

Washington DNR Timber Sales Program

Updated information is being provided for Oh Brian timber sale documents as follows:

Documents amended:

Brief Description	DATE	Initials
<b>From equipment sections we have removed: In Unit 4, ground-based, cut-to-length processor and forwarder only. Cut-to-length processor must have a minimum reach of 20 feet and forwarding machines must be capable of full payload support and have a maximum width of 10 feet.</b>		



**TIMBER NOTICE OF SALE**

**SALE NAME:** OH BRIAN

**AGREEMENT NO:** 30-104795

**AUCTION:** February 28, 2024 starting at 10:00 a.m.,  
Olympic Region Office, Forks, WA

**COUNTY:** Clallam

**SALE LOCATION:** Sale located approximately 8 miles east of Port Angeles, WA

**PRODUCTS SOLD  
AND SALE AREA:**

All timber, except trees marked with a band of blue paint or bounded out by leave tree area boundary tags, bounded by timber sale boundary tags, flag lines, BPA 3763 Road, power lines and red banded take trees in Unit 1; timber sale boundary tags, special management unit boundary tags, BPA 3763 Road, power lines and red banded take trees in Unit 2; timber sale boundary tags and red banded take trees in Unit 5.

All timber as described in Schedule D, except those trees as described in Schedule C, bounded by special management unit boundary tags, power lines and the BPA 3763 Road in Unit 4.

All timber bounded by right of way boundary tags.

All forest products above located on part(s) of Sections 23 and 26 all in Township 30 North, Range 5 West, W.M., containing 191 acres, more or less.

**CERTIFICATION:** This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227)

**ESTIMATED SALE VOLUMES AND QUALITY:**

Species	Avg Ring DBH Count	Total MBF	MBF by Grade									
			1P	2P	3P	SM	1S	2S	3S	4S	UT	
Douglas fir	14	2,899				10			384	1,696	809	
Red alder	11.5	65								7	35	23
Maple	10.2	26									18	8
Grand fir	20.8	26							15	9		2
Hemlock	12.9	12								9	2	1
Sale Total		3,028										

**MINIMUM BID:** \$664,000.00

**BID METHOD:** Sealed Bids

**PERFORMANCE  
SECURITY:**

\$100,000.00

**SALE TYPE:** Lump Sum

**EXPIRATION DATE:** October 31, 2026

**ALLOCATION:** Export Restricted

**BID DEPOSIT:** \$66,400.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

**HARVEST METHOD:** 100% Ground based. Forest products sold under this contract shall be harvested and removed using ground, cable and cable tethered. Cable tethered equipment is limited to sustained slopes 75% and less. Non-tethered self leveling tracked equipment is limited to sustained slopes of 65% and less. Other ground based equipment is limited to tracked equipment on sustained slopes that are 45 % and less. Rubber tired skidders are restricted



## TIMBER NOTICE OF SALE

unless approved by the Contract Administrator. Authority to use other equipment or operate outside the equipment specifications detailed above must be approved in writing by the State. Falling and Yarding will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator or on weekends, State recognized holiday, or from 8:00pm to 6:00am.

**ROADS:** 11.56 stations of required construction. 73.40 stations of required reconstruction. 18.80 stations of optional construction. 19.90 stations of optional reconstruction. 39.65 stations of required prehaul maintenance. 150.00 stations of optional prehaul maintenance. Rock haul, timber haul, rock pit development, pre-haul maintenance, reconstruction and Road construction will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator.

### **ACREAGE DETERMINATION**

**CRUISE METHOD:** Sale area was 100% GPS'd. Sale units were cruised using a variable plot sample.

**FEES:** Within seven days of auction, Purchaser must provide the DNR, a cashiers check in the amount of \$500.00, made payable to Robert E. and Chantelle Reandeu for a Road Use Permit. \$51,476.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

**SPECIAL REMARKS:** There are locked gates on the PA-F-3500 Road - contact the Olympic Region Dispatch Center at 360-374-2800 to obtain 786 and AA1 keys.

All trees 60 inches in Diameter at Breast Height (DBH) and greater shall not be felled unless for safety reasons, which must be approved by the Contract Administrator. If trees 60 inches in DBH or greater need to be felled for safety reasons, trees will be left where felled.

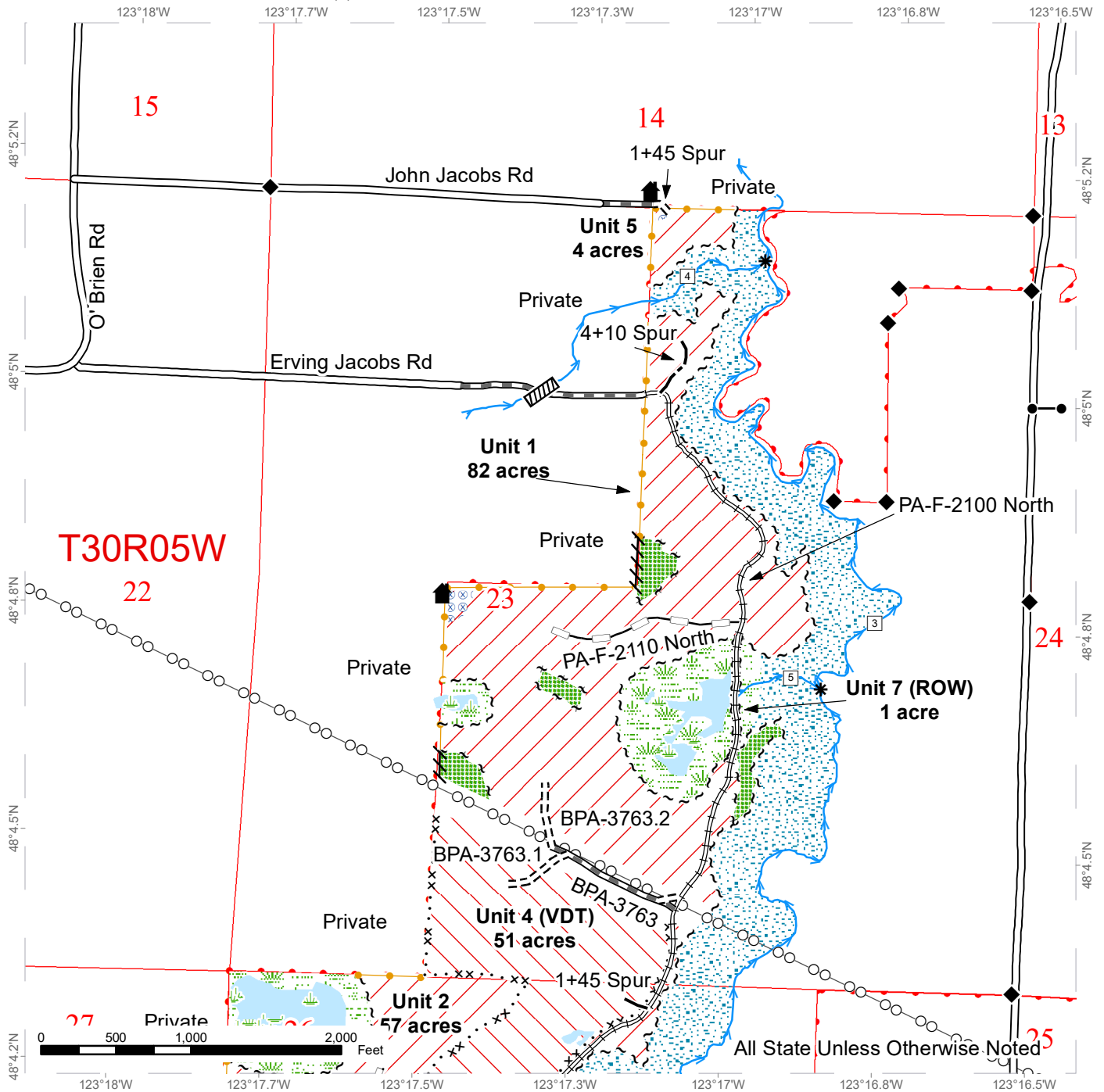
There is no Unit 3 associated with this proposal.

There are extreme hazard abatement requirements associated with this proposal, see contract for details.

# TIMBER SALE MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** 30-104795  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720

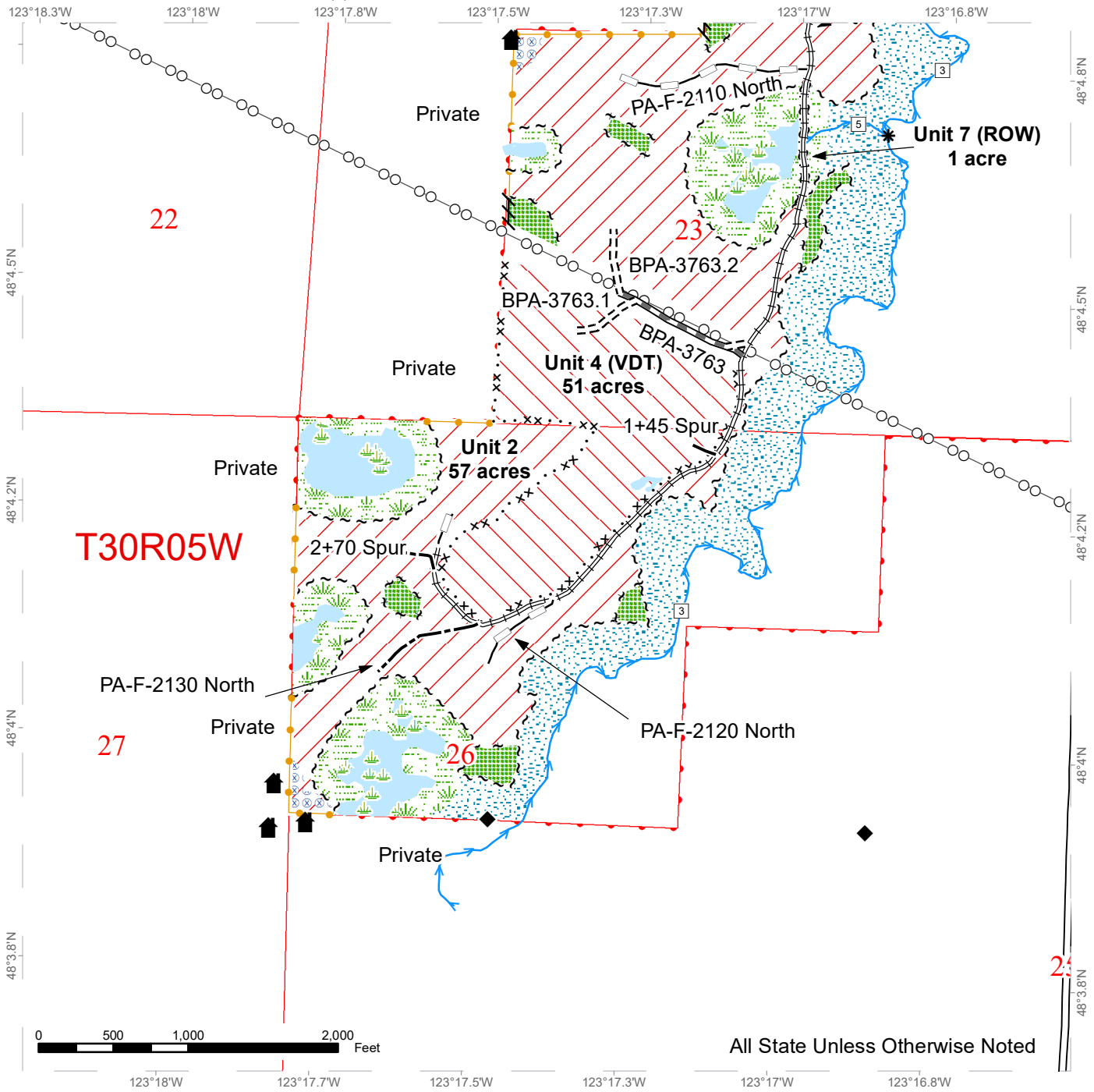


Variable Retention Harvest	Sale Boundary Tags	Existing Roads	Streams
Variable Density Thinning	Right of Way Tags	Optional Pre-Haul Maintenance	Stream Type
Wetlands - Non-forested	Special Mgmt Area	Optional Reconstruction	Stream Type Break
Hazard Abatement Area	Leave Tree Tags	Required Pre-Haul Maintenance	Bridge
Leave Tree Area	Take / Removal Trees	Required Construction	Culvert
Riparian Mgt Zone	Flag Line	Required Reconstruction	Gate
Wetland Mgt Zone	Power Lines	Optional Construction	Structure
			Survey Monument

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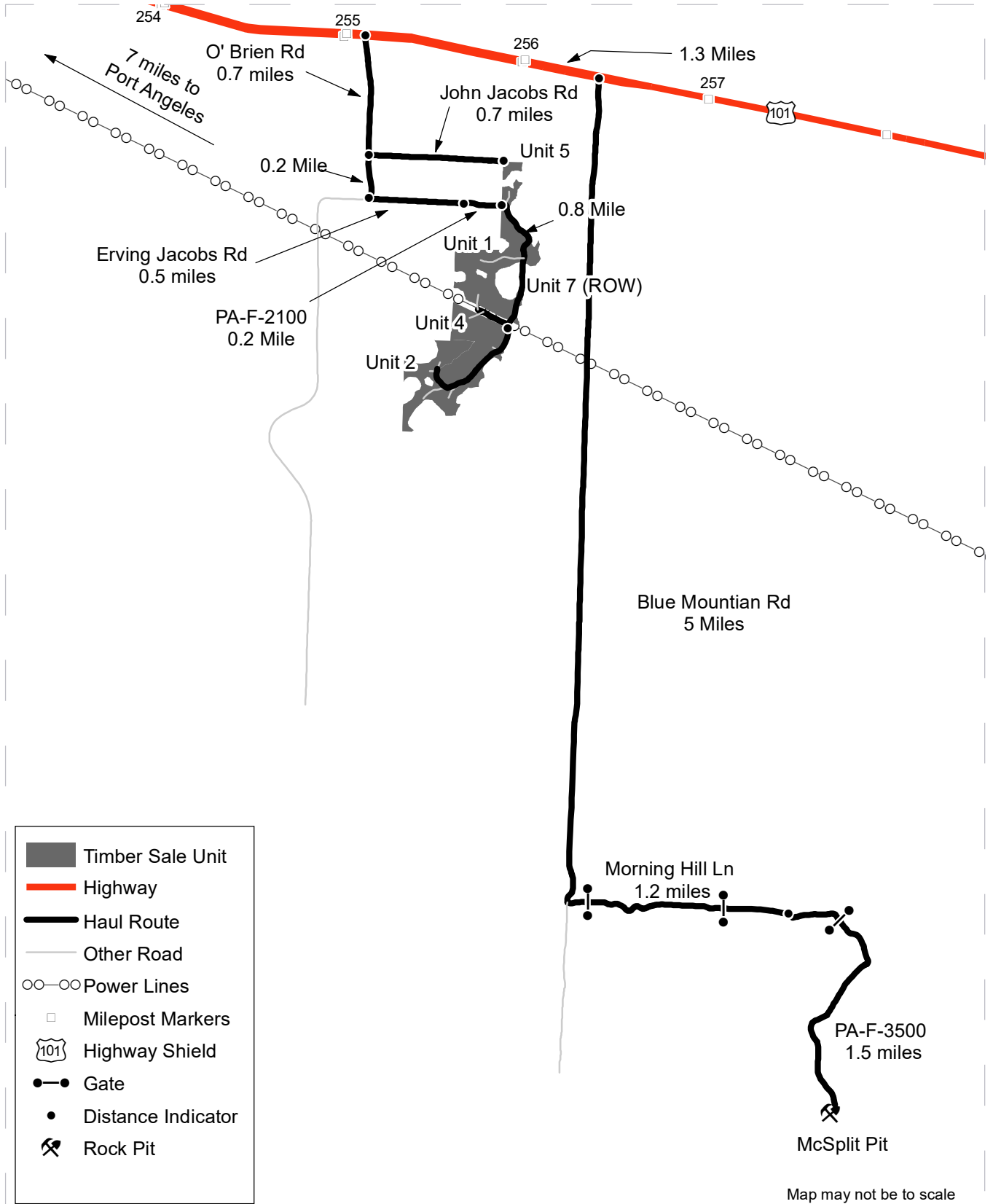
All State Unless Otherwise Noted

Variable Retention Harvest	Sale Boundary Tags	Existing Roads	Streams
Variable Density Thinning	Right of Way Tags	Optional Pre-Haul Maintenance	Stream Type
Wetlands - Non-forested	Special Mgmt Area	Optional Reconstruction	Stream Type Break
Hazard Abatement Area	Leave Tree Tags	Required Pre-Haul Maintenance	Bridge
Leave Tree Area	Take / Removal Trees	Required Construction	Culvert
Riparian Mgt Zone	Flag Line	Required Reconstruction	Gate
Wetland Mgt Zone	Power Lines	Optional Construction	Structure
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# DRIVING MAP

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**DRIVING DIRECTIONS:** See attached.

## **DRIVING DIRECTIONS**

Unit 1 and 7: Head east from Port Angeles on US-101 for 7 miles. Turn right on O'Brien Rd and continue south for 0.9 miles. Turn left onto Erving Jacobs Rd and continue for 0.5 miles. At the end of the county-maintained section continue straight onto PA-F-2100 North for 0.2 miles where you will pass into DNR managed land and arrive at unit 1. As you continue along PA-F-2100 you will pass through right-of-way unit 7.

Units 2 and 4: From unit 1, continue south through the unit for 0.8 miles. After crossing under the transmission line, you will arrive at units 2 and 4.

Unit 5: From US-101 and O'Brien Rd, head south for 0.3 miles. Turn left onto John Jacobs Rd and continue 0.7 miles to the end. Unit 5 lies at the end of John Jacobs Rd to the Southeast. Unit 5 can also be accessed from PA-F-2100 by hiking north across the drainage from the north end of unit 1.

**STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES**

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

**Export Restricted Lump Sum AGREEMENT NO. 30-0104795**

**SALE NAME: OH BRIAN**

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

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

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

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

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

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



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

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

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

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on February 28, 2024 and the sale was confirmed on \_\_\_\_\_. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber, except trees marked with a band of blue paint or bounded out by leave tree area tags; bounded by timber sale boundary tags, flag lines, BPA 3763 Road, power lines and red banded take trees in Unit 1; timber sale boundary tags, special management unit boundary tags, BPA 3763 Road, power lines and red banded take trees in Unit 2; timber sale boundary tags and red banded take trees in Unit 5.

All timber as described in Schedule D, except those trees as described in Schedule C, bounded by special management unit boundary tags, power lines and the BPA 3763 Road in Unit 4.

All timber bounded by right of way boundary tags.

All forest products above located on approximately 191 acres on part(s) of Sections 23, and 26 all in Township 30 North, Range 5 West W.M. in Clallam County(s) as designated on the sale area and as shown on the attached timber sale map.

All forest products described above from the bole of the tree that meet or exceed 2 inches diameter inside bark on the small end are eligible for removal. Above ground components of a tree that remain as by-products after the manufacture of logs, including but not limited to tree tops, branches, limbs, needles, leaves, stumps, are eligible for removal under the terms of this contract.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed. Forest products purchased under a contract that is designated as exportable may be exported prior to processing.

G-020 Inspection By Purchaser

Purchaser hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products being sold. Purchaser further warrants to

the State that they enter this contract based solely upon their own judgment of the value of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products being sold. Purchaser also warrants to the State that they enter this contract without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	SLASH PILING SPECIFICATIONS
B	GREEN TREE RETENTION PLAN
C	LEAVE TREE SELECTION CRITERIA
D	CUT TREE SELECTION CRITERIA
E	CERTIFICATION CRITERIA FOR PROCESSOR & FORWARDER

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2026.

G-040 Contract Term Adjustment - No Payment

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

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

G-051 Contract Term Extension - Payment

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

- a. A written request for extension of the contract term must be received prior to the expiration date of the contract.

- b. Completion of all required roads and compliance with all contract and regulatory requirements.
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the total contract price.

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

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

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

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

- e. Payment of \$839.00 per acre per annum for the acres on which an operating release has not been issued.
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

#### G-053 Surveys - Sensitive, Threatened, Endangered Species

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

#### G-060 Exclusion of Warranties

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

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents

are estimates only, provided solely for administrative and identification purposes.

- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any threatened or endangered species, or the presence of their habitat, within the sale area.
- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-061 Inadvertent Discovery of Cultural Resources

Purchaser acknowledges that cultural resources as defined in WAC 222-16-010 may exist within the timber sale area and that the existence and location of such resources may be unknown at the time this contract is executed. Purchaser has a duty to exercise due care in its operations and in the event any human skeletal remains are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify local law enforcement in the most expeditious manner possible then notifying the Contract Administrator. In the event cultural resources are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify the Contract Administrator. Any potential resources shall not be removed or disturbed. Purchaser shall resume operations as directed in writing by the Contract Administrator.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the

Services' Incidental Take Permit Nos. TE812521-1 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

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

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

#### G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts, or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.
- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.

- c. Purchaser shall refer to a specific ITP number, ITP TE812521-1 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

G-064 Permits

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

G-065 Regulatory Disclaimer

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

G-066 Governmental Regulatory Actions

a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

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

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

c. Adjustment of Price

The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall

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

G-070 Limitation on Damage

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

G-080 Scope of State Advice

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

G-091 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary. The cumulative changes to the sale area during the term of the contract shall not exceed more than four percent of the original sale area. If the sale area is increased, the added forest products become a part of this contract. The State shall determine the volume added and shall calculate the increase to the total contract price using the rates set forth in clause G-101, G-102, or G-103. If the sale area is reduced, the State shall determine the volume to be reduced. The State shall calculate the reduction to the total contract price using the rates set forth in clause G-101, G-102, or G-103.

G-101 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and the Scribner log scale volume, as defined by the Northwest Log Rules Advisory Group, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per Mbf Scribner log scale.

The pricing schedule has not been set for the sale.

G-106 Adding Naturally Damaged Forest Products

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

G-111 Title and Risk of Loss

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

G-116 Sustainable Forestry Initiative® (SFI®) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative 2022 Forest Management Standard under certificate number: BVC-SFIFM-018227.

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

G-120 Responsibility for Work

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

G-121 Exceptions

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

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

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



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

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

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

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

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

#### G-140 Indemnity

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

## G-150 Insurance

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

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

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

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

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

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

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

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

waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

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

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

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

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

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

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

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser

shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

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

#### G-160 Agents

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

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

#### G-170 Assignment and Delegation

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

#### G-180 Modifications

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

#### G-190 Contract Complete

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

## G-200 Notice

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

- G-210 Violation of Contract
- G-220 State Suspends Operations

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

## G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

## G-220 State Suspends Operations

The Contract Administrator may suspend any operation of Purchaser under this contract when the State is suffering, or there is a reasonable expectation the State will suffer environmental, monetary, or other damage if the operation is allowed to continue.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with this contract, the provisions of clause G-066 shall govern just as if the harvest was prevented by an applicable foreign or domestic governmental regulation or order.

G-230 Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Purchaser to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this contract and the parties agree that these procedures must be followed before a lawsuit can be initiated.

- a. In the event of a dispute, Purchaser must make a written request to the Region Manager for resolution prior to seeking other relief.
- b. The Region Manager will issue a written decision on Purchaser's request within ten business days.
- c. Within ten business days of receipt of the Region Manager's decision, Purchaser may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Deputy Supervisor - Uplands within 30 calendar days of the receipt of Purchaser's request for review of the Region Manager's written decision. Purchaser and the Region Manager will have an opportunity to present their positions. The Deputy Supervisor - Uplands will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser shall comply with all applicable statutes, regulations and laws, including, but not limited to; chapter 27.53 RCW, chapter 68.50 RCW, WAC 240-15 and WAC 296-54. Failure to comply may result in forfeiture of this contract.

## G-260 Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

## G-270 Equipment Left on State Land

All equipment owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other State land by the termination date of this contract. Equipment remaining unclaimed on State land 60 days after the expiration of the contract period is subject to disposition as provided by law. Purchaser shall pay to the State all costs of moving, storing, and disposing of such equipment. The State shall not be responsible for any damages to or loss of the equipment or damage caused by the moving, storing or disposal of the equipment.

## G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

## G-310 Road Use Authorization

Purchaser is authorized to use the following State roads and roads for which the State has acquired easements and road use permits; PA-F-2100 North, PA-F-2110 North, PA-F-2120 North, PA-F-2130 North, BPA-3763, BPA-3763.1, BPA-3763.2, BPA-3763 Tie, 1+45 spur, 1+46 spur, 2+70 spur, 4+10 spur and the PA-F-3500. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

## G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this contract and to examine the sale area before beginning any operations. A plan of operations shall be developed and agreed upon by the Contract Administrator and Purchaser before beginning any operations. To the extent that the plan of operations is inconsistent with the contract, the terms of the contract shall prevail. State's acceptance and approval of Purchaser's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Purchaser's purposes or complies with applicable laws.

## G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in

the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

The State shall have the right to use, without charge, all existing roads and any road constructed or reconstructed on State lands by Purchaser under this contract. The State may extend such rights to others. If the State grants such rights to others, the State shall require performance or payment, as directed by the State, for their proportionate share of maintenance based on their use.

G-380 Road Easement and Road Use Permit Requirements

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

#55-000583 Michael and Stella Carpenter

#55-103924 Targan Qualified Personal Residence Trust

#55-104832 Robert E & Chantelle Reandeu

G-430 Open Fires

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

Section P: Payments and Securities

P-011 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in Clause P-020, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$86,814.00. The total contract price consists of a \$0.00 contract bid price plus \$86,814.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest



products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

P-045 Guarantee of Payment

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

P-050 Billing Procedure

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

P-080 Payment Account Refund

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

P-090 Performance Security

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

P-100 Performance Security Reduction

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

Section H: Harvesting Operations

H-001 Operations Outside the Sale Boundaries

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

**H-010 Cutting and Yarding Schedule**

Felling and Yarding will not be permitted from November 1 to April 30, weekends, State recognized holidays or from 8:00pm to 6:00am unless authorized in writing by the Contract Administrator.

**H-011 Certification of Fallers and Yarder Operators - UNIT 4 ONLY**

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 damage for reserve trees is defined in clause H-013.

Excessive skid trail damage is defined in clause H-015 or 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)

When reserve tree damage exceeds the limits set forth in clause H-013, Purchaser shall be subject to liquidated damages (clause D-041).

**H-012 Leave Tree Damage Definition – UNIT 4 ONLY**

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

Leave tree damage exists when more than 5 percent of the leave trees are damaged in a unit and when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 100 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-013 Reserve Tree Damage Definition**

Reserve trees are trees required and designated for retention within the sale boundary. Purchaser shall protect reserve trees from being cut, damaged, or removed during operations.

Reserve tree damage exists when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 100 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

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

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 'Unauthorized Activity' clause. Purchaser is required to leave all cut or damaged reserve trees on site.

#### 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 will not exceed 12 feet in width, including rub trees.
- b. Skid trails shall not cover more than 10 percent of the total acreage on one unit.
- c. Location of the skid trails must be marked by Purchaser and approved by the Contract Administrator.
- d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.
- e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.

- g. Purchaser will not have more than two skid trails open to active skidding at any one time. All other skid trails used for skidding timber will be closed.
- h. Once a skid trail is closed, Purchaser will not reopen a skid trail unless approved in writing by the Contract Administrator.
- i. Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

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

#### H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 12 inches as measured from the natural ground line. To reduce soil damage, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, or other mitigation measures. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

#### H-035 Fall Trees Into Sale Area

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

#### H-051 Branding and Painting

Purchaser shall provide a State of Washington registered log brand, acceptable to the State, unless the State agrees to furnish the brand. All purchased timber shall be branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

For pulp loads purchased under a contract designated as export restricted, Purchaser shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

#### H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using cable, cable-tethered, and ground based equipment. Cable-tethered equipment is limited to sustained slopes of 75 percent and less. Non-tethered self-leveling tracked equipment is limited to sustained slopes of 65 percent and less. Other ground based equipment is limited to tracked equipment on sustained slopes that are 45 percent and less. Rubber tired skidders are restricted unless approved by the Contract Administrator. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

**H-130 Hauling Schedule**

The hauling of forest products will not be permitted from November 1 to April 30, weekends, State recognized holidays, or between 8:00pm and 6:00am unless authorized in writing by the Contract Administrator.

**H-140 Special Harvest Requirements**

Purchaser shall accomplish the following during the harvest operations:

1. Slash must be piled in accordance with Schedule A.
2. 30 days notice must be given before work begins on any crossing work associated with road easements.
3. Purchaser must have utility lines located before digging next to the John Jacobs and Erving Jacobs Roads.
4. The Purchaser shall notify all employees and contractors working on this sale that any danger tree, marked or unmarked, may be felled. Any felled marked danger tree shall be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.
5. Purchaser shall immediately repair all gate damage resulting from operations to an equal or better condition than existed at the time of the sale.

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

**H-190 Completion of Settings**

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

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

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

**H-230 Tops and Limbs Outside the Sale Boundary**

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

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

Road construction and associated work provisions of the Road Plan for this sale, dated 5/18/2023 are hereby made a part of this contract.

**C-050 Purchaser Road Maintenance and Repair**

Purchaser shall perform work at their own expense on all roads listed in the Road Plan, authorized in clause G-310 and not listed in clause C-060. All work shall be completed to the specifications detailed in the Road Plan.

**C-060 Designated Road Maintainer**

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on any roads not covered in C-060. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

**C-130 Dust Abatement**

Purchaser shall abate the dust on the Morning Hill, John Jacobs Rd and Erving Jacobs Rd as directed by the Contract Administrator.

**C-140 Water Bars**

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

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

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

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

**S-010 Fire Hazardous Conditions**

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

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

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

S-020 Extreme Hazard Abatement

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

S-030 Landing Debris Clean Up

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

S-035 Logging Debris Clean Up

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

S-050 Cessation of Operations for Low Humidity

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

S-060 Pump Truck or Pump Trailer

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

S-070 Water Supply (OPTIONAL)

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

## S-100 Stream Cleanout

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

## S-110 Resource Protection

No equipment may operate within 30 feet of any typed waters unless authority is granted in writing by the Contract Administrator.

## S-120 Stream Protection

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

## S-130 Hazardous Materials

## a. Hazardous Materials and Waste - Regulatory Compliance

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

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

## b. Hazardous Materials Spill Prevention

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

## c. Hazardous Materials Spill Containment, Control and Cleanup

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



d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported according to the State Department of Ecology (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 covered in part a., the Purchaser is responsible for immediately notifying all the following:

- Department of Emergency Management at 1-800-258-5990
- National Response Center at 1-800-424-8802
- Appropriate Department of Ecology (ECY) at 1-800-645-7911
- DNR Contract Administrator

S-131 Refuse Disposal

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

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

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

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

D-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 State. 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 \$250.00 per tree for all damaged trees in Unit 4.

D-041 Reserve Tree Excessive Damage

When Purchaser’s operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$500.00 per tree for all damaged reserve trees that are not replaced in Units 1, 2 and 5.

SIGNATURES

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

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

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Purchaser  
\_\_\_\_\_  
Print Name

\_\_\_\_\_  
William Wells  
Olympic Region Manager

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

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

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

STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_

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

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

\_\_\_\_\_  
Notary Public in and for the State of

\_\_\_\_\_

My appointment expires \_\_\_\_\_

**Schedule A**  
**Slash Piling Specifications**

The areas shall be piled by creating circular piles of slash and brush conforming to the following specifications:

- A. Piles shall be a minimum of 12 feet tall by 8 feet wide to a maximum of 30 feet tall and 16 feet wide. Piles shall be cone shaped and stable.
- B. Piles shall be free of topsoil, large rotten logs and large stumps. No material larger than 8 inches in diameter shall be piled. Any burnable material shall be well scattered.
- C. Piles shall not be placed on large stumps or logs.
- D. Piles shall be stacked a minimum of 50 feet from all unit boundaries, Riparian Management Zones, leave trees and any standing timber; a minimum of 100 feet from any public roads and highways; and a minimum of 200 feet from any structures.
- E. Piling shall be completed using an approved hydraulic shovel and grapples.
- F. Slash and displaced soil shall be removed from swales and natural drainage channels concurrent with yarding.
- G. Slash may be placed in skid roads, ahead of machinery, or lopped and scattered throughout the harvest area. Slash which accumulates on landings, roads, and "hazard abatement areas" shall be piled per this schedule. Any changes to the above must be approved by the Contract Administrator.
- H. Purchaser may remove slash as biofuel.

**Schedule B**  
**Green Tree Retention Plan**

Leave the following as directed by the Contract Administrator:

1. All trees marked with a blue band of paint and all leave tree area clumps shall remain standing. The perimeter of the leave tree clumps are designated by Leave Tree Area tags. The tags face outward from the leave tree clumps.

Unit #	# of Individually Marked Trees	# of Clumps	# of Trees Clumped	Total # of Leave Trees
1	78	4	650	728
2	64	3	418	482
5	34	0	0	34

Schedule C  
LEAVE TREE SELECTION CRITERIA – UNIT 4 ONLY

A. Leave trees shall be well distributed within each unit according to the Unit Target Table (shown below). Post thin basal area per acre will be the primary measure of meeting the prescription targets, in conjunction with the desired post thin spacing. The approximate post thin spacing will be of secondary consideration.

UNIT TARGET TABLE

Unit	Acreage	Stems/Acre	Desired Spacing	Basal Area/Acre
4	50	120	19' x 19'	130

B. Leave trees will consist of the largest, best formed trees available. The largest and best formed trees are defined as trees exhibiting a combination of the following characteristics: largest diameters, tallest heights, fullest crowns, straightest boles, smallest diameter limbs and the least amount of defects. Best formed trees will be identified by comparing their characteristics with adjacent trees of similar diameter.

C. Spacing may be varied as necessary to ensure the largest diameter and best formed trees available are left on site.

D. Felling trees shall not result in creating an opening in the stand greater than 34 feet in diameter. If openings in the stand approach this diameter, then a sufficient number of trees shall be left on the perimeter of the opening to maintain the basal area target.

E. When a selection must be made between different tree species of similar diameter, the preferred species to leave in order of preference are; a. western red cedar, b. Douglas fir, c. western hemlock, d. western white pine and/or grand fir, e. red alder, f. all other species.

F. All trees greater than 30 inches in diameter at breast height (dbh) shall be left standing, except for those described in Schedule D (Cut Tree Selection Criteria).

G. All trees within 25 feet of wetlands shall be left standing.

H. Snags shall not be cut unless necessary for operational or safety reasons. If snags must be cut, they shall be left on site and not yarded. Snags will not be counted towards meeting the post thin basal area target.

**Schedule D**  
**CUT TREE SELECTION CRITERIA – UNIT 4 ONLY**

A. Cut trees will be taken from the smallest diameter classes first and will be represented by the poorest formed trees, provided that the remaining stand is not reduced below the basal area target.

B. Cut trees will consist of severely deformed trees which are trees exhibiting the following characteristics: three or more tops, broken tops, two tops that twist around each other, basal scars exceeding 1/3 the circumference of the stem, or scars on the lower stem if soft decay is visible (trees with fresh logging scars or old healed over scars are not to be considered severely deformed). Cutting of severely deformed trees shall not reduce the remaining stand below the basal area target.

C. When a selection must be made between different tree species of similar diameter, the preferred species to cut in order of preference are: a. maple, b. alder, c. true fir, d. hemlock, e. Douglas fir, f. cedar.

D. Trees necessary to be cut for forwarding (skid) trails.

E. Trees within 25 feet of the centerline of any newly constructed or reconstructed roads as identified in the Road Plan.

F. Trees defined as danger trees by the Washington State Department of Labor and Industries as approved by the Contract Administrator.

**Schedule E**  
**CERTIFICATION CRITERIA FOR PROCESSOR & FORWARDER**

Compliance Plots:

Variable radius plots will be taken to determine if falling operations are meeting the post thin basal area target. A 20 basal area factor (BAF) will be used and only trees measuring 5 inches dbh and larger will be tallied.

The Contract Administrator's plot data will be averaged on an acre by acre basis to determine if the leave tree and cut tree criteria are successfully being met. The number and location of the plots taken for compliance purposes are at the discretion of the Contract Administrator and will include forwarding trails. The processor operators should take their own plots to ensure the quality of their work.

Certification process for cut-to-length processor and forwarder operations:

The Contract Administrator and the processor and forwarder operators will jointly review contract clauses pertinent to harvest operations, including the Leave Tree and Cut Tree Selection Criteria as outlined in Schedules C and D, prior to beginning thinning operations.

The Contract Administrator will designate a test area for each individual operator. Test areas will be of sufficient size to incorporate multiple forwarding trails. Each operator must meet the expectations set forth in Clause H-011 and satisfactorily complete the test area before they will be allowed to continue work on the remainder of the unit - only then will they be considered certified. Maintaining certifications is contingent upon continued demonstration of their ability to perform within the requirements set forth in the timber sale contract.

Certification may be revoked if 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.





## WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

### FOREST EXCISE TAX ROAD SUMMARY SHEET

**Region:**

**Timber Sale Name:**

**Application Number:**

#### EXCISE TAX APPLICABLE ACTIVITIES

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

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

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

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

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

#### EXCISE TAX EXEMPT ACTIVITIES

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

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

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

## PRE-CRUISE NARRATIVE

Sale Name: <b>Oh Brian</b>	Region: <b>Olympic</b>
Agreement #: <b>30-104795</b>	District: Straits
Contact Forester: Brad Nellis Phone / Location: (360) 301-2900	County(s): Clallam
Alternate Contact: Ben Stein Phone / Location: (360) 640-8794	Other information: <a href="#">Click here to enter text.</a>

Type of Sale: Lump Sum	
Harvest System: Ground based <a href="#">Click here to enter text.</a>	100%

### UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit # Harvest R/W or RMZ WMZ	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determinatio n  (List method and error of closure if applicable)
				RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1	Sec 23/ Twp 30/ Rng 05W	01	138.9	47.3	6.3	2		83.3	GPS (Garmin)
2	Sec 26/23/ Twp 30/ Rng 05W	01	96.1	31.8	4	2.3		58	GPS (Garmin)
4 (VDT)	Sec 26/23/ Twp 30/ Rng 05W	01	51.2	.3	-	0.0		50.9	GPS (Garmin)
5	Sec 23/ Twp 30/ Rng 05W	01	7.6	3.4	0	0.0		4.2	GPS (Garmin)
7 (ROW)	Sec 23/ Twp 30/ Rng 05W	01	0.9	-	-	-		0.9	GPS (Garmin)
<b>TOTAL ACRES</b>			295.0	82.8	10.3	4.3		197.3	

### HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	VRH, Boundary marked with TSB tags, blue paint, pink flashers, and pink flagging, also red ringed trees, and TTC		650 trees in 4 leave tree areas, 78 individuals
2	VRH, Boundary marked with TSB tags, blue paint, pink flashers, and pink flagging, also red ringed trees.		418 trees in 3 leave tree areas, 64 individuals
4	Thinning, Boundary marked with SMUB tags, blue paint, pink flashers, and pink flagging, also TTC	Thinning unit	no leave trees in VDT

5	VRH, Boundary marked with TSB tags, blue paint, pink flashers, and pink flagging, also red ringed trees		34 scattered leave trees
7 (ROW)	Center line marked with orange flagging, ROW will be described in prescription	ROW through WMZ	

**OTHER PRE-CRUISE INFORMATION:**

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	DF/ 2,000 MBF	No gate, easement at the end of Erving Jacobs Rd. places ecology blocks when we aren't using the road	map attached
2	DF/ 1,438 MBF	Accessed through U1	map attached
4	DF/ 1,250 MBF	Accessed through U1	map attached
5	DF/ 75 MBF	No gate, hike to from north end of U1, logging access will be through the end of John Jacobs Rd.	map attached
7	DF/12 MBF	ROW through WMZ	map attached
TOTAL MBF	4,780 MBF		

