipment to the sale area shall be treated in the same manner as the initial move in. "Off-road equipment" includes all construction machinery, except for dump trucks, pickup trucks or vehicles used to transport personnel on a daily basis.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

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Cuts and Fills

- Maintain slope lines as constructed. 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 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 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 drivable 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 dissipators at culvert outlets with non-erodible material or rock.
- Keep ditches and culverts 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.

Structures

- Repair culverts, bridges, gates, fences, cattle guards, signs, and other road structures as required because of purchaser use.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 2 of 2

Preventative Maintenance

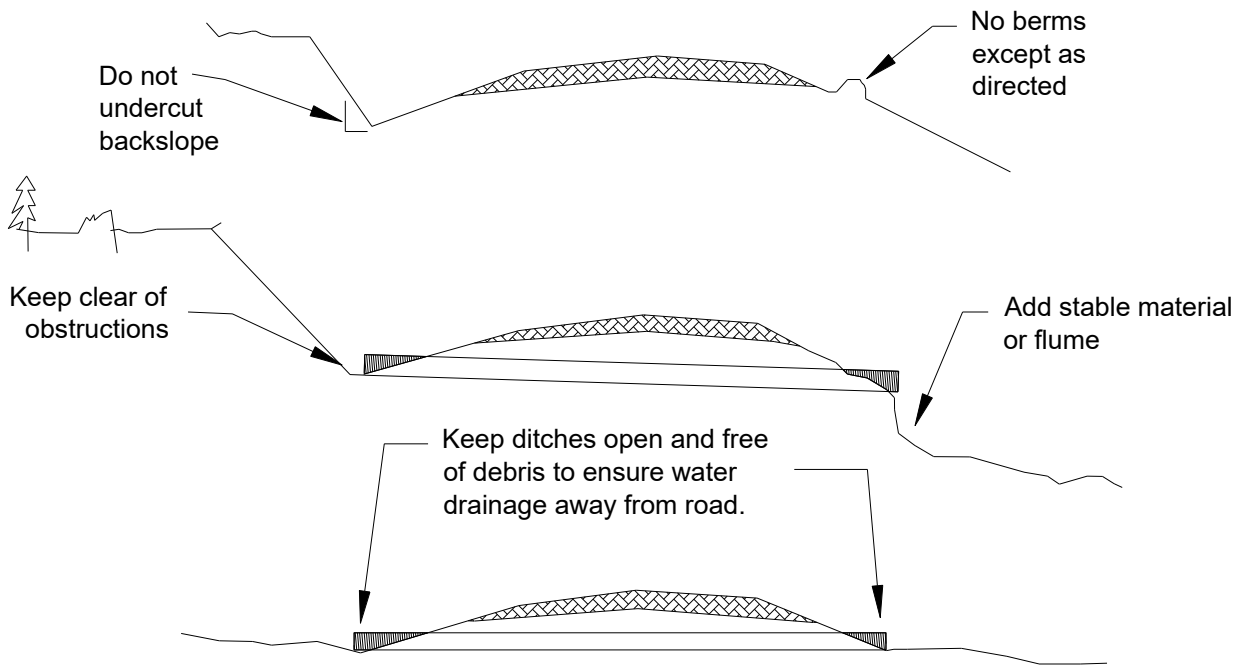
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

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

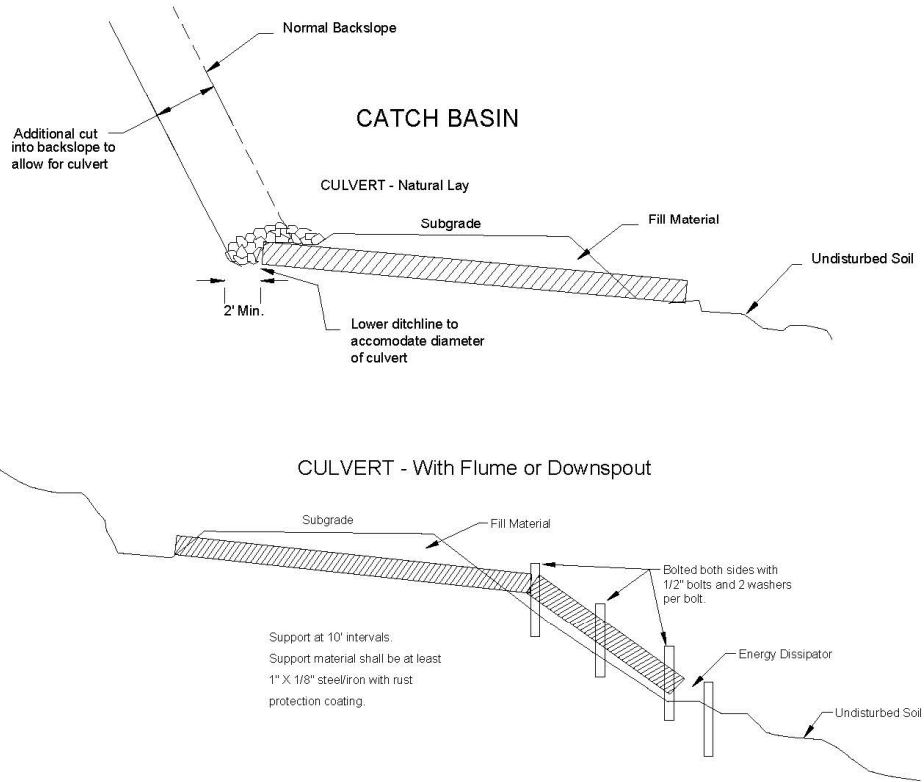
Debris

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



CULVERT AND DRAINAGE SPECIFICATION DETAIL

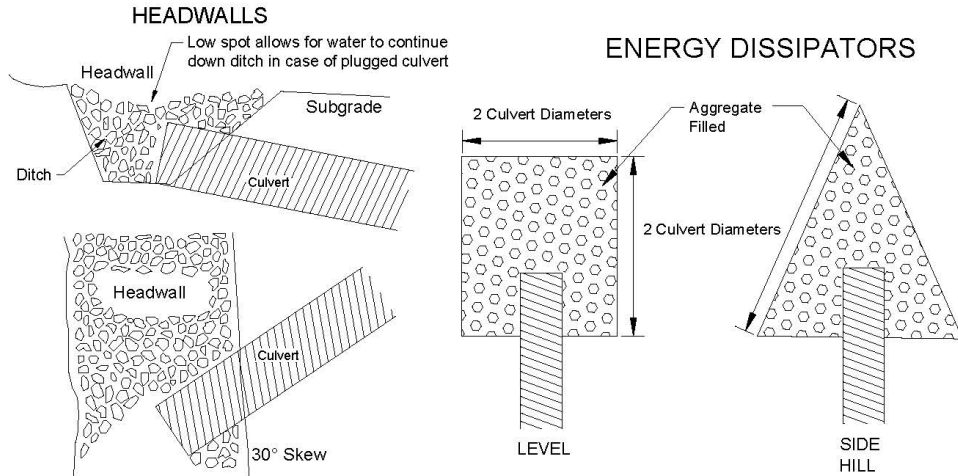
(Page 1 of 3)



CULVERT AND DRAINAGE SPECIFICATION DETAIL

(Page 2 of 3)

Proper preparation of foundation and placement of bedding material shall precede the installation of all culvert pipe. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform dense unyielding base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.



Headwalls to be constructed of material that will resist erosion.

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

CULVERT AND DRAINAGE SPECIFICATION DETAIL

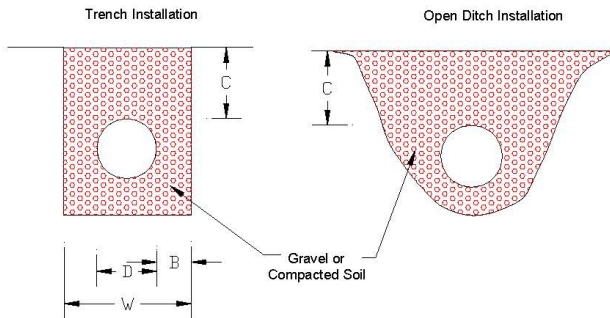
(Page 3 of 3)

POLYETHYLENE PIPE INSTALLATION

INSTALLATION REQUIREMENTS:

1. Crushed stone, gravel, or compacted soil backfill material shall be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed 1/6 pipe diameter or 4" diameter, whichever is smaller.
2. The corrugated pipe shall be laid on grade, on a layer of bedding material as shown for the two types of installations. If native soil is used as the bedding and backfill material, it shall be well compacted in six inch layers under the haunches, around the sides and above the pipe to the recommended minimum height of cover.
3. Site conditions and availability of bedding materials often dictate the type of installation method used.
4. The load bearing capability of flexible conduits is dependent on the type of backfill material used and the degree of compaction achieved. Crushed stone and gravel backfill materials typically reach a compaction level of 90-95% AASHTO standard density without compaction. When native soils are used as backfill material, a compaction level of 85% is required. This minimum compaction can be achieved by either hand or mechanical tamping.