**REMARKS:**

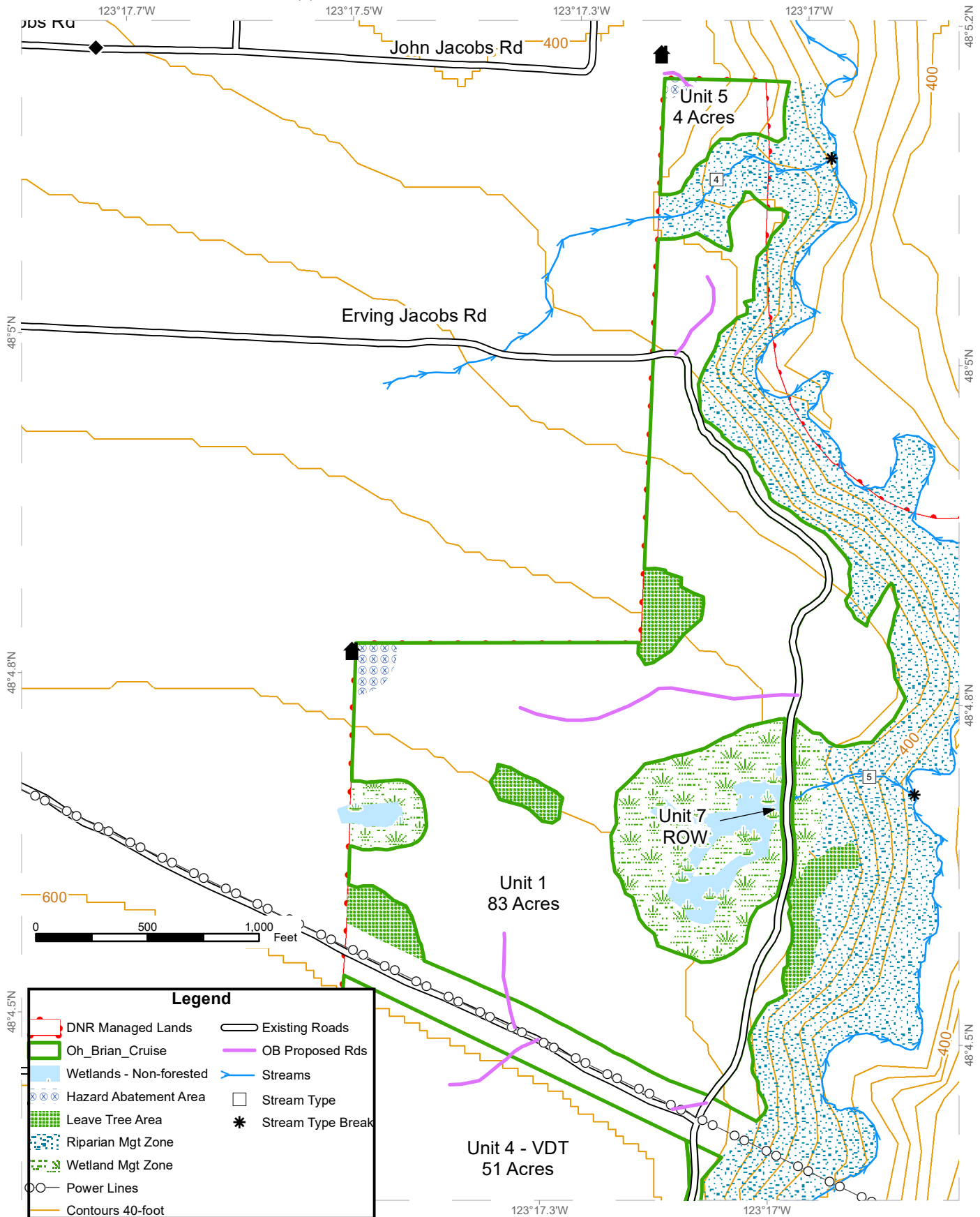
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<b>Prepared By:</b> Brad Nellis <b>Date:</b> 04/12/2023	<b>Title:</b> State Lands Forester	<b>CC:</b>
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# PRECRUISE MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** None  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

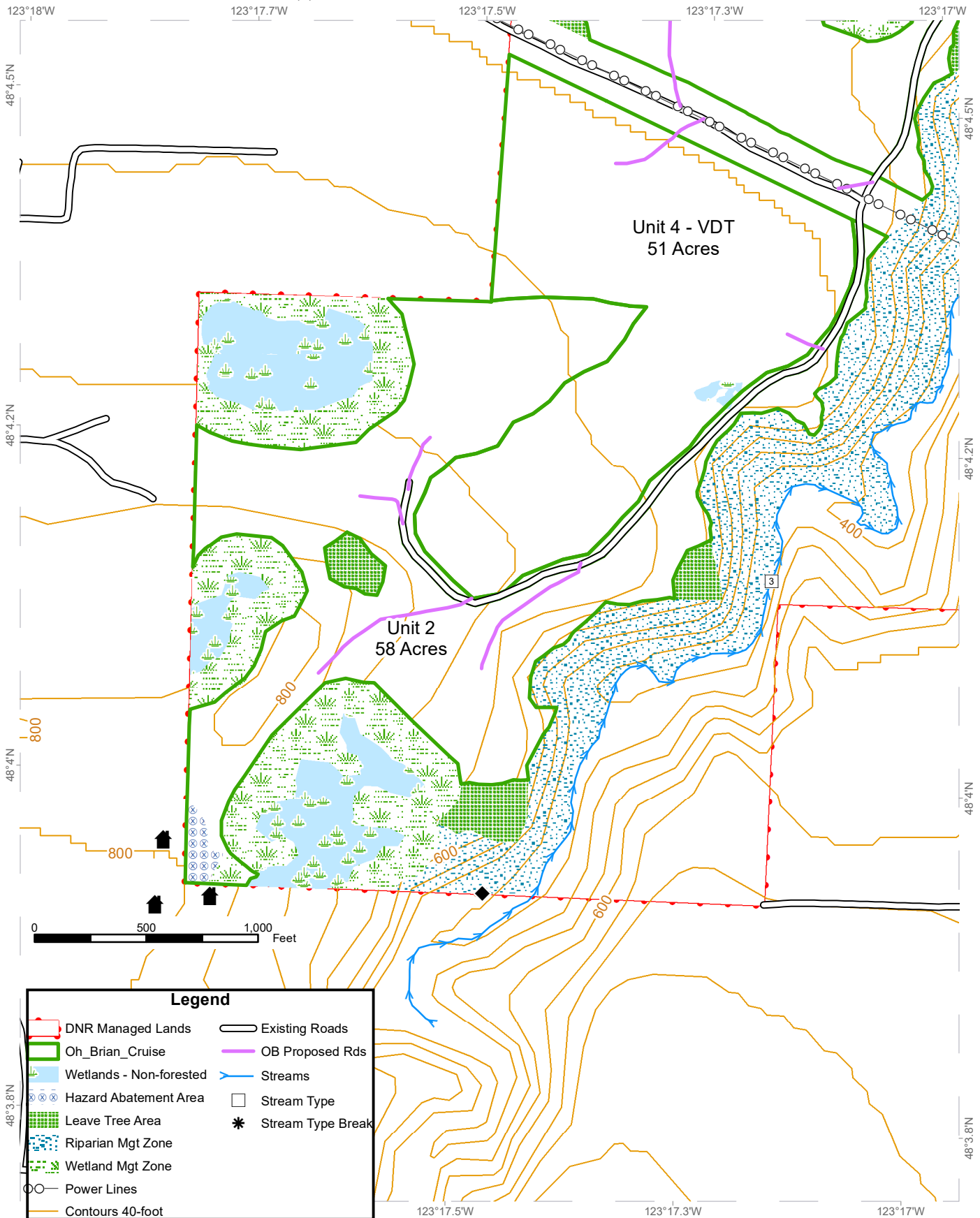
**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720



# PRECRUISE MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** None  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

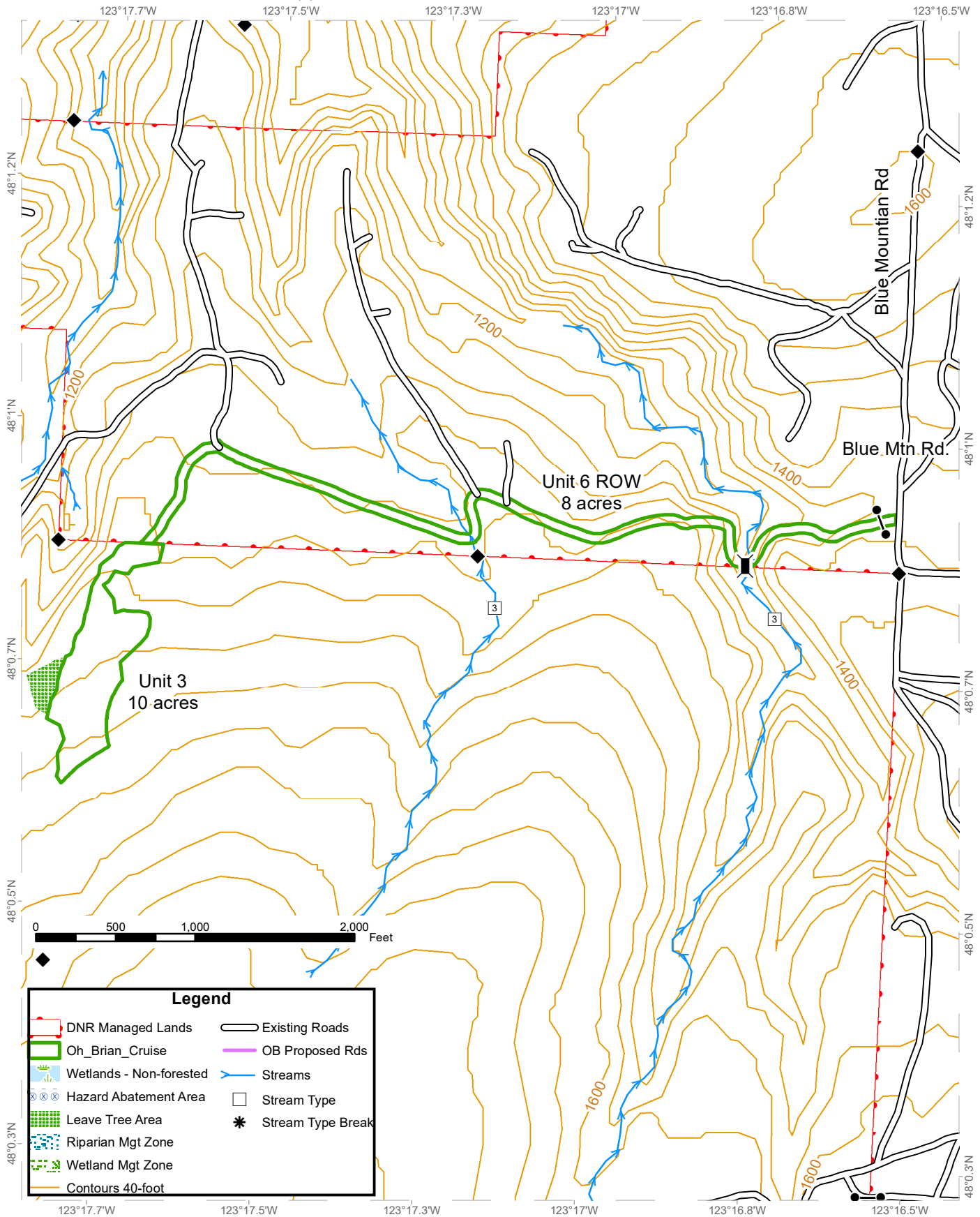
**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720



# PRECRUISE MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** None  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720



**Legend**

DNR Managed Lands	Existing Roads
Oh_Brian_Cruise	OB Proposed Rds
Wetlands - Non-forested	Streams
Hazard Abatement Area	Stream Type
Leave Tree Area	Stream Type Break
Riparian Mgt Zone	
Wetland Mgt Zone	
Contours 40-foot	

## Timber Sale Cruise Report Oh Brian

**Sale Name:** OH BRIAN

**Sale Type:** LUMP SUM

**Region:** OLYMPIC

**District:** STRAITS

**Lead Cruiser:** Kevin Peterson

**Other Cruisers:**

**Cruise Narrative:**

**Location:**

Most units are accessible from Erving Jacobs Rd. Unit 3 is located off of Blue Mountain Rd. All units have good access.

**Cruise Design:**

All units were cruised with a 40 BAF. Merch height was determined at 40% of the diameter at 16'. All logs were cruised in 40' lengths.

**Timber Quality:**

Most of the timber on this sale is plantation style DF. Most of the the DF is defect free and some is of HQ. Some defects are sweep and forked tops.

**Logging and Stand Conditions:**

This sale is 100% ground based harvest. This sale has some light brush in spots.

**General Remarks:**

Unit 4 will be thinned down to an RD of 35.

### Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	14.0			2,899	10	384	1,696	809	
RA	11.5			65			6	35	23
GF	20.8			27		15	9		2
MA	10.2			26				18	8
WH	12.9			12			9	2	1
ALL	13.8			3,028	10	400	1,720	863	35

### Timber Sale Notice Weight (tons)

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	26,182	72	3,135	16,292	6,683	
RA	618			66	342	210
GF	247		143	93		12

Tons by Grade						
Sp	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
MA	196				141	55
WH	127			107	11	8
ALL	27,369	72	3,278	16,557	7,177	285

### 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 (%)
184.5	2.6	99.2	1.7	18,202	3.2

### Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
OH BRIAN U1	B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	83.3	88.4	41	13	0
OH BRIAN U2	B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	58.0	60.5	29	12	0
OH BRIAN U4	B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	50.9	51.5	17	10	0
OH BRIAN U5	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	4.2	4.2	3	3	0
OH BRIAN U7	B1: VR, 1 BAF (20) Measure All, Sighting Ht = 4.5 ft	0.9	0.9	1	1	0
All		197.3	205.5	91	39	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	13.3	39	1,765	1,671	5.4	2,822.8	329.6
DF	LIVE	2 SAW	HQ-B	16.0	32	278	278	0.0	312.5	54.8
DF	LIVE	3 SAW	Domestic	9.1	40	8,954	8,443	5.7	15,985.2	1,665.7
DF	LIVE	3 SAW	HQ-B	11.9	32	187	152	18.7	306.4	30.0
DF	LIVE	4 SAW	Domestic	5.2	28	4,156	4,101	1.3	6,682.8	809.1
DF	LIVE	SPECIAL MILL	HQ-A	17.2	29	52	50	3.5	72.4	9.9
GF	LIVE	2 SAW	Domestic	15.9	40	92	79	14.9	142.6	15.5
GF	LIVE	3 SAW	Domestic	9.1	39	56	45	19.4	92.6	8.9
GF	LIVE	UTILITY	Pulp	5.0	22	12	12	0.0	11.8	2.5
MA	LIVE	4 SAW	Domestic	7.0	20	90	90	0.0	141.0	17.7
MA	LIVE	UTILITY	Pulp	5.1	15	42	42	0.0	54.9	8.3



Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
RA	LIVE	3 SAW	Domestic	10.2	40	36	32	10.5	65.8	6.3
RA	LIVE	4 SAW	Domestic	7.0	37	196	176	9.8	341.6	34.8
RA	LIVE	UTILITY	Pulp	5.2	27	119	119	0.0	210.3	23.5
WH	LIVE	3 SAW	Domestic	7.9	40	49	46	7.8	106.7	9.0
WH	LIVE	4 SAW	Domestic	5.0	23	9	9	0.0	11.4	1.8
WH	LIVE	UTILITY	Pulp	5.2	19	5	5	0.0	8.4	1.0

### Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Domestic	5.8	31	6,927	2.2	12,459.6	1,366.8
DF	9 - 11	LIVE	Domestic	10.2	40	5,616	6.9	10,208.4	1,108.1
DF	9 - 11	LIVE	HQ-B	11.9	32	152	18.7	306.4	30.0
DF	12 - 14	LIVE	Domestic	12.9	40	1,273	6.0	2,324.4	251.1
DF	15 - 19	LIVE	Domestic	15.4	34	398	3.4	498.4	78.5
DF	15 - 19	LIVE	HQ-B	16.0	32	278	0.0	312.5	54.8
DF	15 - 19	LIVE	HQ-A	17.2	29	50	3.5	72.4	9.9
GF	5 - 8	LIVE	Pulp	5.0	22	12	0.0	11.8	2.5
GF	5 - 8	LIVE	Domestic	6.9	32	18	30.0	38.2	3.6
GF	9 - 11	LIVE	Domestic	9.5	40	27	10.3	54.4	5.3
GF	15 - 19	LIVE	Domestic	15.9	40	79	14.9	142.6	15.5
MA	5 - 8	LIVE	Pulp	5.1	15	42	0.0	54.9	8.3
MA	5 - 8	LIVE	Domestic	7.0	21	90	0.0	141.0	17.7
RA	5 - 8	LIVE	Pulp	5.2	28	119	0.0	210.3	23.5
RA	5 - 8	LIVE	Domestic	7.0	37	176	9.8	341.6	34.8
RA	9 - 11	LIVE	Domestic	10.2	40	32	10.5	65.8	6.3
WH	5 - 8	LIVE	Pulp	5.2	19	5	0.0	8.4	1.0
WH	5 - 8	LIVE	Domestic	6.8	34	55	6.6	118.1	10.8

## Cruise Unit Report OH BRIAN U1

### Unit Sale Notice Volume (MBF): OH BRIAN U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	14.2			1,268	141	816	311	
RA	12.6			33		6	19	8
MA	10.0			13			8	5
GF	24.0			11	8	3		
ALL	13.9			1,325	149	825	338	13

### Unit Cruise Design: OH BRIAN U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	83.3	88.4	41	13	0

### Unit Cruise Summary: OH BRIAN U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	36	153	3.7	2
RA	5	5	0.1	0
MA	1	2	0.0	0
GF	1	1	0.0	0
ALL	43	161	3.9	2

### Unit Cruise Statistics: OH BRIAN U1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	149.3	38.8	6.1	102.0	13.5	2.2	15,224	41.1	6.5
RA	4.9	524.9	82.0	82.2	16.6	7.4	401	525.2	82.3
MA	2.0	447.1	69.8	77.0	0.0	0.0	150	447.1	69.8
GF	1.0	640.3	100.0	129.2	0.0	0.0	126	640.3	100.0
ALL	157.1	34.4	5.4	101.2	15.6	2.4	15,901	37.7	5.9

**Unit Summary: OH BRIAN U1**

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	36	ALL	11.7	63	78	15,978	15,224	4.7	199.9	149.3	43.6	1,268.1
GF	LIVE	CUT	1	ALL	24.0	92	118	146	126	13.8	0.3	1.0	0.2	10.5
MA	LIVE	CUT	1	ALL	10.0	40	47	150	150	0.0	3.6	2.0	0.6	12.5
RA	LIVE	CUT	5	ALL	12.6	55	66	435	401	7.9	5.6	4.9	1.4	33.4
ALL	LIVE	CUT	43	ALL	11.7	63	77	16,710	15,901	4.8	209.4	157.1	45.8	1,324.5
ALL	ALL	ALL	43	ALL	11.7	63	77	16,710	15,901	4.8	209.4	157.1	45.8	1,324.5

## Cruise Unit Report OH BRIAN U2

### Unit Sale Notice Volume (MBF): OH BRIAN U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
DF	14.8			1,277	233	768	276	
GF	24.0			10	8	3		
RA	10.0			5				5
MA	11.0			4			4	
ALL	14.6			1,297	241	771	280	5

### Unit Cruise Design: OH BRIAN U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	58.0	60.5	29	12	0

### Unit Cruise Summary: OH BRIAN U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	39	147	5.1	2
GF	1	1	0.0	0
RA	1	1	0.0	0
MA	1	1	0.0	0
ALL	42	150	5.2	2

### Unit Cruise Statistics: OH BRIAN U2

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	202.8	20.4	3.8	108.6	19.8	3.2	22,022	28.4	4.9
GF	1.4	538.5	100.0	129.2	0.0	0.0	178	538.5	100.0
RA	1.4	538.5	100.0	60.5	0.0	0.0	83	538.5	100.0
MA	1.4	538.5	100.0	53.0	0.0	0.0	73	538.5	100.0
ALL	206.9	19.4	3.6	108.1	22.0	3.4	22,357	29.3	4.9

**Unit Summary: OH BRIAN U2**

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	39	ALL	14.8	66	82	23,133	22,022	4.8	169.7	202.8	52.7	1,277.3
GF	LIVE	CUT	1	ALL	24.0	92	118	207	178	13.8	0.4	1.4	0.3	10.3
MA	LIVE	CUT	1	ALL	11.0	40	47	73	73	0.0	2.1	1.4	0.4	4.2
RA	LIVE	CUT	1	ALL	10.0	40	47	83	83	0.0	2.5	1.4	0.4	4.8
ALL	LIVE	CUT	42	ALL	14.7	65	81	23,496	22,357	4.9	174.7	206.9	53.8	1,296.7
ALL	ALL	ALL	42	ALL	14.7	65	81	23,496	22,357	4.9	174.7	206.9	53.8	1,296.7

## Cruise Unit Report OH BRIAN U4

### Unit Sale Notice Volume (MBF): OH BRIAN U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	3 Saw	4 Saw	Utility
DF	9.7			293	79	215	
RA	10.5			26		16	11
MA	10.0			9		6	4
ALL	9.8			329	79	236	14

### Unit Cruise Design: OH BRIAN U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	50.9	51.5	17	10	0

### Unit Cruise Summary: OH BRIAN U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	14	82	4.8	2
RA	2	6	0.4	0
MA	1	1	0.1	0
ALL	17	89	5.2	2