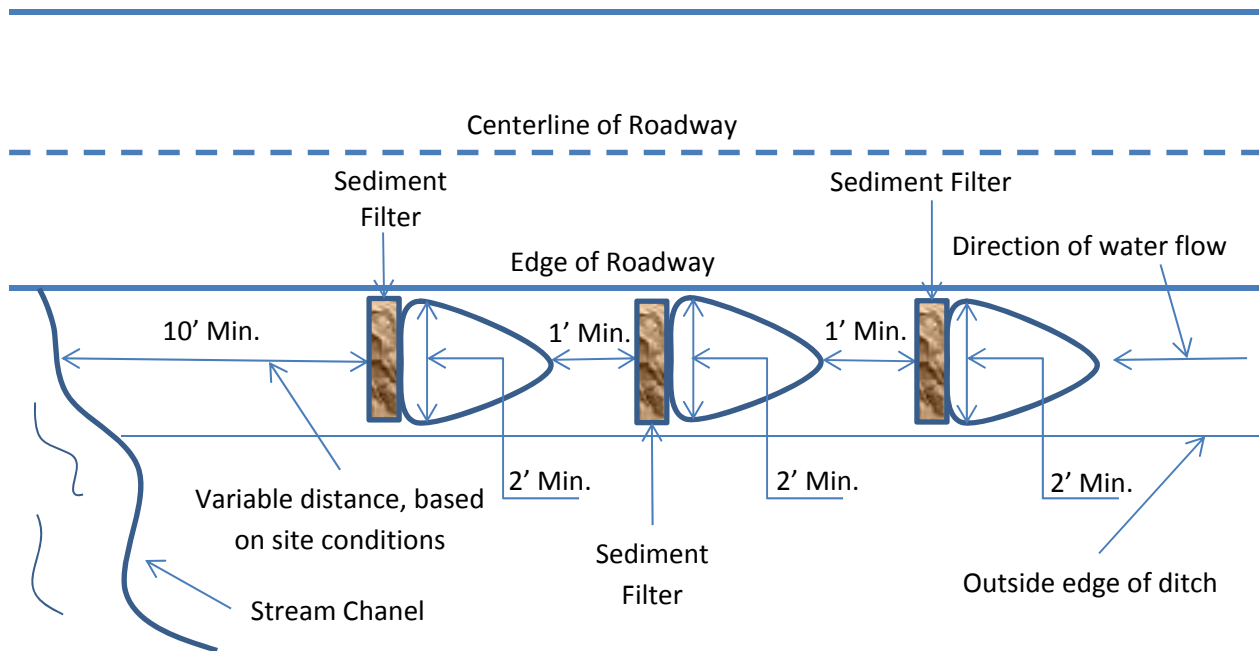
MINIMUM DIMENSIONS
Trench or Open Ditch Installation



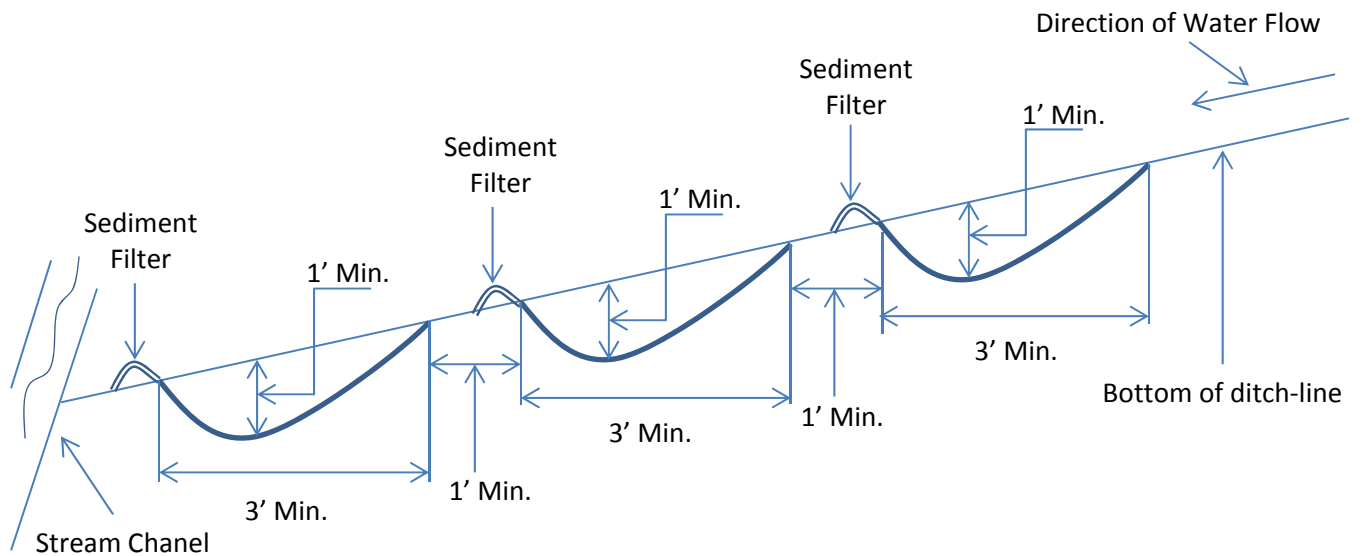
| Nominal Diameter | Minimum Thickness | Minimum Cover | Min. Trench Width |
|------------------|-------------------|---------------|-------------------|
| D | B | C | W |
| 18" | 6" | 12" | 36" |
| 24" | 6" | 12" | 42" |
| 30" | 6" | 12" | 48" |
| 36" | 6" | 12" | 54" |

SEDIMENT TRAP DETAIL

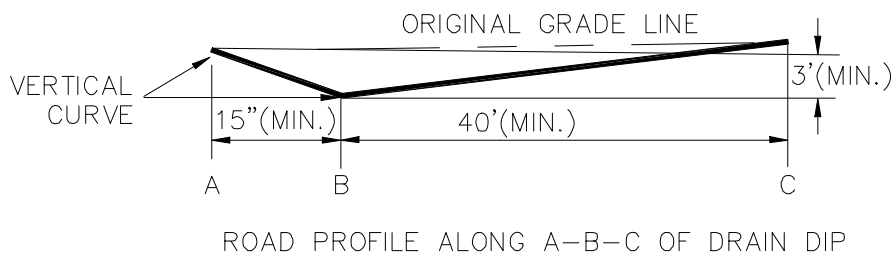
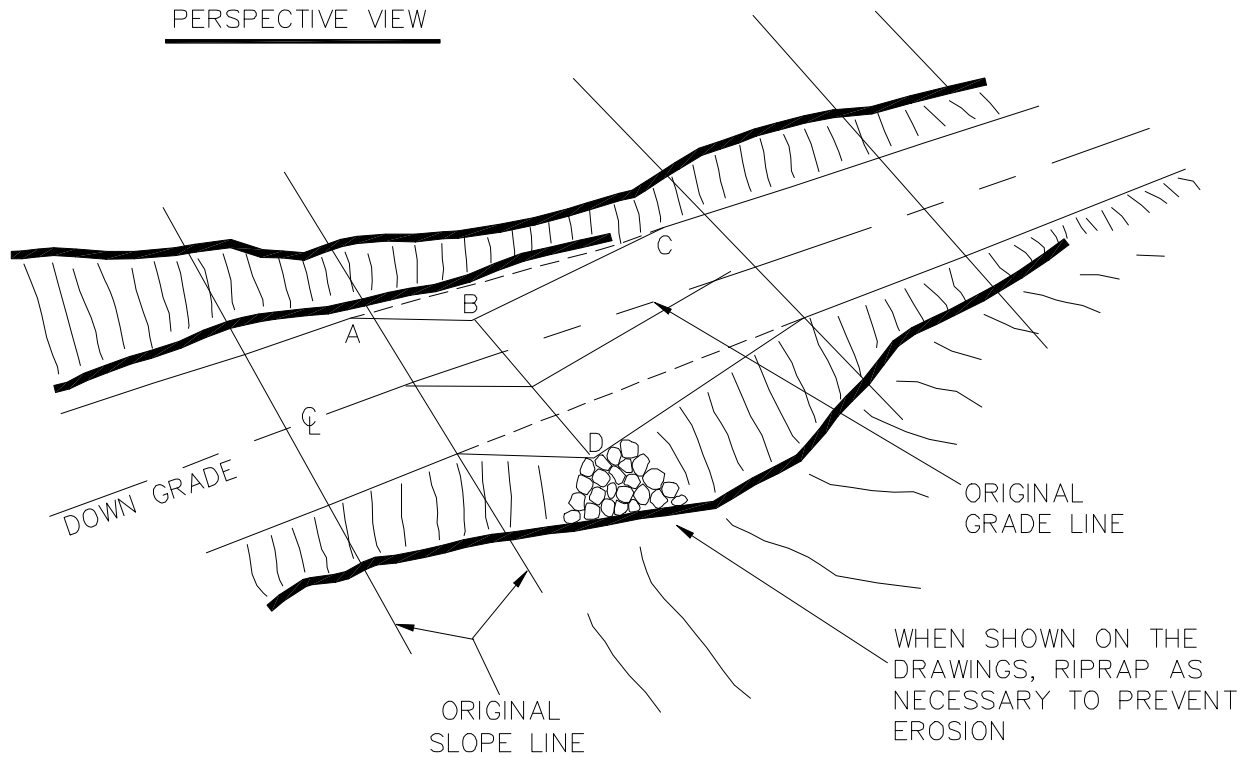
Top View