### Unit Cruise Statistics: OH BRIAN U4

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	192.9	31.3	7.6	84.5	14.0	3.8	16,302	34.3	8.5
RA	14.1	282.3	68.5	73.4	24.9	17.6	1,037	283.4	70.7
MA	2.4	412.3	100.0	77.0	0.0	0.0	181	412.3	100.0
ALL	209.4	17.3	4.2	83.7	14.7	3.6	17,520	22.7	5.5

### Unit Summary: OH BRIAN U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	14	ALL	9.7	47	58	5,903	5,765	2.3	133.0	68.2	21.9	293.5
MA	LIVE	CUT	1	ALL	10.0	40	47	181	181	0.0	4.3	2.4	0.7	9.2
RA	LIVE	CUT	2	ALL	10.6	49	59	550	518	5.8	11.5	7.1	2.2	26.4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	17	ALL	9.8	47	58	6,634	6,465	2.6	148.8	77.6	24.8	329.1
ALL	ALL	ALL	17	ALL	9.8	47	58	6,634	6,465	2.6	148.8	77.6	24.8	329.1

## Cruise Unit Report OH BRIAN U5

### Unit Sale Notice Volume (MBF): OH BRIAN U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	15.3			50	10	9	26	5	
WH	12.9			12			9	2	1
GF	10.0			6			4		2
ALL	13.9			68	10	9	38	7	4

### Unit Cruise Design: OH BRIAN U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	4.2	4.2	3	3	0

### Unit Cruise Summary: OH BRIAN U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	7	7	2.3	0
WH	2	2	0.7	0
GF	1	1	0.3	0
ALL	10	10	3.3	0

### Unit Cruise Statistics: OH BRIAN U5

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	93.3	65.5	37.8	127.8	24.3	9.2	11,924	69.8	38.9
WH	26.7	86.6	50.0	105.5	17.3	12.2	2,814	88.3	51.5
GF	13.3	173.2	100.0	108.2	0.0	0.0	1,442	173.2	100.0
ALL	133.3	45.8	26.5	121.4	23.1	7.3	16,180	51.3	27.5

### Unit Summary: OH BRIAN U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	7	ALL	15.3	75	95	12,546	11,924	5.0	73.1	93.3	23.9	50.1
GF	LIVE	CUT	1	ALL	10.0	72	92	1,809	1,442	20.3	24.4	13.3	4.2	6.1



Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	2	ALL	12.9	70	87	2,994	2,814	6.0	29.4	26.7	7.4	11.8
ALL	LIVE	CUT	10	ALL	13.9	74	92	17,349	16,180	6.7	126.9	133.3	35.5	68.0
ALL	ALL	ALL	10	ALL	13.9	74	92	17,349	16,180	6.7	126.9	133.3	35.5	68.0

## Cruise Unit Report OH BRIAN U7

### Unit Sale Notice Volume (MBF): OH BRIAN U7

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	17.4			10	1	7	2
ALL	17.4			10	1	7	2

### Unit Cruise Design: OH BRIAN U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (20) Measure All, Sighting Ht = 4.5 ft	0.9	0.9	1	1	0

### Unit Cruise Summary: OH BRIAN U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	5	5	5.0	0
ALL	5	5	5.0	0

### Unit Cruise Statistics: OH BRIAN U7

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	100.0	0.0	0.0	113.1	5.7	2.5	11,309	5.7	2.5
ALL	100.0	0.0	0.0	113.1	5.7	2.5	11,309	5.7	2.5

### Unit Summary: OH BRIAN U7

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	5	ALL	17.4	77	97	12,123	11,309	6.7	60.6	100.0	24.0	10.2
ALL	LIVE	CUT	5	ALL	17.4	77	97	12,123	11,309	6.7	60.6	100.0	24.0	10.2
ALL	ALL	ALL	5	ALL	17.4	77	97	12,123	11,309	6.7	60.6	100.0	24.0	10.2



# Forest Practices Application/Notification Notice of Decision

FPA/N No: 2618170

Effective Date: 12/5/2023

Expiration Date: 12/5/2026

Shut Down Zone: 653 S

EARR Tax Credit:  Eligible  Non-eligible

Reference: DNR

Oh Brian

### Decision

- Notification Accepted** Operations shall not begin before the effective date.
- Approved** This Forest Practices Application is subject to the conditions listed below.
- Disapproved** This Forest Practices Application is disapproved for the reasons listed below.
- Withdrawn** Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
- Closed** All forest practices obligations are met.

### FPA/N Classification

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

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

- 4 years
- 5 years

### Conditions on Approval/Reasons for Disapproval

Issued By: Levi Puksta

Region: Olympic

Title: Forest Practices Forester

Date: 12/5/2023

Copies to:  Landowner, Timber Owner and Operator

Issued in person:  LO  TO  OP By: 

Date: 12/5/23

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

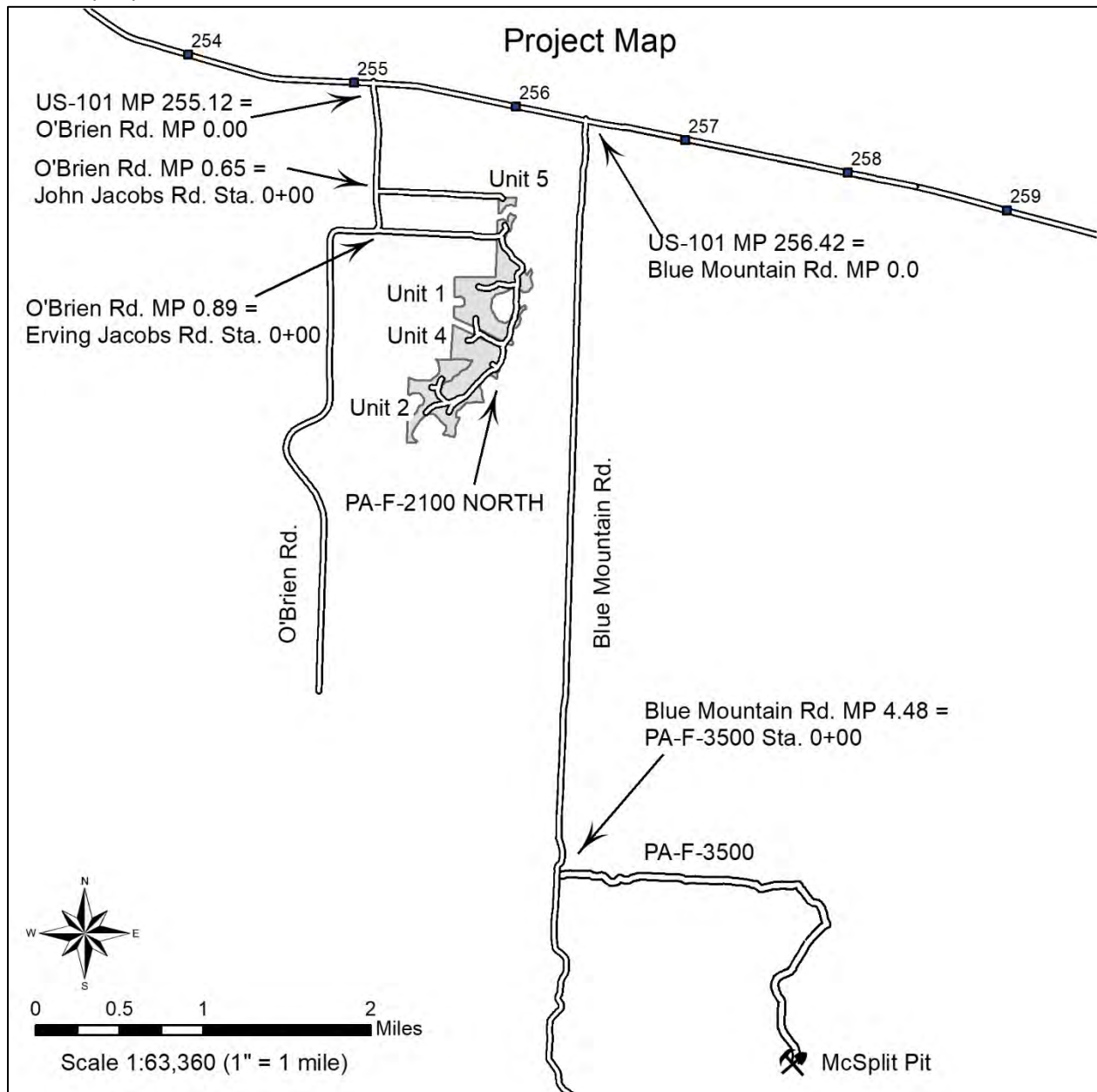
OH BRIAN TIMBER SALE ROAD PLAN  
CLALLAM COUNTY  
STRAITS DISTRICT  
OLYMPIC REGION

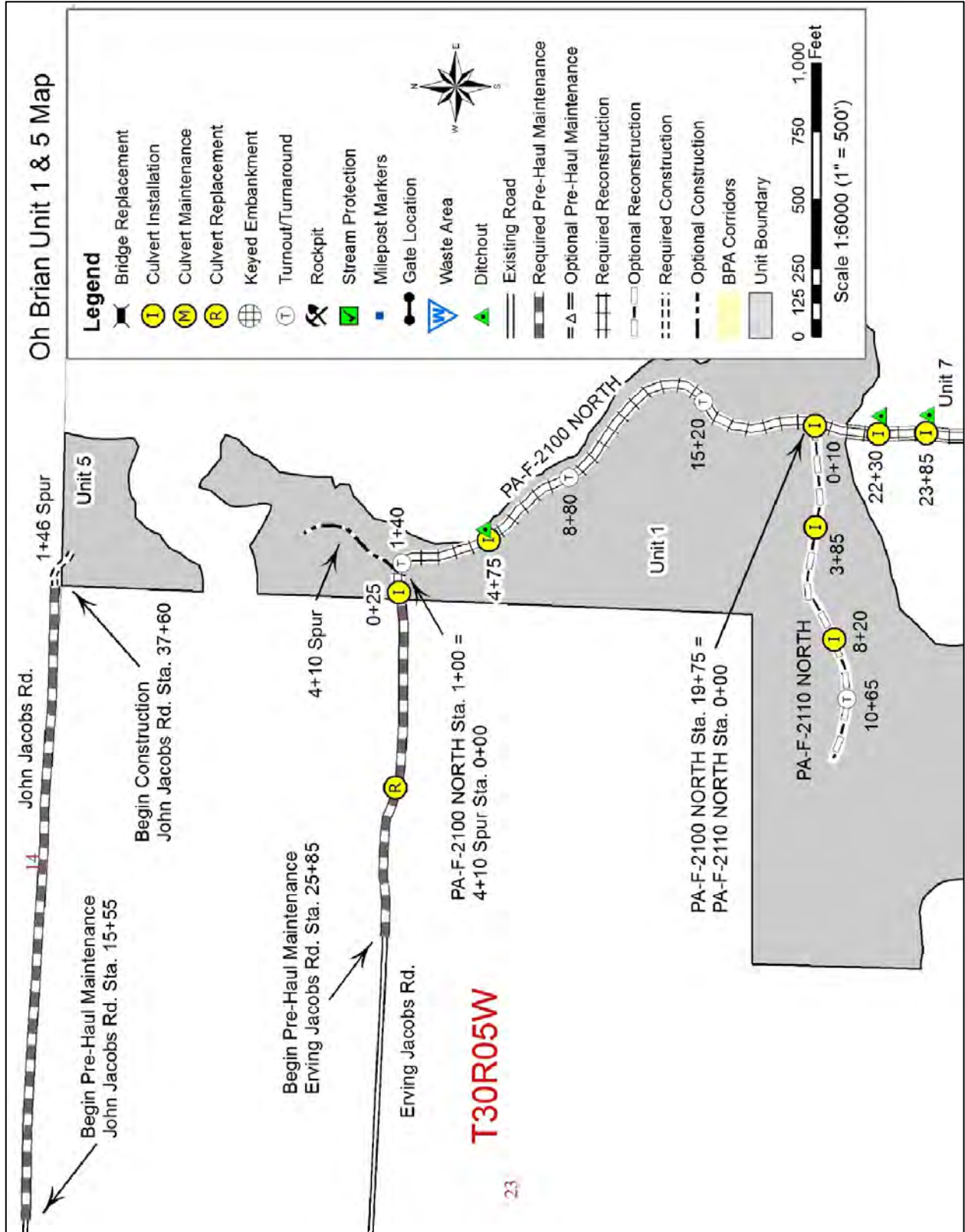
AGREEMENT NO.: 30-104795

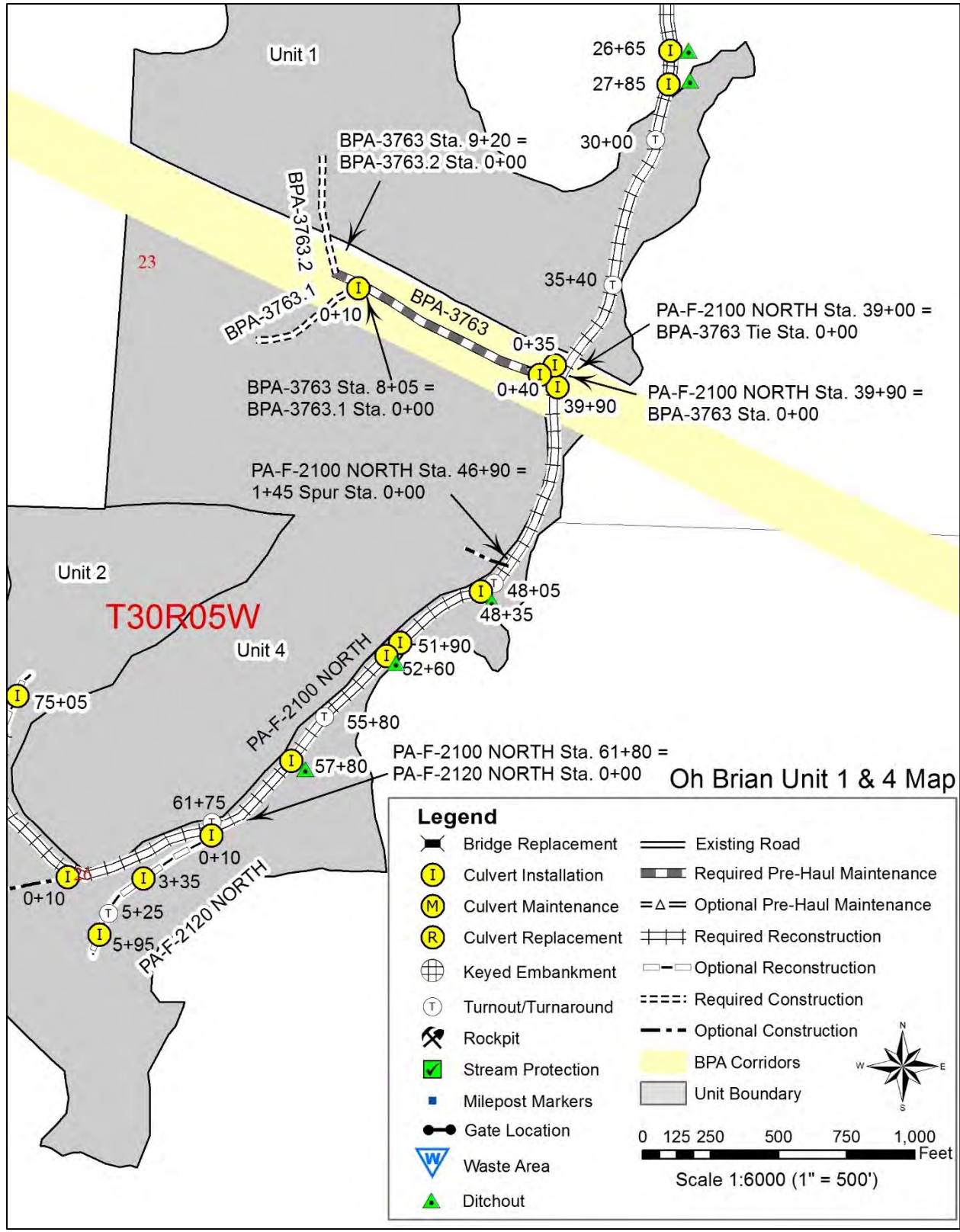
DISTRICT ENGINEER: GREG ELLIS

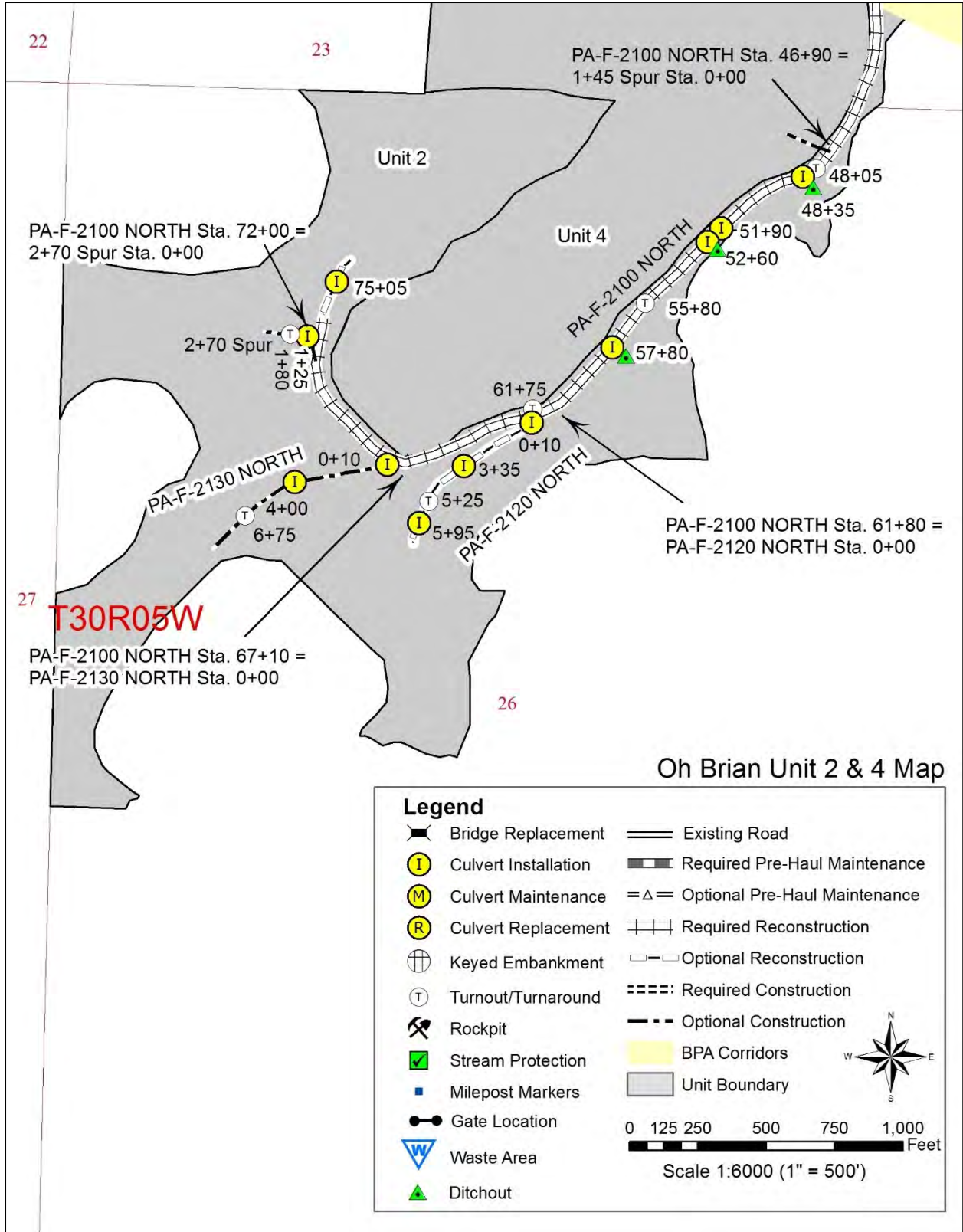
DATE: 5/18/2023

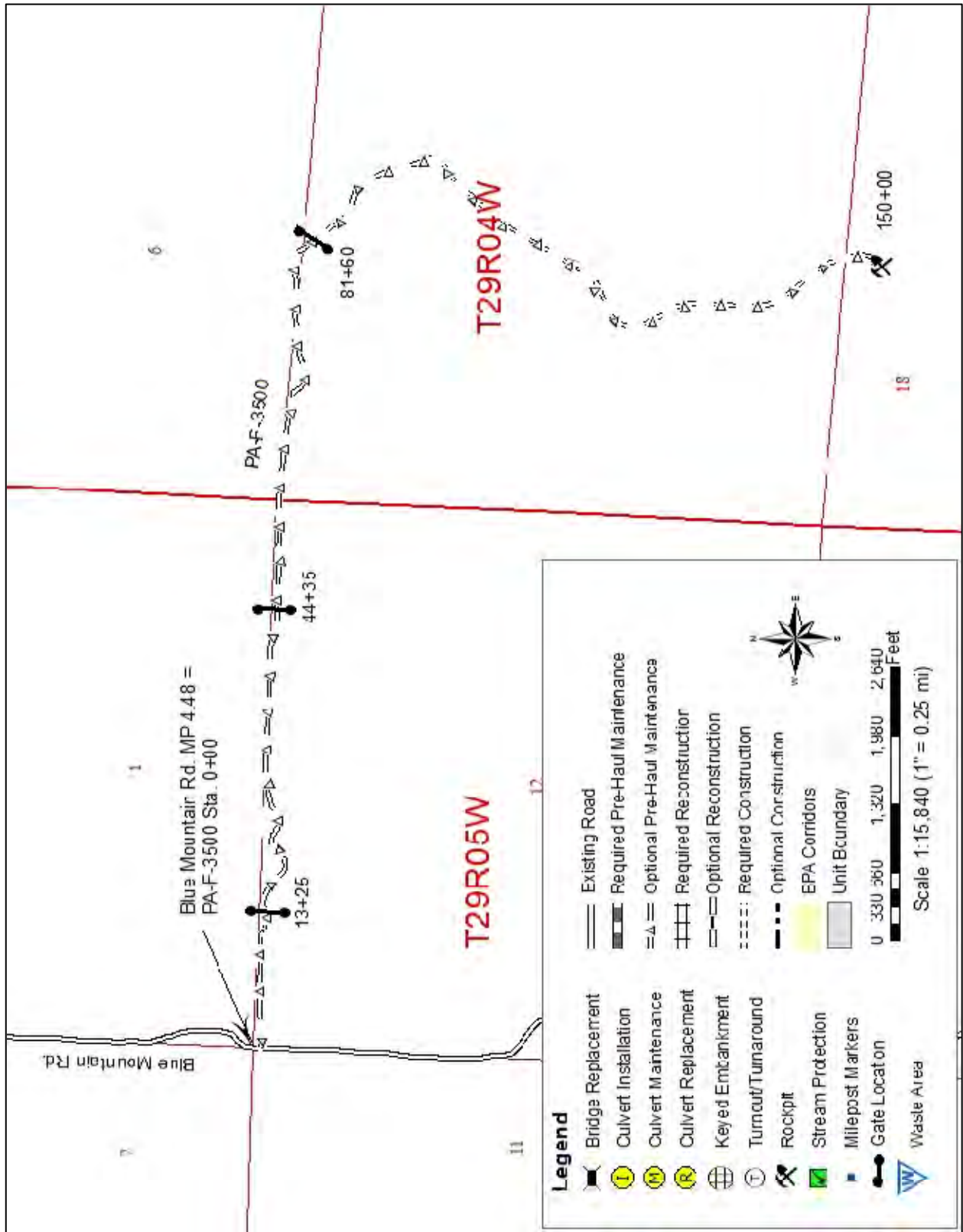
DRAWN & COMPILED BY: EMMA HEIN













SECTION 0 – SCOPE OF PROJECT

**0-1 ROAD PLAN SCOPE**

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

**0-2 REQUIRED ROADS**

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PA-F-2100 North	0+00 – 73+40	Reconstruction
BPA-3763	0+00 – 9+20	Pre-Haul Maintenance
BPA-3763 Tie	0+00 – 1+20	Construction
BPA-3763.1	0+00 – 4+40	Construction
BPA-3763.2	0+00 – 4+50	Construction
1+46 Spur	0+00 – 1+46	Construction
Erving Jacobs Rd.	25+85 – 37+45	Pre-Haul Maintenance
John Jacobs Rd.	15+55 – 34+40	Pre-Haul Maintenance

**0-3 OPTIONAL ROADS**

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PA-F-2100 North	73+40 – 76+05	Construction
4+10 Spur	0+00 – 4+10	Construction
1+45 Spur	0+00 – 1+45	Construction
2+70 Spur	0+00 – 2+70	Construction
PA-F-2110 North	0+00 – 12+75	Reconstruction
PA-F-2120	0+00 – 7+15	Reconstruction
PA-F-2130	0+00 – 7+90	Construction
PA-F-3500	0+00 – 150+00	Pre-Haul Maintenance

**0-4 CONSTRUCTION**

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-2100 North	73+40 – 76+05	See Below
4+10 Spur	0+00 – 4+10	
1+45 Spur	0+00 – 1+45	
2+70 Spur	0+00 – 2+70	
PA-F-2130	0+00 – 7+90	

BPA 3763 Tie	0+00 – 1+20	
BPA 3763.1	0+00 – 4+40	
BPA 3763.2	0+00 – 4+50	
1+46 Spur	0+00 – 1+46	
Total Stations	30.36 Stations	

Construction includes, but is not limited to: Clearing, grubbing, right-of-way debris disposal, excavation and/or embankment to subgrade, end hauling material for construction, compacting road surfaces, constructing ditchlines, constructing ditchouts, constructing turnouts and turnarounds, curve widening, acquisition and installation of drainage structures, application of rock, spreading grass seed and hay.

**0-5 RECONSTRUCTION**

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-2100 North	0+00 – 73+40	See Below
PA-F-2110 North	0+00 – 12+75	
PA-F-2120	0+00 – 7+15	
Total Stations	93.3 Stations	

Reconstruction includes, but is not limited to: Removal of all vegetative material with minimum loss of rock and dispose of in accordance with Clause 2-9 and Clause 3-23. Cleaning ditches and constructing ditches, constructing headwalls, cleaning culvert inlets and outlets in accordance with Clause 2-6 and Clause 2-7. Installing additional culverts and replacing culverts in accordance with the culvert list and constructing ditchouts in accordance with Clause 4-29. Grading, shaping and compacting existing road surface, turnouts and turnaround in accordance with Clause 2-5, realigning road segments, spreading grass seed and hay, and the application of rock in accordance with the Rock List.

**0-6 PRE-HAUL MAINTENANCE**

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3500	0+00 – 150+00	Grade, shape and compact existing running surface in accordance with Clause 2-5, brush road in accordance with Clause 3-1, and apply rock in accordance with Rock List.

BPA-3763	0+00 – 9+20	Grade, shape and compact existing running surface in accordance with Clause 2-5 and apply rock in accordance with Rock List.
Erving Jacobs Rd.	25+85 – 37+45	Grade, shape and compact existing running surface in accordance with Clause 2-5 and apply rock in accordance with Rock List. Brush road in accordance with Clause 3-1. Install culvert in accordance with Clause 7-55. Install farm gate in accordance with Farm Gate Detail.
John Jacobs Rd.	15+55 – 34+40	Grade, shape and compact existing running surface in accordance with Clause 2-5 and apply rock in accordance with Rock List. Care shall be taken not to damage existing asphalt surfacing.
Total Stations	189.65 Stations	

Pre-haul maintenance includes, but is not limited to: Brushing right-of-way, right-of-way debris disposal, cleaning ditches, constructing ditches, installing additional culverts, widening road segments, constructing headwalls, cleaning culvert inlets and outlets, cross drain culvert replacements, installing erosion control materials and sediment removal structures, spot rocking, grading and shaping existing road surface and turnouts, constructing additional turnouts, compaction of road surface, application of rock, acquisition and application of grass seed and hay.

**0-7 POST-HAUL MAINTENANCE**

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

**0-12 DEVELOP ROCK SOURCE**

Purchaser may develop an existing rock source called McSplit Pit. Rock source development may involve stripping up to 0.25 acre, and drilling and shooting to obtain a minimum 1210 yds<sup>3</sup> of Light Loose Rip Rap and the manufacture of a minimum of 16510 yd<sup>3</sup> of 6” Jaw Run Rock and 1940 yd<sup>3</sup> of 2” minus Crushed Rock in accordance with Clause 6-20.

Purchaser may develop an existing rock source called Mason Pit. Rock source development may involve drilling and shooting to obtain a minimum 1210 yds<sup>3</sup> of Light Loose Rip Rap and the manufacture of a minimum of 16510 yd<sup>3</sup> of 6” Jaw Run Rock and 1940 yd<sup>3</sup> of 2” minus Crushed Rock in accordance with Clause 6-20.

All rock manufactured out of rock sources listed above shall meet specifications as listed in Section 6 ROCK AND SURFACING. In the event that rock does not meet specifications, which will be determined by the Contact Administrator, a commercial source shall be used at the purchaser's expense meeting listed specifications.

**0-13 STRUCTURES**

Purchaser shall provide and install all structures. Requirements for these structures are listed in Section 7 STRUCTURES.

**SECTION 1 – GENERAL**

**1-1 ROAD PLAN CHANGES**

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

**1-2 UNFORESEEN CONDITIONS**

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

**1-3 ROAD DIMENSIONS**

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

**1-4 ROAD TOLERANCES**

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

<u>Tolerance Class</u>	<u>A</u>	<u>B</u>	<u>C</u>
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0
Bridge Installation Centerline alignment (feet lt./rt.)	0.5		
Bridge Installation Elevation (feet +/-)	0.25		

**1-6 ORDER OF PRECEDENCE**

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

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

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

**1-7 TEMPORARY ROAD CLOSURE**

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

<u>Road</u>	<u>Number of Allowable Closed Days</u>
Erving Jacobs Rd.	1

**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.

**1-11 FPHP REQUIREMENTS**

The following work is subject to requirements under a Forest Practice Hydraulics Project Approval issued by the State of Washington.

<u>Road</u>	<u>Stations</u>	<u>Work Type</u>
Erving Jacobs Rd.	30+80	Culvert Replacement

**1-12 SURVEY MONUMENTS**

At no time during construction, reconstruction, or maintenance shall survey monuments, witness trees, or bearing trees be disturbed or damaged. If damaged or disturbed, Purchaser shall hire a licensed land surveyor to repair, replace, and/or reset them.

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 ribbon and paint for construction centerlines.
- Construction stakes for everything else.

**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

**1-21 HAUL APPROVAL**

Purchaser shall not use roads under this road plan without written approval from the Contract Administrator.

**1-22 WORK NOTIFICATIONS**

Purchaser shall notify the Contract Administrator a minimum of 3 business days before road 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
- Drainage installation
- Subgrade compaction
- Rock application
- Rock compaction
- Bridge removal/installation

## SUBSECTION RESTRICTIONS

### 1-25 ACTIVITY TIMING RESTRICTION

On the following road(s), are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All	All	All	Weekends and State Recognized Holidays
All	All	All roadwork activities including Timber Haul and rock pit development.	November 1 <sup>st</sup> – April 30 <sup>th</sup>
All	All	All	8:00 PM—6:00 AM (Year Round)

### 1-26 OPERATING DURING CLOSURE PERIOD

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

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

### 1-29 SEDIMENT RESTRICTION

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

### 1-30 CLOSURE TO PREVENT DAMAGE

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

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

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

**1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION**

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

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

**1-33 SNOW PLOWING RESTRICTION**

On the following road(s), snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

SUBSECTION OTHER INFRASTRUCTURE

**1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS**

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

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

The following county roads and state highways are affected by this sale:

<u>Road Name</u>
Erving Jacobs Rd.
John Jacobs Rd.



**1-41 REQUIREMENTS FOR PAVED ROAD APPROACHES**

Requirements for the paved road name road approaches:  
Purchaser shall build up approaches to allow a smooth grade transition between the DNR roads and all paved roads associated with this sale. The top of the DNR road surfacing must be kept level with the surface of the paved roads at all times. The surface of the DNR road approaches must slope from the edge of the paved roads at the rate of 2%, unless otherwise directed by the Contract Administrator.

**1-42 UTILITY ACCESS ROAD**

The following road(s) intersect(s) existing utility access roads. Purchaser shall conduct road work on the intersecting roads so that the utility access roads are accessible at all times.

<u>Road</u>	<u>Stations</u>
PA-F-2100 North	39+90

**1-43 ROAD WORK AROUND UTILITIES**

Road work is in close proximity to a utility. Known utilities are listed, but it is the Purchaser’s responsibility to identify any utilities not listed. Purchaser shall work in accordance with all applicable laws or rules concerning utilities. Purchaser is responsible for all notification, including “call before you dig”, and liabilities associated with the utilities and their rights-of-way. Purchaser shall notify the Bonneville Power Administration before starting road work.

<u>Road</u>	<u>Stations</u>	<u>Utility</u>	<u>Utility Contact</u>
BPA-3763	0+00 – 9+20	Overhead BPA lines	<b>811</b>
Erving Jacobs Rd.	30+80	Buried Utilities	<b>811</b>

**SECTION 2 – MAINTENANCE**

**2-1 GENERAL ROAD MAINTENANCE**

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

**2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE**

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

**2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER**

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

**2-4 PASSAGE OF LIGHT VEHICLES**

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

**2-5 MAINTENANCE GRADING – EXISTING ROAD**

On the following road(s), Purchaser shall use a grader to shape the existing surface.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PA-F-3500	0+00 – 150+00	Grade, shape, compact and remove shoulder vegetation as required by contract administrator
BPA-3763	0+00 – 9+20	Grade, shape, and compact as required by contract administrator
Erving Jacobs Rd.	25+85 – 37+45	Grade, shape, compact and remove shoulder vegetation as required by contract administrator
John Jacobs Rd.	15+55 – 34+40	Grade, shape, compact and remove shoulder vegetation as required by contract administrator

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

On the following road(s), Purchaser shall clean and/or construct ditches, headwalls, and catchbasins. Work must be completed before the start of timber haul and must be done in accordance with the Typical Section Sheet. Pulling ditch material across the road or mixing in with the road surface is not allowed. Ditchlines, headwalls, and catch basins shall not encroach into the existing road.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
PA-F-2100 NORTH	0+00 – 73+40	Left and/or right	Ditching where ditchlines are present

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION BRUSHING

**3-1 BRUSHING**

On the following road(s), Purchaser shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
PA-F-3500	0+00 – 150+00
Erving Jacobs Rd.	34+55 – 37+45

**3-2 BRUSHING RESTRICTION**

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

**3-3 BRUSH REMOVAL**

Remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets. Brush should be disposed of so that it will not fall back onto the road prism.

SUBSECTION CLEARING

**3-5 CLEARING**

Purchaser shall fall all vegetative material larger than 5 inches DBH or over 15 feet high between the marked right-of-way boundaries, or as approved by Contract Administrator. Clearing must be completed before starting excavation and embankment.

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

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

**3-8 PROHIBITED DECKING AREAS**

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

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.

- In locations that impede drainage.
- On slopes greater than 40%.
- Against standing trees.

## SUBSECTION GRUBBING

### **3-10 GRUBBING**

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Grubbing must be completed before starting excavation and embankment.

### **3-12 STUMP PLACEMENT**

Purchaser shall place grubbed stumps outside of the clearing limits, as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps must be positioned upright, with root wads in contact with the forest floor and on stable locations.

## 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 grubbing limits as shown on the TYPICAL SECTION SHEET.

### **3-21 DISPOSAL COMPLETION**

Purchaser shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, before the application of rock.

### **3-23 PROHIBITED DISPOSAL AREAS**

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland, unless used to comply with the specifications detailed in the Riparian Strategy, Clause **Error! Reference source not found.**, and Clause **Error! Reference source not found.**
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 45%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.

- Against standing timber.

### **3-24 BURYING ORGANIC DEBRIS RESTRICTED**

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

### **3-25 SCATTERING ORGANIC DEBRIS**

Purchaser shall scatter organic debris outside of the grubbing limits in accordance with Clause 3-23 unless otherwise detailed in this road plan and as directed by the Contract Administrator.

## **SUBSECTION PILE**

### **3-30 EXCLUSION OF DOZER BLADES**

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

### **3-31 PILING**

Purchaser shall pile organic debris no closer than 20 feet from standing timber and no higher than 20 feet in areas specified in Clause **Error! Reference source not found.** Piles must be free of rock and soil.

## **SECTION 4 – EXCAVATION**

### **4-1 EXCAVATOR CONSTRUCTION**

Purchaser shall use a track mounted hydraulic excavator for construction, reconstruction and maintenance work unless stated otherwise within this Road Plan or authorized in writing by the Contract Administrator.

### **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.

### **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 16 percent adverse.
- Minimum curve radius is 60 feet at centerline.

- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

**4-4 SWITCHBACK STANDARDS**

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

Purchaser shall follow these standards for switchbacks:

- Maximum adverse grades for switchbacks is 10%.
- Maximum favorable grades for switchbacks is 12%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must be constructed on the tangents preceding and departing from the switchbacks.

**4-5 CUT SLOPE RATIO**

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

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

**4-6 EMBANKMENT SLOPE RATIO**

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

<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.

### SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

#### **4-20 SUBGRADE DIMENSIONS FOR INTERSECTIONS**

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

#### **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. Locations changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

#### **4-22 TURNAROUNDS**

Turnarounds must be no larger than 50 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

### SUBSECTION DITCH CONSTRUCTION

#### **4-25 DITCH CONSTRUCTION AND RECONSTRUCTION**

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

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

Purchaser shall not pull ditch material across the road or mix in with the road surface. Excavated material must be end hauled to the location specified in Clauses 4-36 through 4-38.

#### **4-28 DITCH DRAINAGE**

Ditches must drain to cross-drain culverts or ditchouts.

#### **4-29 DITCHOUTS**

Purchaser shall construct ditchouts as identified in the table below and as needed to fit as built conditions. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. L or R denotes ditchout left or ditchout right.

<u>Road</u>	<u>Stations</u>	<u>L or R</u>
PA-F-2100 North	4+75 (approx. 20')	L
PA-F-2100 North	22+30 (approx. 20')	L
PA-F-2100 North	23+85 (approx. 10')	L
PA-F-2100 North	26+65 (approx. 20')	L
PA-F-2100 North	27+85 (approx. 30')	L
PA-F-2100 North	48+35 (approx. 20')	L
PA-F-2100 North	52+60 (approx. 25')	L
PA-F-2100 North	57+80 (approx. 20')	L

#### 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.

#### 4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

#### 4-39 WASTE AREA COMPACTION

Excavated material may be deposited adjacent to the road prism on side slopes up to 45% if the waste material is compacted and free of debris. On side slopes of 45% or more, all excavation shall be end hauled or pushed to designated waste areas. All waste material shall be compacted. The minimum acceptable compaction is achieved by placing embankments in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lifts, with the exception of side hill embankments too narrow to accommodate excavation equipment which may be placed by end-dumping or sidecasting until sufficiently wide to support the equipment.

#### SUBSECTION BORROW

#### 4-47 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 12 inches in any dimension.



**4-48 BORROW MATERIAL**

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

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.

**4-56 DRY WEATHER SHAPING**

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

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 areas specifically requiring keyed embankment construction and for embankment 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, except ditch. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before before placement of rock.

**4-62 DRY WEATHER COMPACTION**

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

**4-63 EXISTING SURFACE COMPACTION**

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

**4-64 WASTE MATERIAL COMPACTION**

All waste material shall be compacted by running equipment over it or bucket tamping.

**4-65 CULVERT BACKFILL COMPACTION**

Culvert backfills shall be accomplished by using a jumping jack compactor, performing at least 2 passes per lift, in lifts not to exceed 8 inches.

**4-66 COMPACTION BY METHOD**

Compaction shall consist of three complete passes over the entire width of each lift with a vibratory drum roller weighing a minimum of 6,000 pounds at a maximum operating speed of 3 mph. For embankment segments too narrow to accommodate a drum roller, a plate compactor shall be used.

SECTION 5 – DRAINAGE

**5-4 PUNCHEON RESTRICTED**

At no time shall puncheon be used in the subgrade, unless approved by the Contract Administrator.

SUBSECTION CULVERTS

**5-5 CULVERTS**

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-24.

**5-12 UNUSED MATERIALS STATE PROPERTY**

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

**5-13 CONTINGENCY CULVERTS**

The following culverts will be supplied by the Purchaser and are available for installation as directed by the Contract Administrator. In the event that culverts are not used, culverts shall be stockpiled at Port Angeles Work Center.

<u>Road</u>	<u>Size</u>
On any portion of road used for timber or rock haul.	1—18" x 30' culvert
	1—18" culvert band
	1 – 24" x 30' culvert

## SUBSECTION CULVERT INSTALLATION

### **5-15 CULVERT INSTALLATION**

Culvert installation must be in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL SHEET, TYPICAL TYPE NS NP CULVERT INSTALLATION DETAIL SHEET, the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations. Culverts over 15 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

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

Purchaser shall obtain written approval from the District Engineer or his/her designee for the installation of culverts 30 inches in diameter and over before backfilling.