Profile View



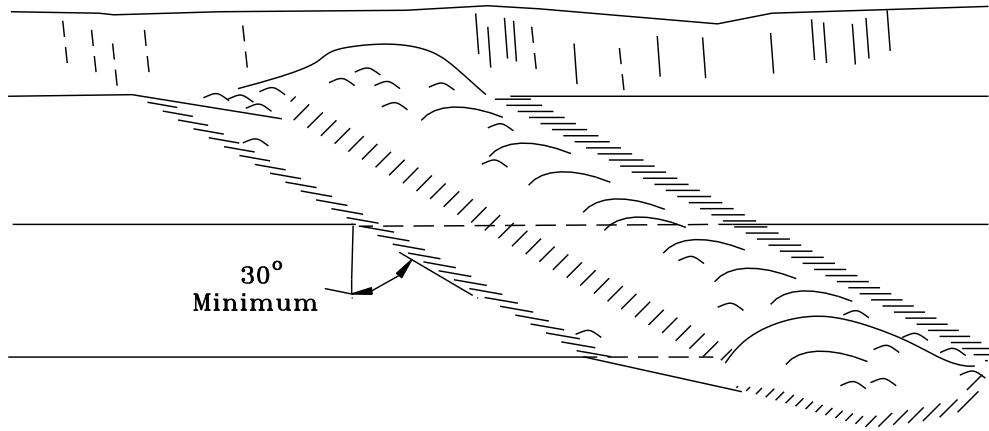
DRIVABLE DIP DETAIL



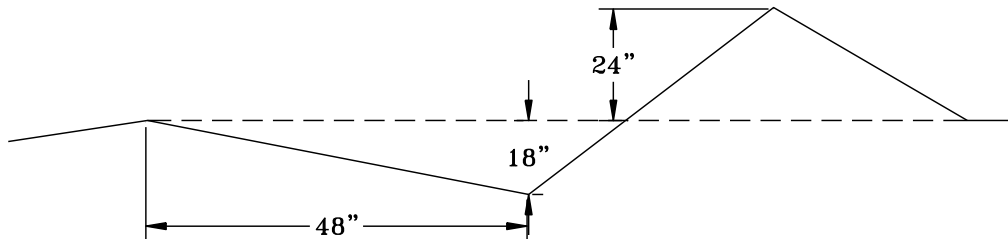
- Notes: 1) Plan shown is for outsloped dip. Dips may be either insloped or outsloped.
- 2) When insloped, dips shall discharge into a culvert, drop inlet, or ditch out.
- 3) The minimum cross grade from "B" to "D" shall be 6%.
- 4) Skew line B-D to fit low point in draw if located in natural drain.
- 5) Preferred construction is to excavate entire dip. If embankment is used, it shall be rock.

Non-Drivable Water Bar Detail

Cross Ditch

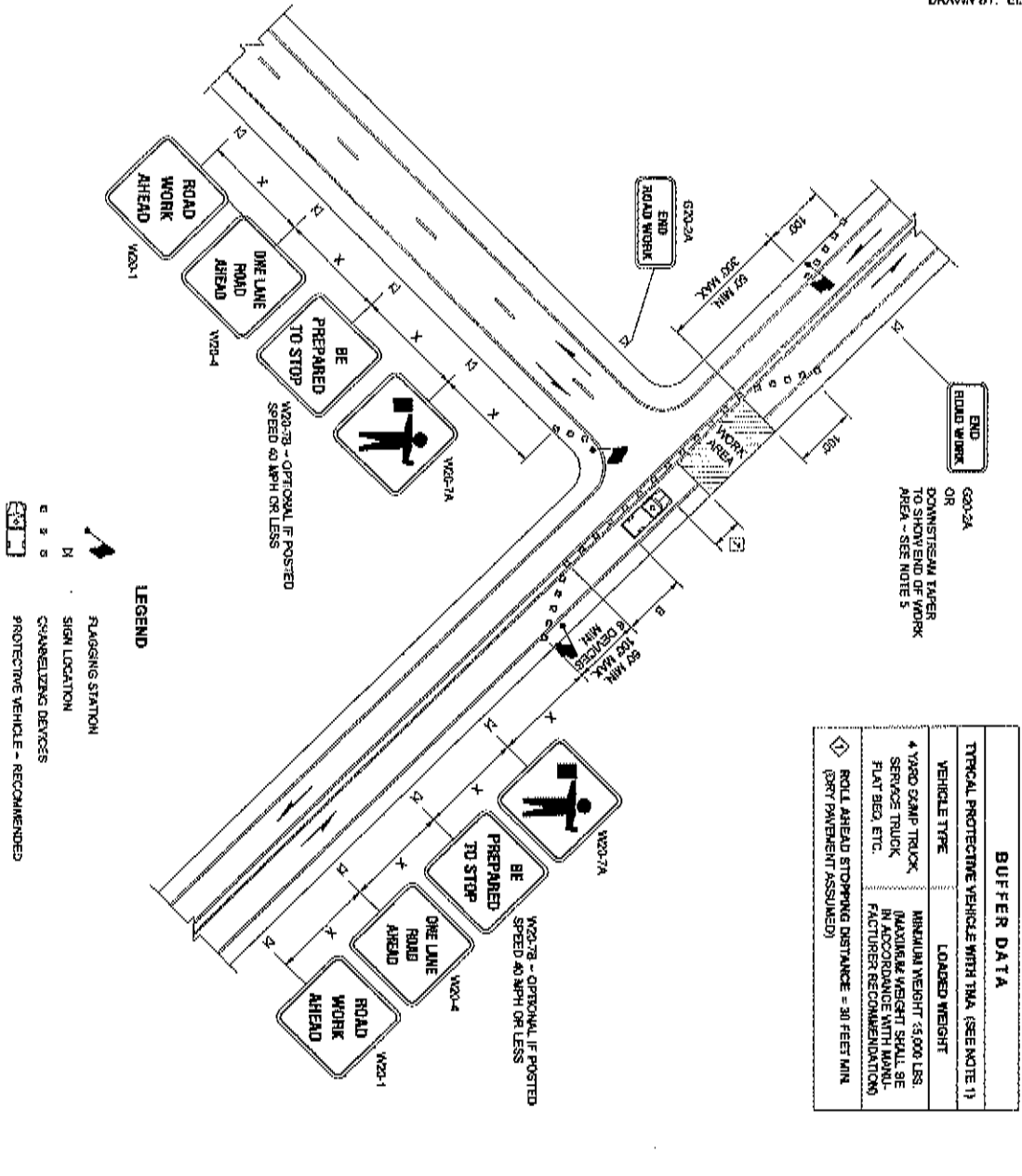


Cross Section at Centerline



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

| | |
|---|--|
| Water Bar Detail | |
|  | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| <small>SPS REGION</small> | |



LONGITUDINAL BUFFER SPACE = B

| POSTED SPEED (MPH) | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LENGTH B (FEET) | 155 | 200 | 250 | 305 | 360 | 425 | 495 | 570 | 645 |

BUFFER DATA

| VEHICLE TYPE | LOADED WEIGHT |
|--|--|
| 4 WARD GRAP TRUCK, SERVICE TRUCK, FLAT BED, ETC. | MINIMUM WEIGHT - 45,000 LBS. IN ACCORDANCE WITH MANUAL FACTOR RECOMMENDATION |
| ROLL AHEAD STOPPING DISTANCE = 30 FEET MIN. (DEPARTMENT ASSUMED) | |

TYPICAL PROTECTIVE VEHICLE WITH TMA. (SEE NOTE 1)

- NOTES**
1. A Protective Vehicle is recommended regardless if a Truck Mounted Attenuation (TMA) is available; a work vehicle may be used. When no TMA is used, the Protective Vehicle shall be strategically located to shield workers, with 700' specific Roll-Ahead distance.
 2. Night work requires additional roadway lighting at flagging stations. See WSDOT Standard Specifications for additional details.
 3. Extend Channelizing Device taper across shoulder - recommended.
 4. Sign sequence is the same for both directions of travel on the roadway.
 5. Channelizing Device spacing for the downstream taper option shall be 20' O.C.
 6. For signs size refer to Manual on Uniform Traffic Control Devices (MUTCD) and WSDOT Sign Fabrication Manual MS-05.

SIGN SPACING = X (1)

| | | |
|--|-----------------|------------|
| RURAL HIGHWAYS | 60 / 65 MPH: | 900' ± |
| RURAL ROADS | 45 / 50 MPH: | 900' ± |
| RURAL ROADS & URBAN ARTERIALS | 35 / 40 MPH: | 350' ± |
| RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS | 25 / 30 MPH: | 200' ± (2) |
| URBAN STREETS | 25 MPH OR LESS: | 100' ± (2) |

- (1) ALL SIGN SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS, AND DRIVEWAYS.
- (2) THIS SIGN SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

**FOR LOCAL AGENCY USE ONLY
NOT FOR USE ON STATE ROUTES**



LANE CLOSURE WITH FLAGGING CONTROL STANDARD PLAN K-20-40-01

SHEET 1 OF 1 SHEET

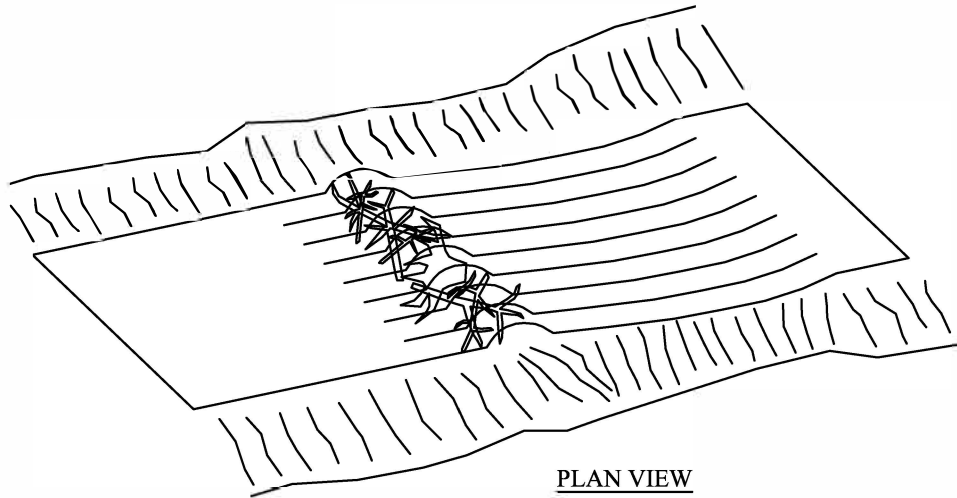
APPROVED FOR PUBLICATION

Ken L. Smith
STATE DESIGN DIVISION
Washington State Department of Transportation

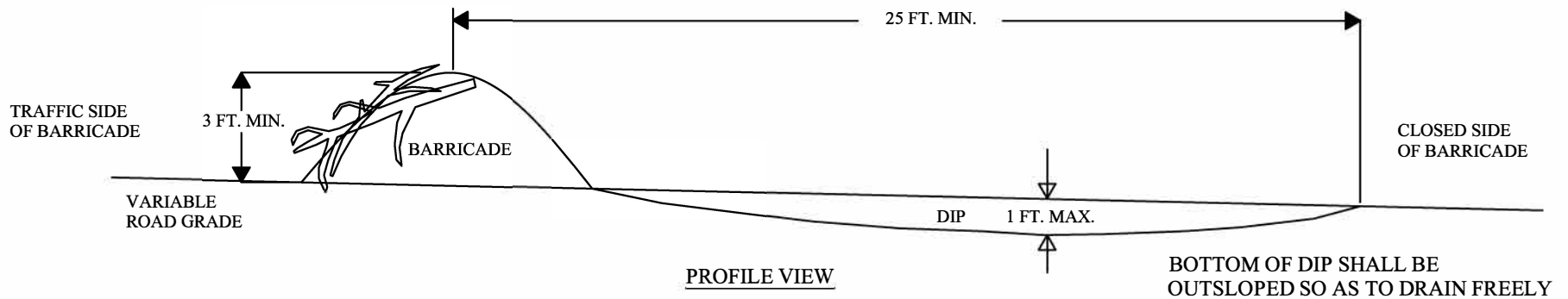
02-15-07

Klahane, Timbe, Sale Agreement # 36-105255

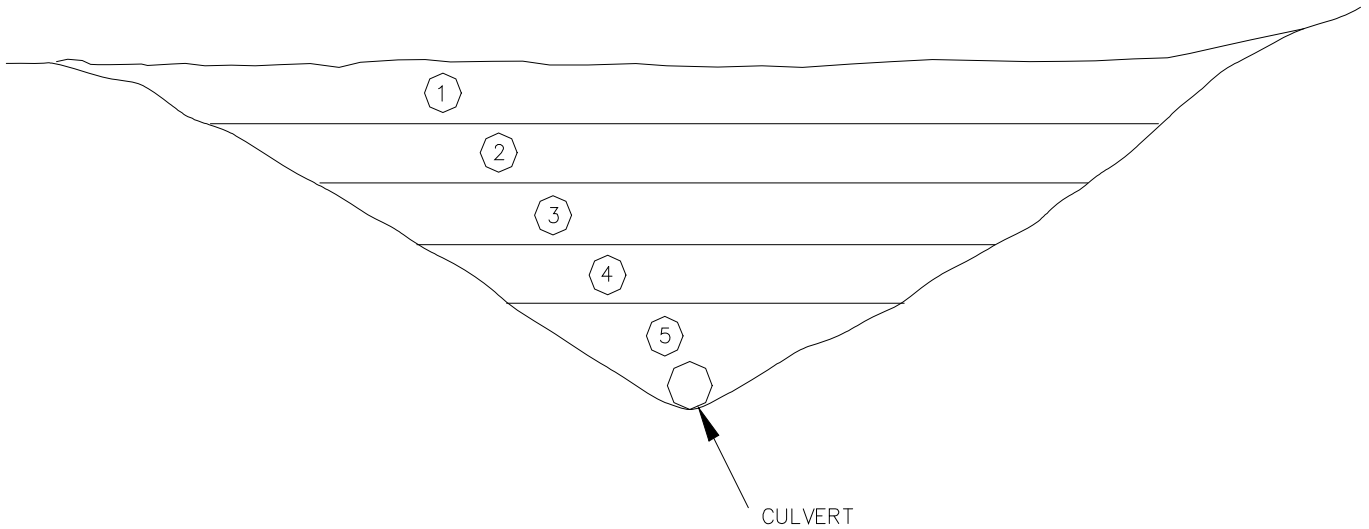
EARTHEN BARRICADE DETAIL



SLASH AND ROOT WADS SHALL BE INCORPORATED INTO THE TRAFFIC SIDE OF THE BARRICADE.



FILL REMOVAL DETAIL



Remove fill in layers not to exceed 3 feet.