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

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

### **5-18 CULVERT DEPTH OF COVER**

Cross drain culverts must be installed with a depth of cover of not less than 18 inches of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design, TYPICAL TYPE NS NP DETAIL SHEET, or recommended by the culvert manufacturer for the type and size of the pipe, whichever is greater.

## SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

### **5-25 CATCH BASINS**

Purchaser shall construct catch basins to resist erosion. Minimum dimensions of catch basins are 1-2 feet wide, 1-2 feet deep and 2-4 feet long.

### **5-26 HEADWALLS FOR CROSS DRAIN CULVERTS**

Purchaser shall construct headwalls in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL at all cross drain culverts that specify the placement of rock. Rock used for headwalls must consist of oversize or quarry spall material. 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. No placement by end dumping or dropping of rock is allowed.

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

Purchaser shall place rip rap in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the TYPICAL TYPE NS NP CULVERT INSTALLION DETAIL or as directed by the Contract Administrator. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be with a zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

**SECTION 6 – ROCK AND SURFACING**

**SUBSECTION ROCK SOURCE**

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

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

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
McSplit Pit	T29N R04W Sec 18	6" Jaw Run Rock, 2" minus Crushed Rock, Light Loose Rip Rap
Mason Pit	T29N R05W Sec 9	6" Jaw Run Rock, 2" minus Crushed Rock, Light Loose Rip Rap

**6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE**

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following existing stockpile(s) on state land at no charge to the Purchaser. Purchaser shall not remove more than 1000 cubic yards of 6" Jaw Run rock. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
McSplit Pit	T29N R04W Sec 18	6" Jaw Run Rock	1000 yd <sup>3</sup>

**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. Prior to approval, purchaser shall submit a passing sieve test performed by procedure described in WSDOT FOP for WAQTC T 27/11.

**SUBSECTION ROCK SOURCE DEVELOPMENT**

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

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

<u>Source</u>	<u>Rock Type</u>
McSplit Pit	6" Jaw Run Rock, 2" minus Crushed Rock, Light Loose Rip Rap

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

Purchaser shall conduct rock source development and use at the following sources, in accordance with a written ROCK SOURCE DEVELOPMENT PLAN to be prepared by the Purchaser. The plan is subject to written approval by the Contract Administrator before any rock source operations. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. Purchaser shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the rock source.

<u>Source</u>	<u>Rock Type</u>
Mason Pit	6" Jaw Run Rock, 2" minus Crushed Rock, Light Loose Rip Rap

**6-12 ROCK SOURCE SPECIFICATIONS**

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

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

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

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

#### 6-14 DRILL AND SHOOT

Rock drilling and shooting must meet the following specifications:

- Oversize material remaining in the rock source at the conclusion of the timber sale may not exceed 5% of the total volume mined in that source.
- Oversize material is defined as rock fragments larger than five feet in any dimension.
- Oversized rock that exceeds the maximum allowable amount must be shot or broken up.
- Purchaser shall notify the Contract Administrator a minimum of 3 working days before blasting operations.
- Purchaser shall submit an informational drilling and shooting plan to the Contract Administrator 10 working days before any drilling (Form #M-126PAC).
- All operations must be carried out in compliance with the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and the Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- Purchaser is require to inform Clallam County Dispatch (PenCom) of a day and approximate time of the pit blasting.

- Purchaser shall block access roads before blasting operations.

## **6-16 DRILL AND SHOOT TECHNICAL SPECIFICATIONS**

### **DRILLING**

The Purchaser shall drill in accordance to an approved Shot Plan. Drill depth shall not extend more than 5 feet below existing pit floor. The District Engineer or their designee and Purchaser shall jointly measure and determine drill depths, hole spacing and pattern and must be approved prior to loading explosives. During drilling operation, drill operator shall keep a bore log which includes the depth and location of each hole drilled. The District Engineer or their designee may ask to see the bore log during and after the drilling process has completed.

### **BLASTING**

The Purchaser shall furnish and load appropriate explosives, detonators, and ignition sources in accordance to all State and Federal laws and in accordance to an approved Shot Plan.

### **DRILLING AND SHOOTING PLAN “SHOT PLAN”**

The Purchaser shall submit a written drilling and shooting plan, including drawings, to the District Engineer or their designee, which must meet the approval of the District Engineer or their designee prior to the start of the drilling operation. The plan and drawing(s) shall include the following proposals: drill hole diameter, drill hole spacing, drill hole pattern, drill hole depth, any stemming depths, type and depth of explosive including amount per drill hole, detonator and ignition type, and proposed delay pattern. Any adjustment or modifications to the proposals during operations must be noted and resubmitted prior to loading of explosives.

### **WEATHER LIMITATIONS**

When, in the opinion of the District Engineer or their designee, the weather is such that satisfactory results cannot be obtained in any phase of operation, Purchaser shall suspend operations until the weather is favorable. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

## **SUBSECTION ROCK MANUFACTURE**

## **6-20 ROCK CRUSHING OPERATIONS**

Rock crushing operations must conform to the following specifications:

- Operations and placement of oversize material must be conducted in or near the rock source site, as approved in writing by the Contract Administrator.
- The crushing operation must be concluded within 30 working days from the time it begins.

- All testing and operations must be performed in accordance with the attached ROCK CRUSHING COMPLIANCE PROCEDURE.
- Purchaser shall produce sieve analysis for crushing operations as described in ROCK CRUSHING COMPLIANCE PROCEDURE.
- Purchaser may use a commercial testing lab to produce sieve analyses.
- Sieve analysis for acceptance of aggregate shall be performed by procedure described in WSDOT FOP for WAQTC T 27/11.

**6-23 ROCK GRADATION TYPES**

Purchaser shall manufacture rock in accordance with the types and amounts listed in the Manufacturing list below. Rock must meet the following specifications for gradation and uniform quality during manufacture and placement into a stockpile. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

<u>Rock Type</u>	<u>Amount</u>
6" Jaw Run Rock	14,260 yd <sup>3</sup>
2" Jaw Run Rock	510 yd <sup>3</sup>
Light Loose Rip Rap	10 yd <sup>3</sup>

**6-24 ROCK CRUSHING COMPLIANCE PROCEDURE**

Phase I. Equipment Adjustment

**Step 1:**

At start up of crushing operations, the Purchaser will notify the Contract Administrator when the rock meets the gradation specifications in the contract. None of the rock crushed during this calibration period will be counted toward the amount required to be crushed, and this rock must be kept separate from accepted rock crushed later.

**Step 2:**

The Purchaser will test the rock. Two samples will be taken. If the rock meets specifications, crushing may begin. If the rock does not meet specifications, return to Step 1.

Phase II. Production

**Step 3:**

The Purchaser will continue periodic testing to ensure that rock stays in spec. Testing will take place according to the following schedule:

- After the first 500 yards
- After every 2,000 yards thereafter.

a) Any time a sample is out of spec, but is within 5%\*, the Purchaser will be notified and a second sample will be taken later in the day. If the second sample meets



specifications, the rock crushed during that day will be accepted. If the second sample also fails to meet spec, none of the rock crushed since the last acceptable test will be counted toward the amount to be crushed.

- b) Any time a sample is out of spec and is more than 5% off in any category, none of the rock crushed since the last acceptable test will be accepted and that rock must be kept separate from the stockpile. Return to Step 1.
- c) Purchaser is strongly encouraged to take their own samples regularly and keep their operations in spec to avoid unnecessary expenses.

- The 5% will be applied only to sieve specs for 2" to ¼"; rock that is out of spec in larger sizes must be kept separate from the acceptable rock. Periodic visual inspection required for all rock gradations larger than 2". If in the opinion of the Contract Administrator that gradations are not meeting specifications, Contract Administrator may require testing of material 2" or larger.

#### 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.

##### **6-30 2-INCH MINUS CRUSHED ROCK**

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

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

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

##### **6-39 6-INCH JAW RUN ROCK**

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

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

**6-50 LIGHT LOOSE RIP RAP**

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

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

**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 estimated truck 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.

**SUBSECTION ROCK APPLICATION**

**6-70 APPROVAL BEFORE ROCK APPLICATION**

Purchaser shall obtain written approval from the Contract Administrator for subgrade drainage installation included grading and compaction before rock application.

**6-71 ROCK APPLICATION**

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width and in lifts not to exceed 6 inches.

**6-72 ROCK APPLICATION AFTER HAULING**

On the following road(s), upon completion of all hauling operations, Purchaser shall apply rock in accordance with the quantities shown on the ROCK LIST and listed below.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>	<u>Amount</u>
PA-F-3500	0+00 – 150+00	1 ¼" minus	300 yd <sup>3</sup>
Erving Jacobs Rd.	25+85 – 37+45	1 ¼" minus	50 yd <sup>3</sup>

John Jacobs Rd.	15+55 – 34+40	1 ¼" minus	50 yd <sup>3</sup>
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**6-73 ROCK FOR WIDENED PORTIONS**

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

**6-76 DRY WEATHER ROCK COMPACTION**

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

**6-78 ROCK FOR SPOT PATCHING**

Rock for spot patching shall be applied before any grading is done and before any rock lifts are applied. Once applied, spot patches shall be graded into the existing running surface.

SUBSECTION DUST ABATEMENT

**6-80 WATERING FOR DUST ABATEMENT**

Purchaser shall use water for dust abatement as directed by the Contract Administrator.

SECTION 7 – STRUCTURES

SUBSECTION SIGNS

**7-2 SIGN INSTALLATION (NON-HIGHWAY)**

The Purchaser shall be responsible for the purchase, installation, and maintenance of the following road signs. Signs shall be installed a minimum of 7 days before hauling logs and/or rock. Signs shall be at least 2 feet in any direction, and shall be orange with black lettering.

<u>Road</u>	<u>Station</u>	<u>Sign</u>
PA-F-3500	0+00	1 Truck Crossing sign facing outbound

SUBSECTION STREAM CROSSING STRUCTURES GENERAL

**7-5 STRUCTURE DEBRIS**

Purchaser shall not allow debris from the installation or removal of structures to enter any stream. Components removed from existing structure(s) must be removed from state land or, as directed in writing, by the Contract Administrator. Purchaser shall maintain a clean jobsite, with all materials stored away from the high water mark or

other area presenting a risk of the materials entering a stream. Debris entering any stream must be removed immediately, and placed in the site(s) designated for stockpiling or disposal. Purchaser shall retrieve all material carried downstream from the jobsite.

**7-6 STREAM CROSSING INSTALLATION**

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements, and as directed by the District Engineer or their designee.

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

Purchaser shall design and construct bank protection to prevent the undermining of the structure.

SUBSECTION LARGE CULVERTS

**7-55 LARGE CULVERT INSTALLATION**

Purchaser shall provide and install large culverts in accordance with the Typical Large Culvert Detail. Culvert designs must meet or exceed the following specifications:

<u>Road</u>	<u>Erving Jacobs Rd.</u>
<u>Station</u>	30+80
<u>Type</u>	Round
<u>Material and Coating Type*</u>	Aluminized Steel
<u>Diameter (in.)</u>	48
<u>Length (ft.)</u>	50
<u>Depth of Fill (ft)</u>	11
<u>Corrugations</u>	2 2/3" x 1/2"
<u>Gauge</u>	14

\* See Clause 10-15 CORRUGATED STEEL CULVERT

**7-56 STEEL PIPE, PIPE ARCH, AND STRUCTURAL PLATE INSTALLATION**

Purchaser shall install steel pipe, pipe arches, and structural plate culverts in accordance with the National Corrugated Steel Pipe Association "Installation Manual for Corrugated Steel Pipe, Pipe Arches, and Structural Plate." Installation is subject to the inspection and approval of the Contract Administrator before placement and backfill. The latest edition of the NCSA Installation Manual can be found at [www.ncspa.org](http://www.ncspa.org).

**7-57 CULVERT SHAPE CONTROL**

Purchaser shall monitor the culvert shape during backfill and compaction. Special attention must be paid to maintaining the structure's rise dimensions, concentricity, and smooth uniform curvature. If compaction methods are resulting in peaking or deflection

of the culvert, Purchaser shall modify the compaction method to achieve the appropriate end result.

#### SUBSECTION GATE CLOSURE

##### **7-70 GATE CLOSURE**

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

#### SUBSECTION GATES AND FENCES

##### **7-76 GATE INSTALLATION**

Purchaser shall install the listed gate(s). Gate installations must be completed at the completion of Pre-Haul Maintenance.

<u>Road</u>	<u>Station</u>	<u>Type*</u>	<u>Provided by</u>
Erving Jacobs Rd.	25+85	Farm Gate	<b>Purchaser</b>

Farm gate installation(s) must be in accordance with the FARM GATE DETAIL

The gate and lock box must be installed plumb and aligned to ensure all mating components match with precision. Each post must be filled with concrete, capped and set in a minimum of 1 ½ cubic yards of concrete. The gate must be installed with a post and locking device to allow the gate to be locked in an open position. The Contract Administrator will provide Purchaser with a padlock.

If Purchaser wishes to install an alternate design, detailed plans for the construction of the gate must be submitted to the Contract Administrator. Purchaser shall obtain written approval for the plans from the Contract Administrator or their designee, before gate installation begins.

##### **7-78 GATE SUPPLIED BY PURCHASER**

Purchaser shall provide all gates specified for installation in Clause 7-76 GATE INSTALLATION. Purchaser shall obtain written approval for the gates from the Contract Administrator before installation.

## SECTION 8 – EROSION CONTROL

### **8-2 PROTECTION FOR EXPOSED SOIL**

Purchaser shall provide and evenly spread a 3-inch layer of straw or hay to all exposed soils at culvert installations within 100 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**

Purchaser shall spread grass seed and straw and/or hay mulch on all exposed soils including, but not limited to, stream culverts, waste areas, sidecast pullback areas, stream crossing removals, bridge installations, and other areas directed by the Contract Administrator. Revegetation of exposed soils shall be accomplished by manual dispersal of grass seed unless otherwise detailed in this Road Plan. Other methods of covering must be approved in writing by the Contract Administrator.

### **8-16 REVEGETATION SUPPLY**

Purchaser shall provide the all seed, mulch, straw and/or hay, matting etc..

### **8-17 REVEGETATION TIMING**

Purchaser shall revegetate during the first available opportunity. 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. Soils shall not be allowed to sit exposed during any rain event.

### **8-18 PROTECTION FOR SEED**

Purchaser shall provide a protective cover over the revegetated area. The protective cover may consist of but not be limited to, such items as dispersed hay mulch 3" thick or jute matting. Seed must be covered before the first anticipated storm event. Seed may not be allowed to sit exposed during any rain event.

### **8-19 ASSURANCE FOR SEEDED AREA**

Purchaser shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Purchaser shall reapply the seed and/or mulch in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply the seed and/or mulch at no addition 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 at a rate of 60 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
  - a. Common name of seed
  - b. Net weight
  - c. Percent of purity
  - d. Percentage of germination
  - e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>	<u>Minimum % germination</u>
Perennial Rye	35-45	90
Red Fescue	30-40	90
Highland Bent	5-15	85
White Clover	10-20	90
Inert and Other Crop	0.5	

SECTION 9 – POST-HAUL ROAD WORK

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

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

SUBSECTION POST-HAUL MAINTENANCE

**9-5 POST-HAUL MAINTENANCE**

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

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
All	All	Clean culverts, clean ditches, grade road shape and compact as directed by the Contract Administrator.

PA-F-3500	0+00 – 150+00	Apply post haul rock per Clause 6-72.
Erving Jacobs Rd.	25+85 – 37+45	
John Jacobs Rd.	15+55 – 34+40	

#### SUBSECTION POST-HAUL LANDING MAINTENANCE

##### **9-10 LANDING DRAINAGE**

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

##### **9-11 LANDING EMBANKMENT**

On all roads, landing embankments shall be sloped to original construction specifications.

#### SECTION 10 MATERIALS

##### SUBSECTION CULVERTS

##### **10-15 CORRUGATED STEEL CULVERT**

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

##### **10-17 CORRUGATED PLASTIC CULVERT**

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

##### **10-21 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. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe joint.



**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 engineer’s design, insert 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"
54" to 96"	12 (0.109")	5" X 1"

SECTION 11 SPECIAL NOTES

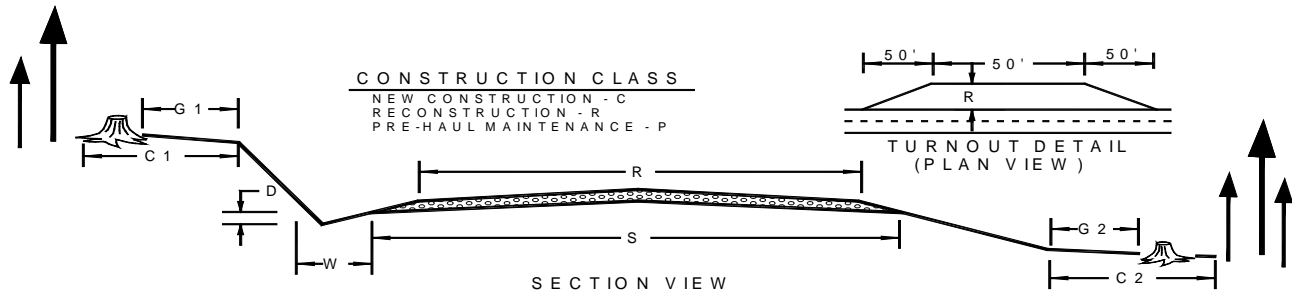
**11-7 COUNTY ROAD APPROACH PERMITS**

All county road approach permit(s) must be followed. This includes posting, correspondence with the County Public works department and construction requirements.

**11-9 RELOCATION OF UTILITIES**

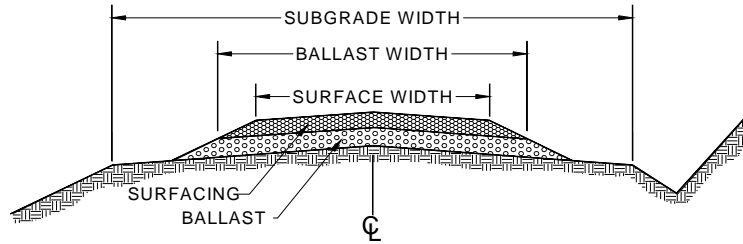
Purchaser is responsible for the relocation of utilities. This includes but not limited to; notification of utility company(ies), following all Utility, County and State requirements or codes for relocation of said utility(ies) and notification of Contract Administrator 5 business days prior commencement of work.