Channel slopes shall be according to 9-2 CULVERT REMOVAL
FROM LIVE STREAM

Stream bed width shall be according to 9-2 CULVERT REMOVAL
FROM LIVE STREAM

ROCK ACCOUNTABILITY DETAIL

SALE NAME: _____

Purchaser: _____

Agreement #: _____

Contractor: _____

Rock Quarry/Pit: _____

Truck No: _____

DAILY ROCK LOAD RECORD

| DATE | LOAD TIME | ROAD NO. | TYPE OF ROCK | QUANTITY | COMMENTS |
|------|-----------|----------|--------------|----------|----------|
| | | | | | |
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Truck Driver Signature

SIGNATURE DATE

**KLAHANIE TIMBER SALE
SUMMARY - Road Development Costs**

GOOD NEIGHBOR AUTHORITY
OLYMPIC NATIONAL FOREST

PACIFIC RANGER DISTRICT
CLALLAM COUNTY WASHINGTON

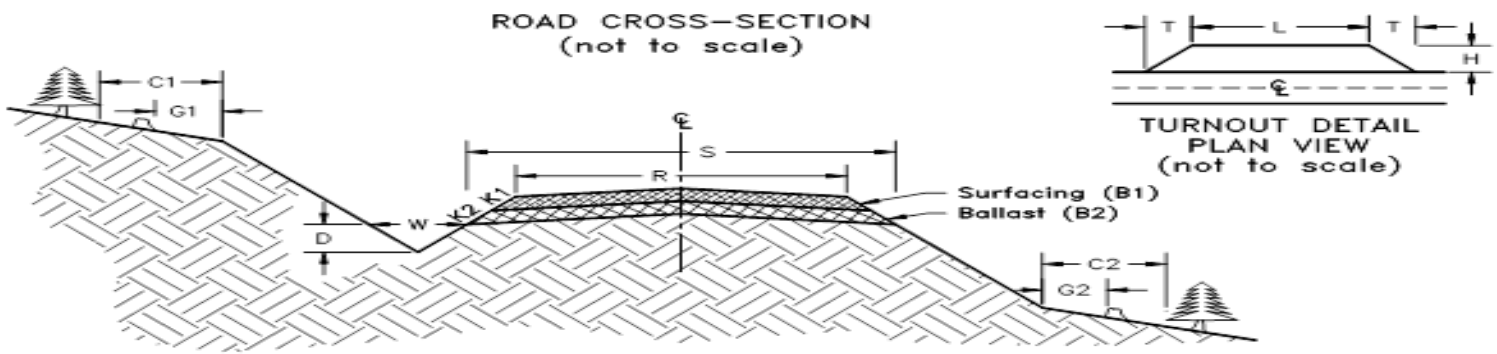
Compiled By Chad Vandehey

Agreement # 36-105255

Date 05/01/2023

| ROAD NUMBERS: | Temp3, Temp4 | 2900018, Temp2, Temp5 | 2900015, 2900000 M.P 6.2 |
|-----------------------------|--------------|-----------------------|--|
| ROAD STANDARD: | Construction | Reconstruction | Maintenance |
| NUMBER OF STATIONS: | 4+42 | 70+46 | 6+93 |
| CLEARING & GRUBBING: | \$ 828.75 | \$ 13,211.25 | \$ - |
| EXCAVATION AND FILL: | \$ 2,836.39 | \$ 52,956.68 | \$ - |
| ROAD & LANDING ROCK: | \$ 2,820.45 | \$ 32,567.50 | \$ - |
| CULVERTS AND FLUMES: | \$ - | \$ - | \$ - |
| MISC. MAINTENANCE: | \$ 20.33 | \$ 169.71 | \$ 198.31 |
| STRUCTURES: | | | |
| MANAGEMENT & OVERHEAD (10%) | \$ 650.59 | \$ 9,890.51 | \$ 19.83 |
| MOBILIZATION: | \$ 1,666.67 | \$ 1,666.67 | \$ 1,666.67 |
| POST HAUL MOBILIZATION: | | | |
| COST PER STATION: | \$ 1,996.19 | \$ 2,232.09 | \$ 295.07 |
| POST HAUL MAINTENANCE: | \$ - | \$ - | \$ 160.06 |
| DECOMMISSIONING & CLOSURE: | | \$ 46,810.80 | |
| TOTAL COSTS: | \$ 8,823.18 | \$ 157,273.13 | \$ 2,044.86 |
| | | | TOTAL (All Roads): \$168,141.17 |
| | | | SALE VOLUME MBF: 1,536 |
| | | | TOTAL \$/MBF: \$109.47 |

TYPICAL SECTION SHEET



L = 50'
 T = 25'
 H = 12'

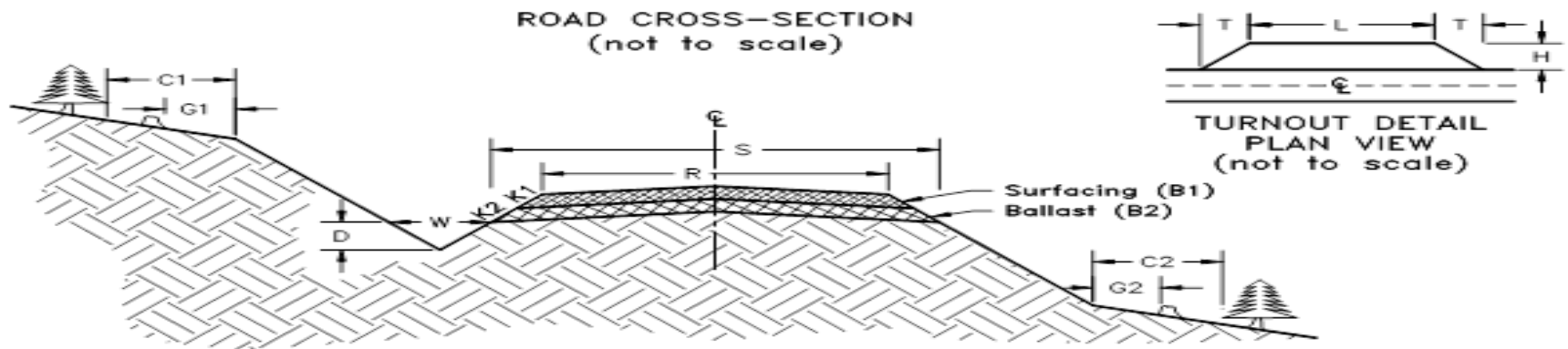
| Road Name | Maintenance Level | Stations | | Tolerance Class | Subgrade Width | Road Width | Ditch | | Crown @ CL (in) | Grubbing Limits | | Clearing Limits | |
|-----------|-------------------|----------|-------|-----------------|----------------|------------|-------|-------|-----------------|-----------------|----|-----------------|----|
| | | From | To | | | | Width | Depth | | G1 | G2 | C1 | C2 |
| 2900000 | 4 | M.P. 6.2 | | - | - | - | - | - | - | - | - | - | - |
| 2900015 | 1 | 0+00 | 6+93 | A | - | - | - | - | - | - | - | - | - |
| 2900018 | Non-System | 0+00 | 61+07 | C | 16 | 12 | 0 | 0 | 3 | 3 | 3 | 5 | 5 |
| Temp2 | Non-System | 0+00 | 6+85 | C | 16 | 12 | 0 | 0 | 3 | 3 | 3 | 5 | 5 |
| Temp3 | Non-System | 0+00 | 3+07 | C | 16 | 12 | 0 | 0 | 3 | 3 | 3 | 5 | 5 |
| Temp4 | Non-System | 0+00 | 1+35 | C | 16 | 12 | 0 | 0 | 3 | 3 | 3 | 5 | 5 |
| Temp5 | Non-System | 0+00 | 2+54 | C | 16 | 12 | 0 | 0 | 3 | 3 | 3 | 5 | 5 |
| | | | | | | | | | | | | | |
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COMPACTION LIST

Page 1 of 1

| Road Name | Stations | | Type | Max. Depth per Left (in.) | Equipment Type | Equipment Weight (pounds) | Minimum # of Passes | Maximum Operating Speed |
|-----------|----------|----|---------------------|---------------------------|-----------------------|---------------------------|---------------------|-------------------------|
| | From | To | | | | | | |
| All | - | - | Maintenance grading | - | Vibratory Smooth Drum | 12000 | 3 Low Freq. Vibe on | 3 |
| All | - | - | Subgrade | - | Vibratory Smooth Drum | 12000 | 3 Low Freq. Vibe on | 3 |
| All | - | - | Embankment | 12 | Vibratory Smooth Drum | 12000 | 3 Low Freq. Vibe on | 3 |
| All | - | - | Fill | 24 | Vibratory Smooth Drum | 12000 | 3 Low Freq. Vibe on | 3 |
| All | - | - | Rock | 6 | Vibratory Smooth Drum | 12000 | 3 Low Freq. Vibe on | 3 |
| All | - | - | Waste Area | 24 | Excavation | 30000 | - | - |

ROCK LIST
4-Inch Jaw
Page 1 of 3



Rock Sources

C 4" In Place
B Commercial

L = 50' T = 25' H = 12'

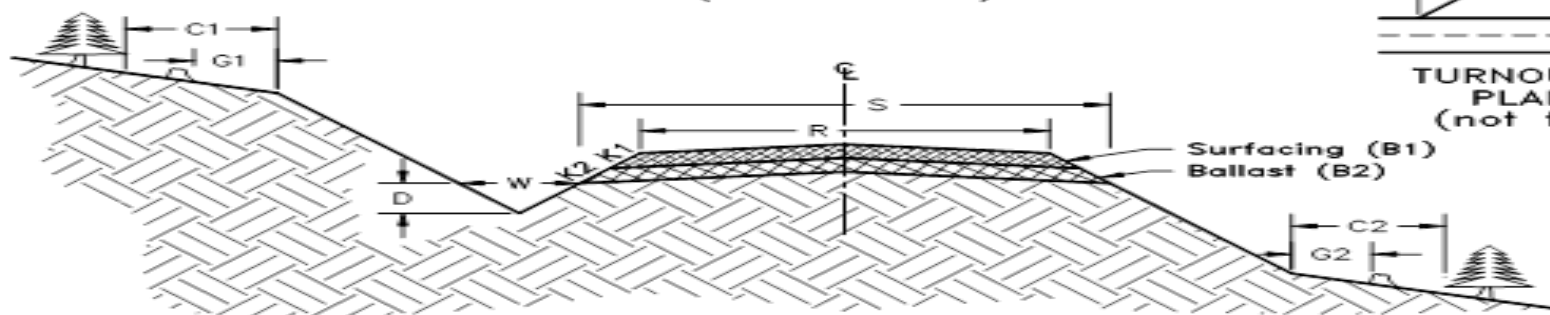
| Road Name | | Stations | | Rock Slope K1 | Compacted Depth (in) B1 | C. Y./ Sta | Number of Stations | C.Y. Needed | Rock Source |
|-------------|----|----------|------|------------------|-------------------------------|------------|-----------------------|-------------|-------------|
| | | From | To | | | | | | |
| 2900018 | | 0+00 | 4+13 | 1.5 to 1 | 6 | 36 | 4.13 | 148.68 | B,C |
| Temp2 | ** | 0+00 | 6+85 | 1.5 to 1 | 4 | 18 | 6.85 | 123.30 | B,C |
| Temp3 | ** | 0+00 | 3+07 | 1.5 to 1 | 4 | 18 | 3.07 | 55.26 | B,C |
| Temp4 | ** | 0+00 | 1+35 | 1.5 to 1 | 4 | 18 | 1.35 | 24.30 | B,C |
| Temp5 | ** | 0+00 | 2+54 | 1.5 to 1 | 4 | 18 | 2.54 | 45.72 | B,C |
| Turnarounds | ** | | | | | 20 | 2.00 | 40.0 | B,C |
| Landings | ** | | | | | 20 | 7.00 | 140 | B,C |

OPTIONAL 4-INCH JAW BALLAST ROCK TOTAL 577 CUBIC YARDS
 REQUIRED 4-INCH JAW BALLAST ROCK TOTAL 0 CUBIC YARDS
 4-INCH JAW BALLAST ROCK TOTAL 577 CUBIC YARDS

** Optional rock, see Road Plan Clause 6-75

ROCK LIST
 1 1/4" Minus Crushed Surfacing
 Page 2 of 3

ROAD CROSS-SECTION
 (not to scale)



L = 50' T = 25' H = 12'

| Road Name | | Stations | | Rock Slope K1 | Compacted Depth (in) B1 | C. Y./ Sta | Number of Stations | C.Y. Needed | Rock Source |
|-----------|----|----------|-------|------------------|-------------------------------|------------|-----------------------|-------------|-------------|
| | | From | To | | | | | | |
| 2900018 | | 0+00 | 4+13 | 1.5 to 1 | 6 | 31 | 4.13 | 128.03 | B |
| 2900018 | ** | 4+13 | 61+07 | 1.5 to 1 | 2.5 | 13 | 56.94 | 740 | B |

** Optional rock, see Road Plan Clause 6-75

| | |
|--|-----------------|
| TOTAL OPTIONAL 1 1/4" MINUS CRUSHED ROCK | 868 CUBIC YARDS |
| TOTAL REQUIRED 1 1/4" MINUS CRUSHED ROCK | 0 CUBIC YARDS |
| TOTAL 1 1/4" MINUS CRUSHED ROCK | 868 CUBIC YARDS |

| | |
|--|-----------------|
| Rock Summary | |
| TOTAL LIGHT LOOSE RIP RAP | 0 CUBIC YARDS |
| 4-INCH JAW BALLAST ROCK TOTAL | 577 CUBIC YARDS |
| OPTIONAL 4-INCH JAW BALLAST ROCK TOTAL | 428 CUBIC YARDS |
| TOTAL 1 1/4" MINUS CRUSHED ROCK | 868 CUBIC YARDS |
| TOTAL OPTIONAL 1 1/4" MINUS CRUSHED ROCK | 740 CUBIC YARDS |

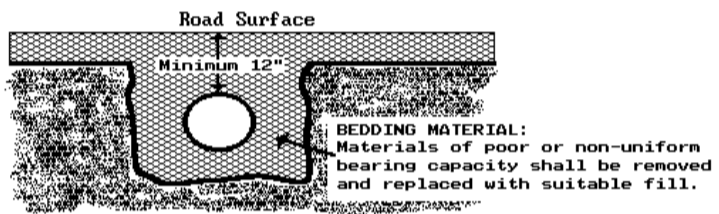
CULVERT LIST

Page 1 of 1

| Road | Location | Culvert | | Length (feet) | | Energy Dissapater (CY) | | | | Remarks |
|-------------|----------|----------------|-------|---------------|-------|------------------------|--------|------|--------|---------------------------------------|
| | | Diameter (in.) | Gauge | Culvert | Flume | Inlet | Outlet | Type | Source | |
| 2900000 | M.P. 6.2 | - | - | - | - | - | - | - | - | Install Silt Fence and Sediment Traps |
| Contingency | - | 18 | - | 30 | | | | | | NT Cross Drain |
| | - | 18 | - | 30 | | | | | | NT Cross Drain |

*

CULVERT BACKFILL AND BASE PREPARATION
(For culverts less than 36")



Key:

- SR - Shot Rock
- NT - Native (bank run)
- SL - Select Fill
- HLRR - Heavy Loose Rip Rap
- LLRR - Light Loose Rip Rap
- Flume - Half round pipe
- Downspout - Full round pipe
- DOL-
- DOR-

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: 2900018
 Total road length (feet): 6107
 Distance to Place Pit (feet) 34848
 Average Haul Speed (mph) 30
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

RECONSTRUCTION

CLEARING & GRUBBING

| | | | | | | |
|-------------|------------------|----|--------|-------------|----|--------------|
| Scatter | 61.07 stations @ | \$ | 187.50 | per station | \$ | 11,450.63 |
| C & G Total | | | | | | \$ 11,450.63 |

EXCAVATION AND FILL

| | | | | | | |
|-------------------------------------|------------------|----|--------|-------------|----|--------------|
| Reconstruction (heavy) | 61.07 stations @ | \$ | 292.18 | per station | \$ | 17,843.40 |
| Landing (medium) | 5.00 each @ | \$ | 193.00 | each | \$ | 965.00 |
| Turnaround | 2.00 each @ | \$ | 196.58 | each | \$ | 393.17 |
| Large Fill | 7000.00 CY @ | \$ | 4.20 | per CY | \$ | 29,400.00 |
| Rip, Grade, shape, compact subgrade | 61 stations @ | \$ | 19.32 | per station | \$ | 1,180.07 |
| Excavation Total | | | | | | \$ 49,781.64 |