## TYPICAL SECTION SHEET



ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS	TOLERANCE CLASS	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	CROWN AT CL (in)	DITCH WIDTH (W)	DITCH DEPTH (D)	GRUBBING CUT BANK (G1)	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (C1)	ROAD FILL CLEARING (C2)
PA-F-2100 North	0+00	73+400	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-2100 North	73+40	76+05	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
4+10 Spur	0+00	4+10	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
1+45 Spur	0+00	1+45	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
2+70 Spur	0+00	2+70	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-2110 North	0+00	12+75	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-2120 North	0+00	7+15	R	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-2130 North	0+00	7+90	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
PA-F-3500	0+00	150+00	P	C		12'	3"	3'	1'				
BPA-3763	0+00	9+20	P	C		12'	3"	3'	1'				
BPA-3763 Tie	0+00	1+20	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
BPA-3763.1	0+00	4+40	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
BPA-3763.2	0+00	4+50	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'
Erving Jacobs Rd.	25+85	37+45	P	C		12'	3"	3'	1'				
John Jacobs Rd.	15+55	34+40	P	C		12'	3"	3'	1'				
1+46 Spur	0+00	1+46	C	C	17'	12'	3"	3'	1'	5'	5'	10'	5'

## ROCK LIST SHEET

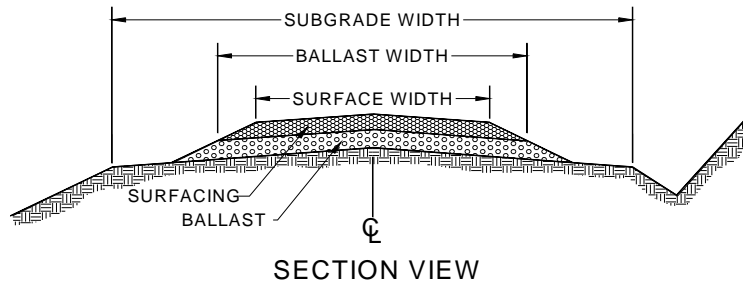


SECTION VIEW

1. Rock quantities, subtotals and totals are “truck measure” estimates. Rock shall be applied to at least the depths listed.
2. All depths are compacted depths.
3. Rock slopes shall be 1½ (H) : 1 (V).
4. All rock sources are subject to approval by the Contract Administrator.
5. Pitrun is defined as pitrun or ballast per Line 6. Crushed is defined as any crushed rock from ¼” minus to 4” minus per Line 6. Oversize is defined as oversize, quarry spalls, light loose rip rap, or heavy loose rip rap per Line 6.
6. Rock sources= 1: McSplit Pit 6” Jaw Run, 2: McSplit Pit 2” Jaw Run, 3: Commercial Source 1 ¼” minus, 4: McSplit Pit Oversized

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd <sup>3</sup> /sta)	Pitrun SUBTOTAL(yd <sup>3</sup> )	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd <sup>3</sup> /sta)	Crushed Subtotal(yd <sup>3</sup> )	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd <sup>3</sup> )
<b>PA-F-2100 North</b>															
Spot Patch	0+00	73+40		1				200							
Lift	0+00	73+40	17	1	12	18	110	8080							
Culvert Install	0+25								2				20		
Turnout	1+40			1				30							
Culvert Install	4+75								2				20		
Turnaround	8+80			1				50							
Turnout	15+20			1				30							
Culvert Install	22+30								2				20		
Culvert Install	23+85								2				20		
Culvert Install	26+65								2				20		
Culvert Install	27+85								2				20		
Turnout	30+00			1				30							
Turnaround	35+65			1				50							
Culvert Install	39+90								2				20		
Turnout	48+05			1				30							
Culvert Install	48+35								2				20		
Culvert Install	51+90								2				20		
Culvert Install	52+60								2				20		
Totals:								1: 8500					2: 200		

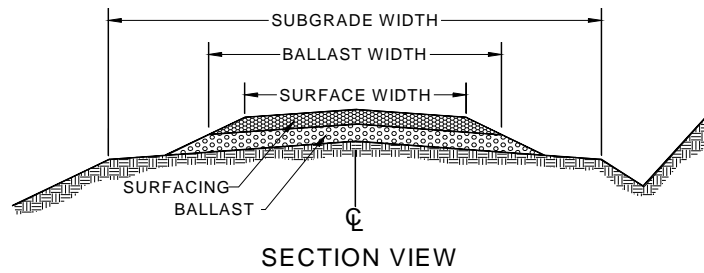
## ROCK LIST SHEET CONTINUED



1. Rock quantities, subtotals and totals are "truck measure" estimates. Rock shall be applied to at least the depths listed.
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6. Rock sources= 1: McSplit Pit 6" Jaw Run, 2: McSplit Pit 2" Jaw Run, 3: Commercial Source 1 ¼" minus, 4: McSplit Pit Oversized

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd <sup>3</sup> /sta)	Pitrun SUBTOTAL(yd <sup>3</sup> )	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd <sup>3</sup> /sta)	Crushed Subtotal(yd <sup>3</sup> )	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd <sup>3</sup> )
<b>PA-F-2100 N Cont.</b>															
Turnout	55+80			1				30							
Culvert Install	57+80								2				20		
Turnout	61+75			1				30							
Lift	73+40	76+05		1	12	18	110	290							
Culvert Install	75+05								2				20		
<b>4+10 Spur</b>															
Lift	0+00	4+10	17	1	12	18	110	450							
<b>1+45 Spur</b>															
Lift	0+00	1+45	17	1	12	18	110	160							
<b>2+70 Spur</b>															
Lift	0+00	2+70	17	1	12	18	110	300							
Culvert Install	1+25								2				20		
Turnout	1+80			1				30							
<b>PA-F-2110 North</b>															
Lift	0+00	12+75	17	1	12	18	110	1400							
Culvert Install	0+10								2				20		
Culvert Install	3+85								2				20		
Culvert Install	8+20								2				20		
Turnaround	10+65			1				50							
Totals:								1:2740					2: 120		

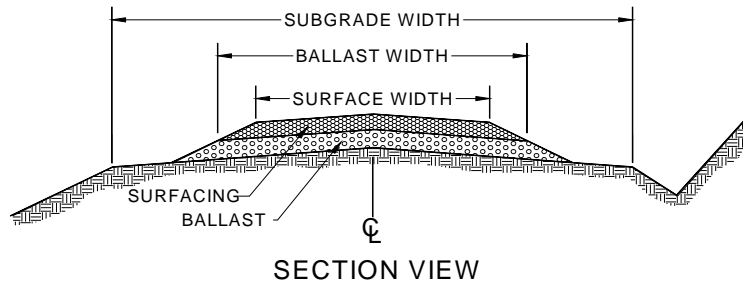
## ROCK LIST SHEET CONTINUED



1. Rock quantities, subtotals and totals are “truck measure” estimates. Rock shall be applied to at least the depths listed.
2. All depths are compacted depths.
3. Rock slopes shall be 1½ (H) : 1 (V).
4. All rock sources are subject to approval by the Contract Administrator.
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6. Rock sources= 1: McSplit Pit 6” Jaw Run, 2: McSplit Pit 2” Jaw Run, 3: Commercial Source 1 ¼” minus, 4: McSplit Pit Oversized

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd <sup>3</sup> /sta)	Pitrun SUBTOTAL(yd <sup>3</sup> )	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd <sup>3</sup> /sta)	Crushed Subtotal(yd <sup>3</sup> )	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd <sup>3</sup> )
<b>PA-F-2120 North</b>															
Lift	0+00	7+15	17	1	12	18	110	790							
Culvert Install	0+30								2				20		
Culvert Install	3+35								2				20		
Turnout	5+65			1				30							
Culvert Install	5+95								2				20		
<b>PA-F-2130 North</b>															
Lift	0+00	7+90	17	1	12	18	110	870							
Culvert Install	0+10								2				20		
Culvert Install	4+00								2				20		
Turnaround	6+75			1				50							
<b>PA-F-3500</b>															
Misc.	0+00	65+00							3				100		
Post-Haul	0+00	150+00							3				300		
<b>BPA-3763</b>															
Lift	0+00	9+20							3	12	12	70	650		
Culvert Install	0+40								2				20		
<b>BPA-3763 Tie</b>															
Lift	0+00	1+20	17	1	12	18	110	130							
Culvert Install	0+40								2				20		
<b>Totals:</b>								1: 1870					2: 140, 3:1050		

## ROCK LIST SHEET CONTINUED



1. Rock quantities, subtotals and totals are “truck measure” estimates. Rock shall be applied to at least the depths listed.
2. All depths are compacted depths.
3. Rock slopes shall be 1½ (H) : 1 (V).
4. All rock sources are subject to approval by the Contract Administrator.
5. Pitrun is defined as pitrun or ballast per Line 6. Crushed is defined as any crushed rock from ¼” minus to 4” minus per Line 6. Oversize is defined as oversize, quarry spalls, light loose rip rap, or heavy loose rip rap per Line 6.
6. Rock sources = 1: McSplit Pit 6” Jaw Run, 2: McSplit Pit 2” Jaw Run, 3: Commercial Source 1 ¼” minus, 4: McSplit Pit Oversized

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd <sup>3</sup> /sta)	Pitrun SUBTOTAL(yd <sup>3</sup> )	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd <sup>3</sup> /sta)	Crushed Subtotal(yd <sup>3</sup> )	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd <sup>3</sup> )
<b>BPA-3763.1</b>															
Lift	0+00	4+40	17	1	12	18	110	490							
Culvert Install	0+10								2				20		
<b>BPA-3763.2</b>															
Lift	0+00	4+50	17	1	12	18	110	500							
<b>Erving Jacobs Rd.</b>															
Culvert Replacement	30+80								2				30	4	10
Misc.	25+90	34+55							3				50		
Lift	34+55	37+45							3	12	6	35	100		
Post-Haul	25+90	34+55							3				50		
<b>John Jacobs Rd.</b>															
Misc.	15+55	34+40							3				50		
Post-Haul	15+55	34+40							3				50		
<b>1+46 Spur</b>															
Lift	0+00	1+46	17	1	12	18	110	160							
Totals:								1: 1150					2: 50, 3: 300		4: 10

Rock Source	Grand Total (yd <sup>3</sup> )
1: McSplit Pit 6" Jaw Run Rock	14,260
2: McSplit Pit 2" Minus Crushed Rock	510
3: Commercial 1 ¼" Minus Crushed Rock	1350
4: McSplit Pit Oversized	10

### CULVERT LIST

ROAD NAME	STATION	CULVERT DIAMETER (in)	CULVERT LENGTH (ft)	FLUME LENGTH (ft)		RIP RAP - INLET (cy)	RIP RAP - OUTLET (cy)	BACKFILL MATERIAL	NOTES
PA-F-2100 North	0+25	18	40					CR	Culvert Install
PA-F-2100 North	4+75	18	30					CR	Culvert Install
PA-F-2100 North	22+30	18	30					CR	Culvert Install
PA-F-2100 North	23+85	24	30					CR	Culvert Install
PA-F-2100 North	26+65	24	30					CR	Culvert Install
PA-F-2100 North	27+85	18	30					CR	Culvert Install
PA-F-2100 North	39+90	18	30					CR	Culvert Install
PA-F-2100 North	48+35	18	30					CR	Culvert Install
PA-F-2100 North	51+90	24	30					CR	Culvert Install
PA-F-2100 North	52+60	18	30					CR	Culvert Install
PA-F-2100 North	57+80	18	30					CR	Culvert Install
PA-F-2100 North	75+05	18	30					CR	Culvert Install
2+70 Spur	1+25	18	30					CR	Culvert Install
PA-F-2110 North	0+10	18	40					CR	Culvert Install
PA-F-2110 North	3+85	18	30					CR	Culvert Install
PA-F-2110 North	8+20	18	30					CR	Culvert Install
PA-F-2120 North	0+30	18	50					CR	Culvert Install
PA-F-2120 North	3+35	18	30					CR	Culvert Install
PA-F-2120 North	5+95	18	30					CR	Culvert Install
PA-F-2130 North	0+10	18	30					CR	Culvert Install
PA-F-2130 North	4+00	18	30					CR	Culvert Install
BPA-3763	0+40	18	30					CR	Culvert Install
BPA-3763 Tie	0+35	18	30					CR	Culvert Install
BPA-3763.1	0+10	18	30					CR	Culvert Install
Erving Jacobs Rd.*	30+80	48	50					CR	Culvert Replacement FPA ID: C1, Inlet Armoring with Light Loose Rip Rap
Contingency Culvert		18	30					NT	See Clause 5-13
Contingency Culvert		24	30					NT	See Clause 5-13



## FISH STREAM WORK PROVISIONS

1. TIMING LIMITATIONS: The fish culvert project may begin July 1 and shall be completed by September 30.
2. Work shall conform to plans and specifications in the road plan.
3. Prior to the commencement of in-stream work, the Purchaser shall isolate the work area in a manner that fish cannot enter the work area, capture and safely move fish and other fish life from the work area. The Purchaser shall have fish capture and transportation equipment ready and on the job site. Captured fish shall be immediately and safely transferred to free-flowing water downstream of the work area.

### TEMPORARY STREAM FLOW BYPASS

4. All in-stream work shall be conducted in the dry or in isolation from the stream flow by the installation of a bypass flume/pipe or by pumping the flow around the work area, back into the stream below the work area. Waste water pumped from within the work area shall terminate on the forest floor, sufficient distance from the stream to filter sediment prior to entering the stream.
5. The temporary bypass to divert flow around the work area shall be in place prior to initiation of other work in the wetted perimeter.
6. A sandbag revetment or similar device shall be installed at the bypass inlet to divert the entire flow through the bypass.
7. The bypass shall be of sufficient size to pass all flows and debris for the duration of the project.
8. If a pump is used for diverting water from the stream where fish are present, as per RCW 77.57.010 and 77.57.070, the pump intake shall be equipped with a fish guard to prevent passage of fish into the diversion pump. The pump intake shall be screened with 1/8 inch mesh to prevent fish from entering the pump. Velocity through the screened intake shall be less than 0.4 feet per second. Screens shall be maintained to prevent injury or entrapment of juvenile fish.

### WATER QUALITY

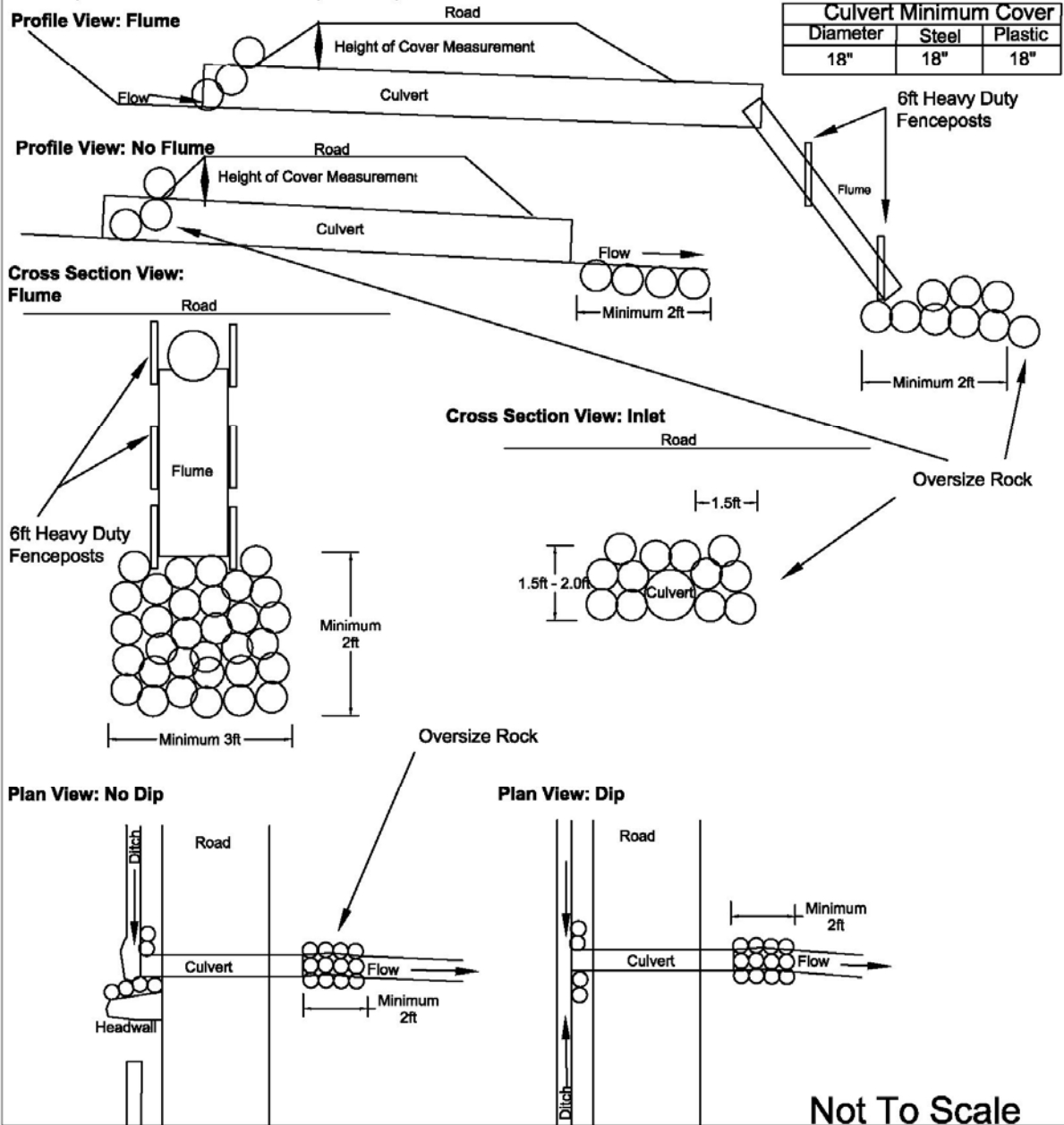
9. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

## COMPACTION LIST

Road	Stations	Type	Max Depth Per Lift (inches)	Equipment Type	Minimum Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
Pre-haul	All	Culvert Backfill	8"	Jumping Jack		3	
Pre-haul	All	Rock Lifts	6"	Vibratory Smooth Drum	6,000	3	3
Pre-haul	All	Pre-haul Surface		Vibratory Smooth Drum	6,000	3	3
Construction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Construction	All	Culvert Backfill	8"	Jumping Jack		3	
Construction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Culvert Backfill	8"	Jumping Jack		3	
Reconstruction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Post-haul Maintenance	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3

# Typical Cross Drain Culvert Installation Detail Sheet

- Culvert lay shall not exceed 10%.
- Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.
- Oversize shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.
- Oversize shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume oversize shall be placed at the outlet as an energy dissipater as specified in this Detail. All oversize distance to be determined by the Contract Administrator.
- Backfill compaction for installations on existing roads shall be achieved using a jumping jack, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus at least the width of the compactor footprint used.



## Typical Type Ns, Np Culvert Installation Detail Sheet.

-Water shall be diverted away from the work site before any "in stream" work begins, and shall continue until culvert installation is complete.

-Culvert lay shall match stream gradient up to 5%.

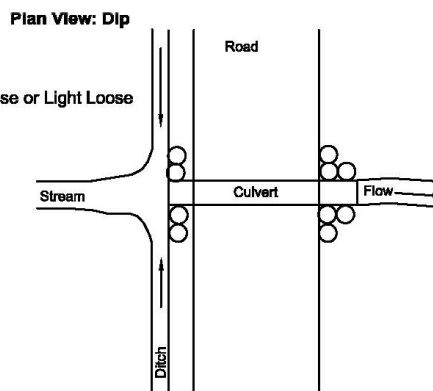
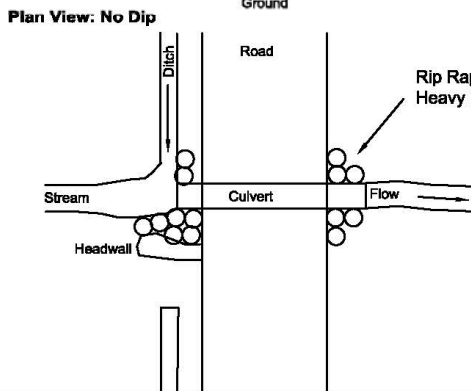
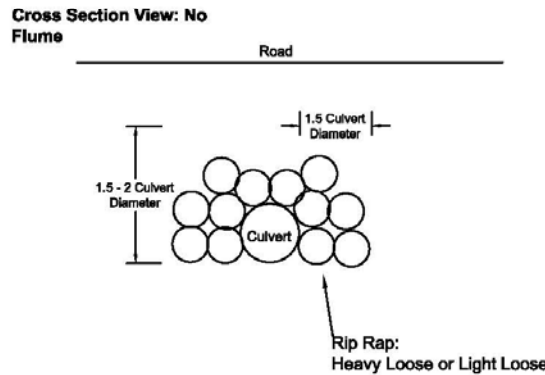
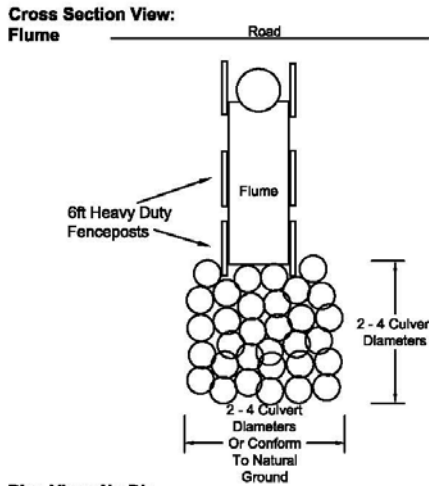
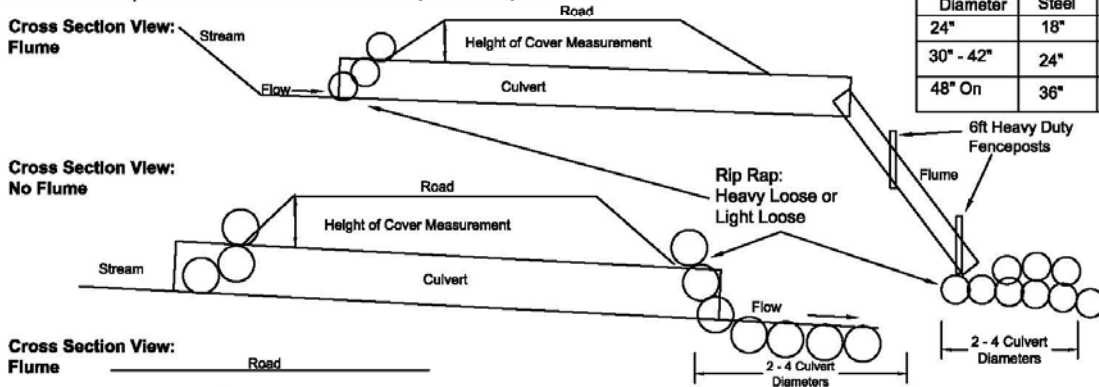
-Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.