ROCK

| | | | | | | |
|--|-------------------------|----|--------|----------|----|--------------|
| 1¼" Minus Purchase Price w/ tax | 868 CY @ | \$ | 16.20 | per CY | \$ | 14,065.65 |
| 4" Jaw Run Purchase Price W/Tax | 149 CY @ | \$ | 14.80 | per CY | \$ | 2,200.46 |
| Rock haul | Round Trip (feet) 81910 | \$ | 130.00 | per Hour | \$ | 9,480.24 |
| Process/Compacting Surfacing (6" Lift) | 1017 CY @ | \$ | 1.86 | per CY | \$ | 1,887.68 |
| Rock Total | | | | | | \$ 27,634.03 |

CULVERTS & FLUMES

| | | | | |
|-------------------------------|-----------|---------|----------|------------|
| 18" Polyethylene, double wall | 60 feet @ | \$21.93 | per foot | \$1,315.80 |
| Culvert & Flume Total | | | | \$1,315.80 |

MISC. MAINTENANCE

| | | | | | | |
|---------------------------------|-------------|----|----------|-----------|----|-----------|
| Grass seed (spread by hand) | 38 pounds @ | \$ | 3.34 | per pound | \$ | 126.52 |
| Straw mulching (spread by hand) | acres @ | \$ | 3,151.00 | per acre | \$ | - |
| Misc Maintenance Total | | | | | | \$ 126.52 |

| | | |
|----------------------|----|---------------|
| Reconstruction Total | \$ | 90,308.61 |
| \$/STA | | 1478.8 |

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: Temp2
 Total road length (feet): 685
 Distance to Pit (feet) 37342
 Average Haul Speed (mph) 25
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

RECONSTRUCTION

CLEARING & GRUBBING

| | | | | | | |
|---------|-----------------|----|--------|-------------|----------------|----------|
| Scatter | 6.85 stations @ | \$ | 187.50 | per station | \$ | 1,284.38 |
| | | | | | C & G Total \$ | 1,284.38 |

EXCAVATION AND FILL

| | | | | | | |
|-------------------------------------|------------------|----|--------|---------------------|----|----------|
| Reconstruction (Light) | 6.85 stations @ | \$ | 138.85 | per station | \$ | 951.12 |
| Landing (small) | 1 each @ | \$ | 193.00 | each | \$ | 193.00 |
| Turnaround | 0 each @ | \$ | 196.58 | each | \$ | - |
| Rip, Grade, shape, compact subgrade | 6.85 per station | \$ | 19.32 | per station | \$ | 132.36 |
| | | | | Excavation Total \$ | | 2,227.60 |

ROCK

| | | | | | | |
|---------------------------------------|-------------------------|----|--------|--------------------|----|----------|
| 4" Jaw Run Purchase Price W/Tax | 123 CY @ | \$ | 14.80 | per CY | \$ | 1,824.84 |
| Landing Rock | 20 CY @ | \$ | 14.80 | per CY | \$ | 296.00 |
| Rock haul | Round Trip (feet) 76054 | \$ | 130.00 | per Hour | \$ | 1,099.34 |
| Process/Compacting Ballast (12" Lift) | 123 CY @ | \$ | 1.23 | per CY | \$ | 151.75 |
| | | | | Road Rock Total \$ | | 3,371.93 |

MISC. MAINTENANCE

| | | | | | | |
|---------------------------------|--------------|----|----------|---------------------------|----|-------|
| Grass seed (spread by hand) | 9 pounds @ | \$ | 3.34 | per pound | \$ | 31.51 |
| Straw mulching (spread by hand) | 0.00 acres @ | \$ | 3,151.00 | per acre | \$ | - |
| | | | | Misc Maintenance Total \$ | | 31.51 |

| | |
|-----------------------|-------------|
| Construction Total \$ | 6,915.43 |
| \$/sta | \$ 1,009.55 |

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: Temp3
 Total road length (feet): 307
 Distance to Pit (feet) 37876
 Average Haul Speed (mph) 25
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

| | | | | |
|-------------|-----------------|-----------|-------------|-----------|
| Scatter | 3.07 stations @ | \$ 187.50 | per station | \$ 575.63 |
| C & G Total | | | | \$ 575.63 |

EXCAVATION AND FILL

| | | | | |
|-------------------------------------|------------------|-----------|-------------|-------------|
| Construction (balanced, medium) | 3.07 stations @ | \$ 430.47 | per station | \$ 1,321.54 |
| Landing (small) | 1 each @ | \$ 193.00 | each | \$ 193.00 |
| Turnaround | 0 each @ | \$ 196.58 | each | \$ - |
| Rip, Grade, shape, compact subgrade | 3.07 per station | \$ 19.32 | per station | \$ 59.32 |
| Excavation Total | | | | \$ 2,000.13 |

ROCK

| | | | | |
|---------------------------------------|-------------------------|-----------|--------------------|-------------|
| 4" Jaw Run Purchase Price W/Tax | 55 CY @ | \$ 14.80 | per CY | \$ 817.85 |
| Landing Rock | 20 CY @ | \$ 14.80 | per CY | \$ 296.00 |
| Rock haul | Round Trip (feet) 76366 | 5 Hours @ | \$ 130.00 per Hour | \$ 592.02 |
| Process/Compacting Ballast (12" Lift) | 55 CY @ | \$ 1.23 | per CY | \$ 68.01 |
| Road Rock Total | | | | \$ 1,773.88 |

MISC. MAINTENANCE

| | | | | |
|---------------------------------|--------------|-------------|-----------|----------|
| Grass seed (spread by hand) | 4 pounds @ | \$ 3.34 | per pound | \$ 14.12 |
| Straw mulching (spread by hand) | 0.00 acres @ | \$ 3,151.00 | per acre | \$ - |
| Misc Maintenance Total | | | | \$ 14.12 |

| | |
|--------------------|-------------|
| Construction Total | \$ 4,363.76 |
| \$/sta | \$ 1,421.42 |

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: Temp4
 Total road length (feet): 135
 Distance to Pit (feet) 38259
 Average Haul Speed (mph) 25
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

| | | | | | | |
|-------------|-----------------|----|--------|-------------|----|-----------|
| Scatter | 1.35 stations @ | \$ | 187.50 | per station | \$ | 253.13 |
| C & G Total | | | | | | \$ 253.13 |

EXCAVATION AND FILL

| | | | | | | |
|-------------------------------------|------------------|----|--------|-------------|----|-----------|
| Construction (balanced, light) | 1.35 stations @ | \$ | 318.32 | per station | \$ | 429.73 |
| Landing (small) | 1 each @ | \$ | 193.00 | each | \$ | 193.00 |
| Turnaround | 0 each @ | \$ | 196.58 | each | \$ | - |
| Rip, Grade, shape, compact subgrade | 1.35 per station | \$ | 19.32 | per station | \$ | 26.09 |
| Excavation Total | | | | | | \$ 836.26 |

ROCK

| | | | | | | |
|---------------------------------------|-------------------------|----|--------|----------|----|-------------|
| 4" Jaw Run Purchase Price W/Tax | 24 CY @ | \$ | 14.80 | per CY | \$ | 359.64 |
| Landing Rock | 20 CY @ | \$ | 14.80 | per CY | \$ | 296.00 |
| Rock haul | Round Trip (feet) 76788 | \$ | 130.00 | per Hour | \$ | 361.02 |
| Process/Compacting Ballast (12" Lift) | 24 CY @ | \$ | 1.23 | per CY | \$ | 29.91 |
| Road Rock Total | | | | | | \$ 1,046.56 |

MISC. MAINTENANCE

| | | | | | | |
|---------------------------------|--------------|----|----------|-----------|----|---------|
| Grass seed (spread by hand) | 2 pounds @ | \$ | 3.34 | per pound | \$ | 6.21 |
| Straw mulching (spread by hand) | 0.00 acres @ | \$ | 3,151.00 | per acre | \$ | - |
| Misc Maintenance Total | | | | | | \$ 6.21 |

| | | |
|--------------------|----|----------|
| Construction Total | \$ | 2,142.16 |
| \$/sta | \$ | 1,586.79 |

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: Temp5
 Total road length (feet): 254
 Distance to Pit (feet) 38882
 Average Haul Speed (mph) 25
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

RECONSTRUCTION

CLEARING & GRUBBING

| | | | | | | |
|---------|-----------------|----|--------|-------------|-------------|-----------|
| Scatter | 2.54 stations @ | \$ | 187.50 | per station | \$ | 476.25 |
| | | | | | C & G Total | \$ 476.25 |

EXCAVATION AND FILL

| | | | | | | |
|-------------------------------------|------------------|----|--------|-------------|------------------|-----------|
| Reconstruction (light) | 2.54 stations @ | \$ | 138.85 | per station | \$ | 352.68 |
| Landing (small) | 1 each @ | \$ | 193.00 | each | \$ | 193.00 |
| Turnaround | 0 each @ | \$ | 196.58 | each | \$ | - |
| Rip, Grade, shape, compact subgrade | 2.54 per station | \$ | 19.32 | per station | \$ | 49.08 |
| | | | | | Excavation Total | \$ 947.44 |

ROCK

| | | | | | | |
|---------------------------------------|-------------------------|----|--------|----------|-----------------|-------------|
| 4" Jaw Run Purchase Price W/Tax | 46 CY @ | \$ | 14.80 | per CY | \$ | 676.66 |
| Landing Rock | 20 CY @ | \$ | 14.80 | per CY | \$ | 296.00 |
| Rock haul | Round Trip (feet) 78272 | \$ | 130.00 | per Hour | \$ | 532.61 |
| Process/Compacting Ballast (12" Lift) | 46 CY @ | \$ | 1.23 | per CY | \$ | 56.27 |
| | | | | | Road Rock Total | \$ 1,561.54 |

MISC. MAINTENANCE

| | | | | | | |
|---------------------------------|--------------|----|----------|-----------|------------------------|----------|
| Grass seed (spread by hand) | 3 pounds @ | \$ | 3.34 | per pound | \$ | 11.69 |
| Straw mulching (spread by hand) | 0.00 acres @ | \$ | 3,151.00 | per acre | \$ | - |
| | | | | | Misc Maintenance Total | \$ 11.69 |

| | | |
|--------------------|----|----------|
| Construction Total | \$ | 2,996.91 |
| \$/sta | \$ | 1,179.89 |

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255
 ROAD NUMBER: 2900000

Total road length (feet): 25

POST HAUL MAINTENANCE

MISC. MAINTENANCE

| | | | | |
|---|-----------------|-----------------------------|----|-------|
| Sediment traps and Silt Fence | 4 traps | \$13.20 each | \$ | 52.80 |
| Pull and clean ditch (one side, scatter) | stations @ | \$56.76 per station | \$ | - |
| Pull and clean ditch (two sides, scatter) | stations @ | \$99.00 per station | \$ | - |
| Maintenance grading & compacting | 0+00 stations @ | \$21.00 per station | \$ | - |
| | | Misc. Maintenance Total | \$ | 52.80 |
| | | Management & Overhead | \$ | 5.28 |
| | | POST HAUL MAINTENANCE TOTAL | \$ | 58.08 |

SALE/PROJECT NAME: Klahanie
CONTRACT #: 36-105255
ROAD NUMBER: 2900015

Total road length (feet): 693

POST HAUL MAINTENANCE

MISC. MAINTENANCE

| | | | | |
|----------------------------------|-----------------|-----------------------------|----|--------|
| Maintenance grading & compacting | 6+93 stations @ | \$21.00 per station | \$ | 145.51 |
| | | Misc. Maintenance Total | \$ | 145.51 |
| | | Management & Overhead | \$ | 14.55 |
| | | POST HAUL MAINTENANCE TOTAL | \$ | 160.06 |

SALE/PROJECT NAME: Klahanie
CONTRACT #: 36-105255
ROAD NUMBER: 2900015

Total road length (feet): 693
Distance to Place Pit (feet) 65000
Distance to Place Road (feet) 44000
Average Haul Speed (mph) 30
Truck Load/Unload Time (minutes) 12
Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

| | | | | |
|----------------------------------|-----------------|-----------------------------|----|--------|
| Maintenance grading & compacting | 6+93 stations @ | \$21.00 per station | \$ | 145.51 |
| | | Misc. Maintenance Total | \$ | 145.51 |
| | | Management & Overhead | \$ | 14.55 |
| | | POST HAUL MAINTENANCE TOTAL | \$ | 160.06 |

SALE/PROJECT NAME: Klahanie

CONTRACT #: 36-105255

ROAD NAMES: 2900018,Temp2,Temp3,Temp4,Temp5

DECOMMONISSIONG

Road Decommissioning and Closure

| | | | |
|---------------------|------------------|-----------------------|--------------|
| Light abandonment | 74.88 stations @ | \$ 185.00 per station | \$ 13,852.80 |
| Fill Removal - Deep | 7000 CY @ | \$ 4.68 per CY | \$ 32,760.00 |
| Earthen Barricade | 2 Barricades | \$ 99.00 per each | \$ 198.00 |

Abandonment Cost \$ 46,810.80

MOBILIZATION

SALE/PROJECT NAME: Klahanie
 CONTRACT #: 36-105255

ROAD BUILDING EQUIPMENT

| | | | | | |
|-------------------|-----|----------|------|----|-------|
| Grader | 1 @ | \$ 750 | each | \$ | 750 |
| Dozer (small) | 1 @ | \$ 500 | each | \$ | 500 |
| Excavator (small) | 1 @ | \$ 500 | each | \$ | 500 |
| Excavator (large) | 1 @ | \$ 1,000 | each | \$ | 1,000 |
| Roller | 1 @ | \$ 500 | each | \$ | 500 |
| End Dump | 3 @ | \$ 150 | each | \$ | 450 |
| Tractor Brusher | 1 @ | \$ 400 | each | \$ | 400 |

ROAD BUILDING EQUIPMENT SUBTOTAL: \$ 2,750

ROCK SOURCE EQUIPMENT

| | | | | | |
|-------------------------------|-----|----------|------|----|-------|
| Loader | 1 @ | \$ 750 | each | \$ | 750 |
| Dozer (large) | 1 @ | \$ 500 | each | \$ | 500 |
| Excavator (large) | 1 @ | \$ 1,000 | each | \$ | 1,000 |
| Rock drill | 0 @ | \$ 1,000 | each | \$ | - |
| Jaw (mobile, includes set up) | 0 @ | \$ 1,750 | each | \$ | - |

ROCK SOURCE EQUIPMENT SUBTOTAL: \$ 2,250

INITIAL MOBILIZATION TOTAL: \$ 5,000

POST HAUL EQUIPMENT

| | | | | | |
|-------------------|-----|------|------|----|-------|
| Grader | 1 @ | 750 | each | \$ | 750 |
| Excavator (small) | 1 @ | 500 | each | \$ | 500 |
| Excavator (large) | 1 @ | 1000 | each | \$ | 1,000 |
| Roller | 1 @ | 500 | each | \$ | 500 |
| End Dump | 3 @ | 150 | each | \$ | 450 |

POST HAUL & ABANDONMENT \$ 3,200



**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion AD-1048
 Lower Tier Covered Transactions**

The following statement is made in accordance with the Privacy Act of 1974 (5 U.S.C. § 552a, as amended). This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, and 2 C.F.R. §§ 180.300, 180.335, Participants' responsibilities. The regulations were amended and published on August 31, 2005, in 70 Fed. Reg. 51865-51880. Copies of the regulations may be obtained by contacting the Department of Agriculture agency offering the proposed covered transaction.

According to the Paperwork Reduction Act of 1995 an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0505-0027. The time required to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of appropriate criminal and civil fraud privacy, and other statutes may be applicable to the information provided.

(Read instructions on page two before completing certification.)

- A. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency;
- B. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

| | |
|--|---------------------------------|
| ORGANIZATION NAME | PR/AWARD NUMBER OR PROJECT NAME |
| NAME(S) AND TITLE(S) OF AUTHORIZED REPRESENTATIVE(S) | |
| SIGNATURE(S) | DATE |

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint \(https://www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer\)](https://www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442.

Instructions for Certification

- (1) By signing and submitting this form, the prospective lower tier participant is providing the certification set out on page 1 in accordance with these instructions.
- (2) The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
- (3) The prospective lower tier participant shall provide immediate written notice to the person(s) to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (4) The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549, at 2 C.F.R. Parts 180 and 417. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- (5) The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- (6) The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- (7) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the System for Award Management (SAM) database.
- (8) Nothing contained in the foregoing shall be construed to require establishment of a system of records to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (9) Except for transactions authorized under paragraph (5) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.