-Rip rap shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.

-Rip rap shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume rip rap shall be placed along the fill at the outlet, unless there is stream drop or it is called for in the Road Plan, at which point it will be installed as an energy dissipater at the end of the culvert as specified in this Detail. All rip rap distance to be determined by the Contract Administrator or the District Engineer.

-Backfill compaction shall be achieved using a jumping jack, walk behind vibratory roller, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus 3 times the width of the compactor footprint used.

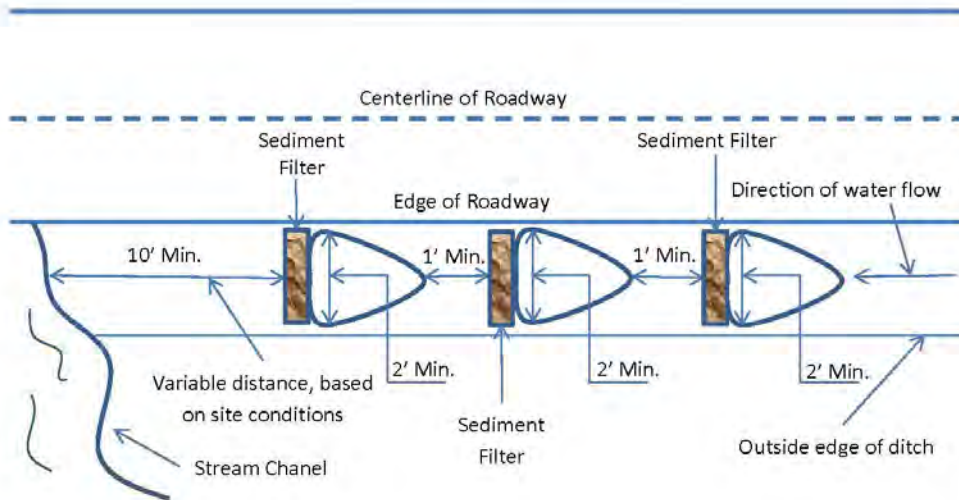
Culvert Minimum Cover		
Diameter	Steel	Plastic
24"	18"	24"
30" - 42"	24"	24"
48" On	36"	36"



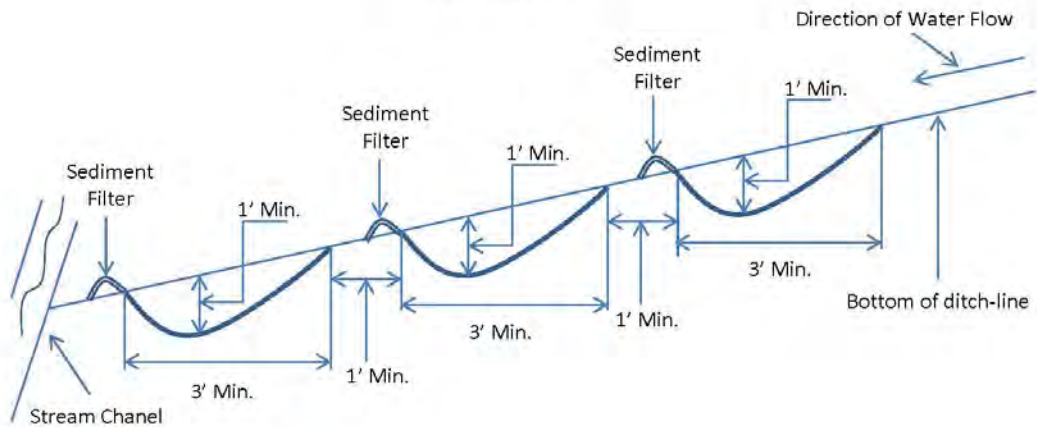
**Not To Scale**

## SEDIMENT TRAP DETAIL

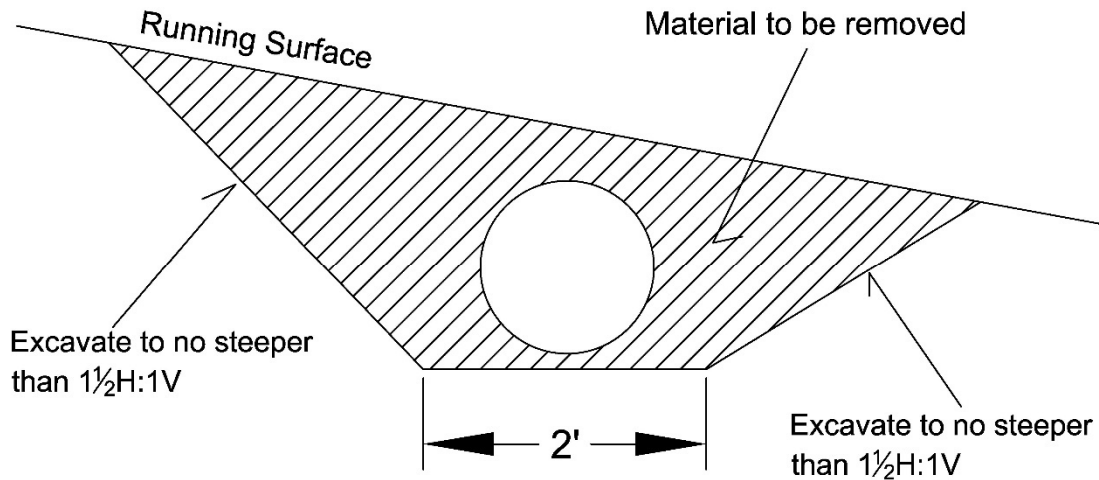
### Top View



### Profile View



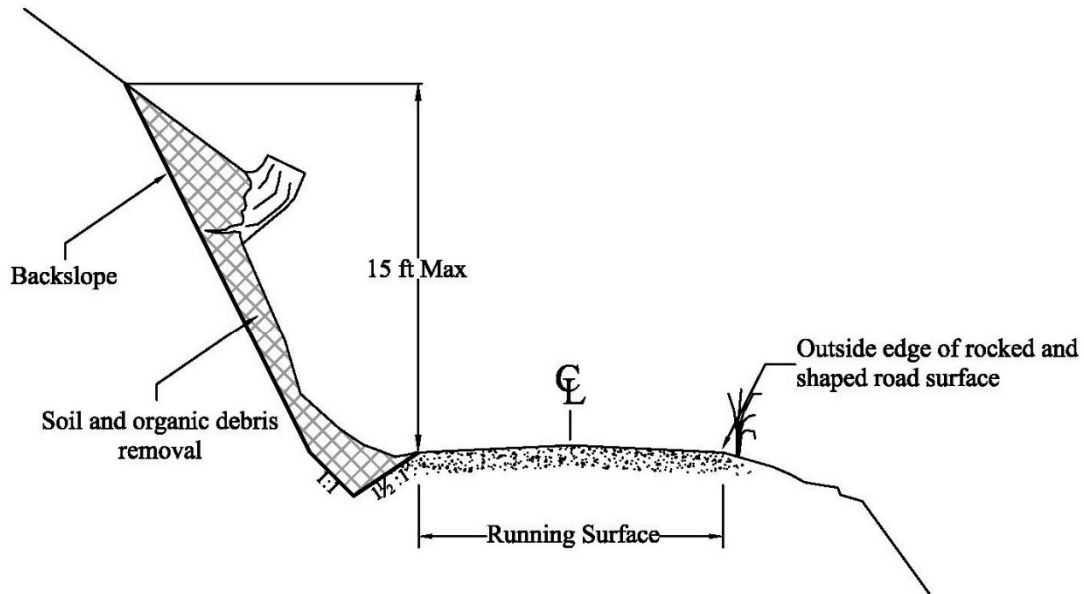
# CROSSDRAIN REMOVAL DETAIL



1) Excavated material may be wasted on the road surface on the downhill side of the excavation. Waste material shall be sloped at no steeper than  $\frac{1}{2}$  H:1V.

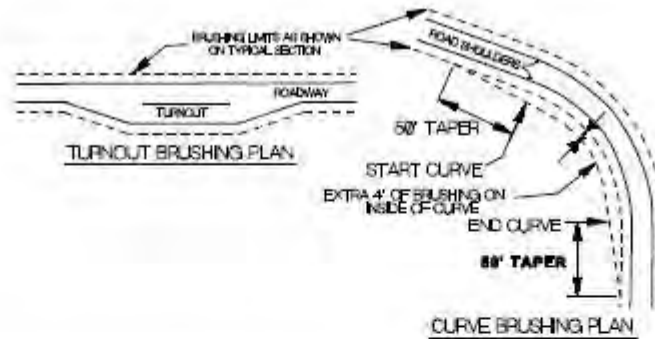
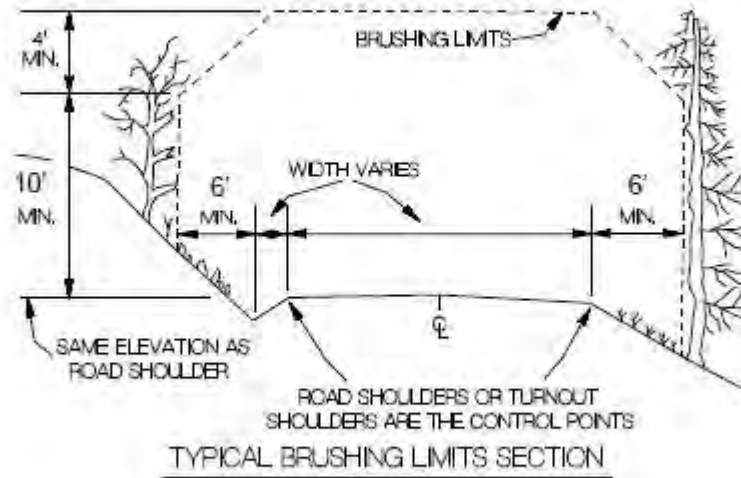
2) Resulting trench shall be keyed into the ditchline and sloped towards the outside edge of the road with a drop of at least 1 foot in 10 feet.

## Ditch Cleaning Detail



1. The backslope shall be no steeper than  $\frac{1}{2}:1$ , unless the material is hardpan or solid rock, in which case it may be  $\frac{1}{4}:1$ .
2. If there is sufficient width for the ditch without affecting the cut bank, than removing bank material is not required.
3. Bank material above the ditch shall be removed to a maximum height of 15 feet, if needed to meet the requirements of this detail.
4. If there is insufficient width to clean or construct a ditch without disturbing more than 15 vertical feet of bank, the Contract Administrator may authorize changes to this plan in order to still meet the intent of having a ditch, while staying within the excavation limits already set.
5. Ditch cleaning or construction shall not shrink the running surface of the road.

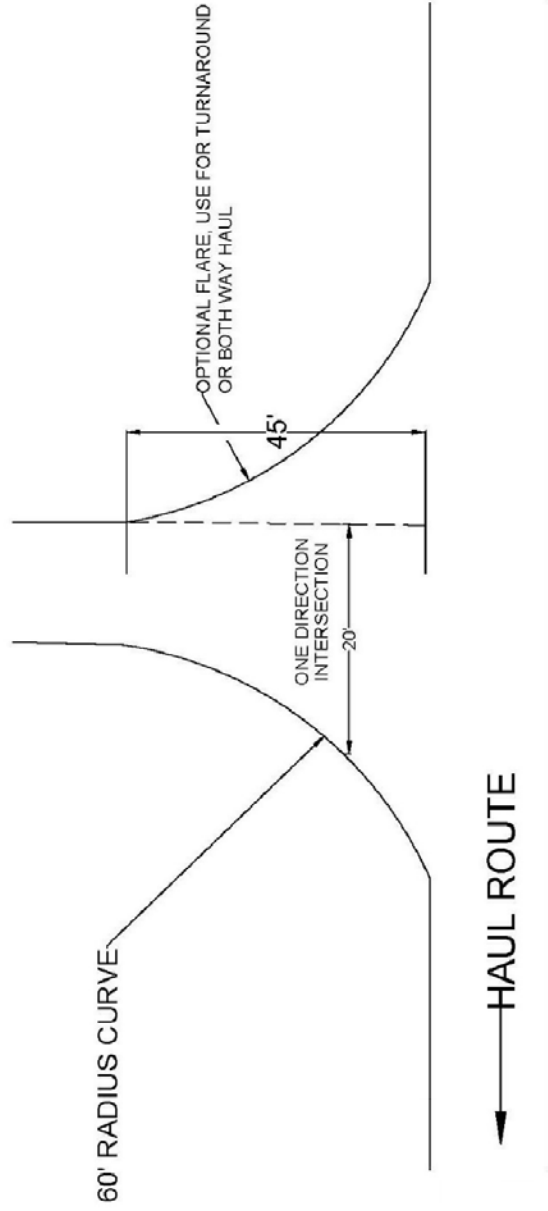
## BRUSHING DETAIL



1. All vegetation within the brushing limits shall be cut to within 3 inches of the ground, unless otherwise directed by the Contract Administrator
2. All brush, trees, limbs, etc. shall be removed from the road surface, cut banks, culvert inlets/outlets, and ditch lines
3. All debris that may roll or move into the ditch line shall be removed and placed in a stable location



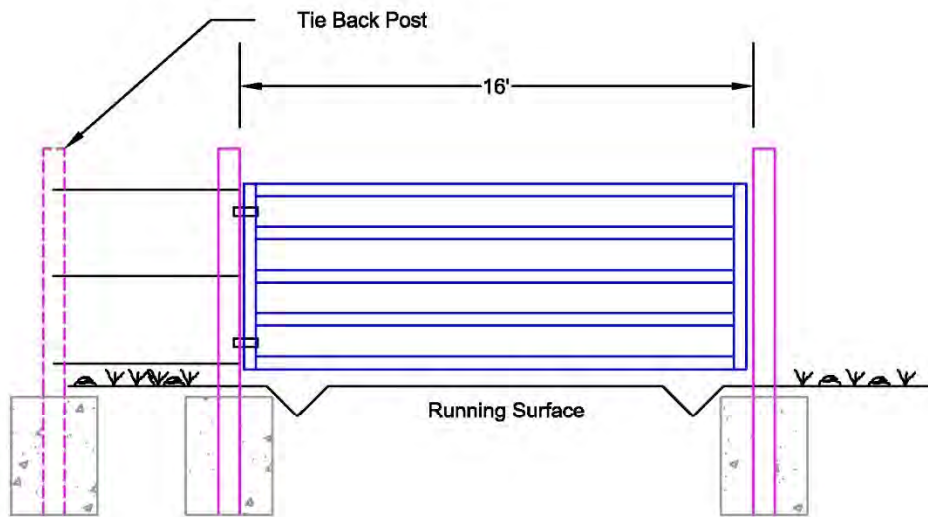
# TYPICAL INTERSECTION



NOT TO SCALE

Purchaser shall submit to the Contract Administrator a plan for the construction or purchase and installation of a gate similar to the one pictured below. The plan shall be subject to approval, in writing by the Contract Administrator.

1. Gate posts shall be a minimum of 6" diameter steel pipe with a minimum of 1/4" wall thickness. Gate posts shall be filled with concrete.
2. Tubular steel gate members shall be at least 2" in diameter and of 16 gauge thickness, minimum, spacing of bars shall be adequate to contain livestock.
3. Gate posts shall extend a minimum of 3' into the ground and each post shall be set in a minimum of one and one half cubic yards of concrete.
4. All metal surfaces, shall be galvanized.
5. Gate shall be of a piece, side locking type.
6. Farm gates meeting these specifications may be obtained from commercial sources. Behlen Country 16' Hot-Dipped Galvanized Heavy Duty Gate is a approved Style Gate.
7. Tieback Posts may be required for proper swing movement and to prevent sag.



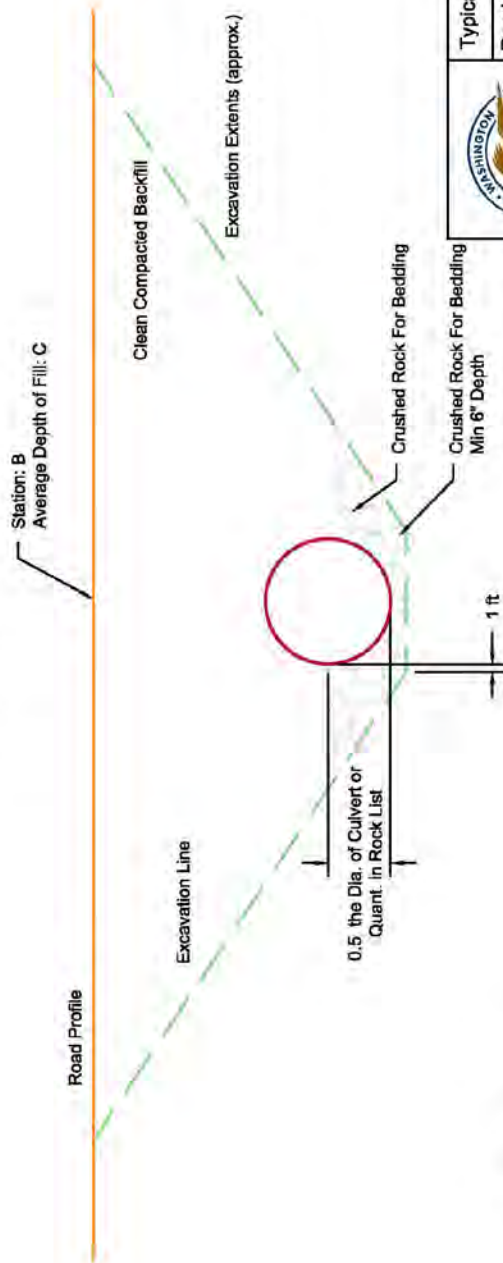
Drawing not to scale

	Farm Gate Detail
	Farm Gate Detail Designed By: G.Ellis Drawn By: G.Ellis Date: 3/10/20 Sheet 1 of 1

TYPICAL LARGE CULVERT INSTALL

A	B	C	D	E
Road Name	Station	Avg. Fill Depth (ft)	Size of Pipe (in)	Length of Pipe (ft)
Erving Jacobs Rd.	30+80	11	48	50

PROFILE - CENTERLINE OF ROAD  
LOOKING UPSTREAM



Note: Drawing not to scale

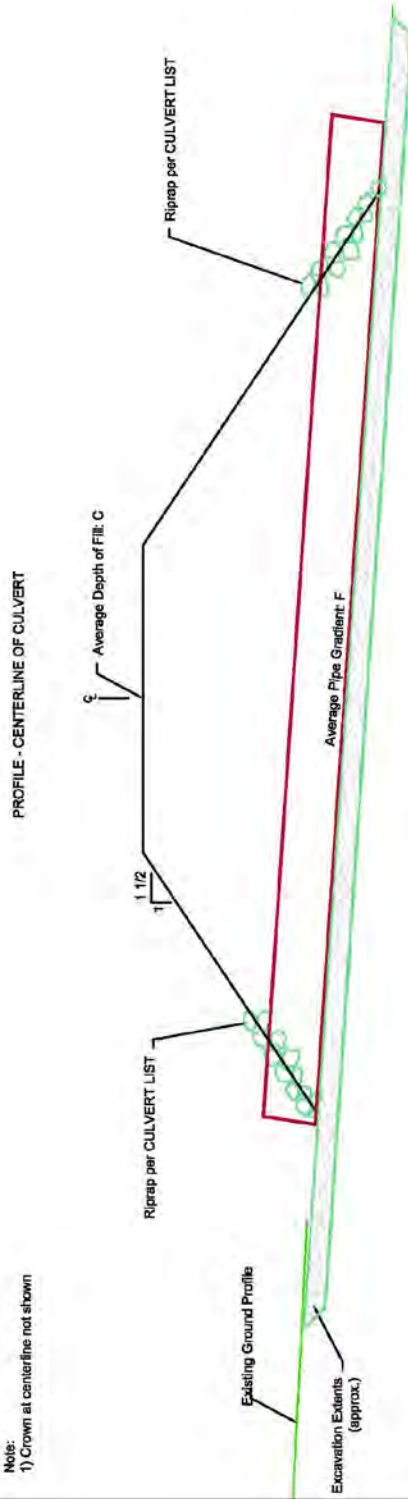


Typical Large Culvert Detail  
 Road Profile View  
 Designed By: E. Hein  
 Drawn By: E. Hein  
 Date: 5/18/2023  
 Sheet 1 of 2

TYPICAL LARGE CULVERT INSTALL

A	B	C	D	E	F	G
Road Name	Station	Avg. Fill Depth (ft)	Size of Pipe (In)	Length of Pipe (ft)	Avg. Pipe Gradient (%)	Stream Type
Erving Jacobs Rd.	30+80	11	48	50	4	4

Note:  
1) Crown at centerline not shown



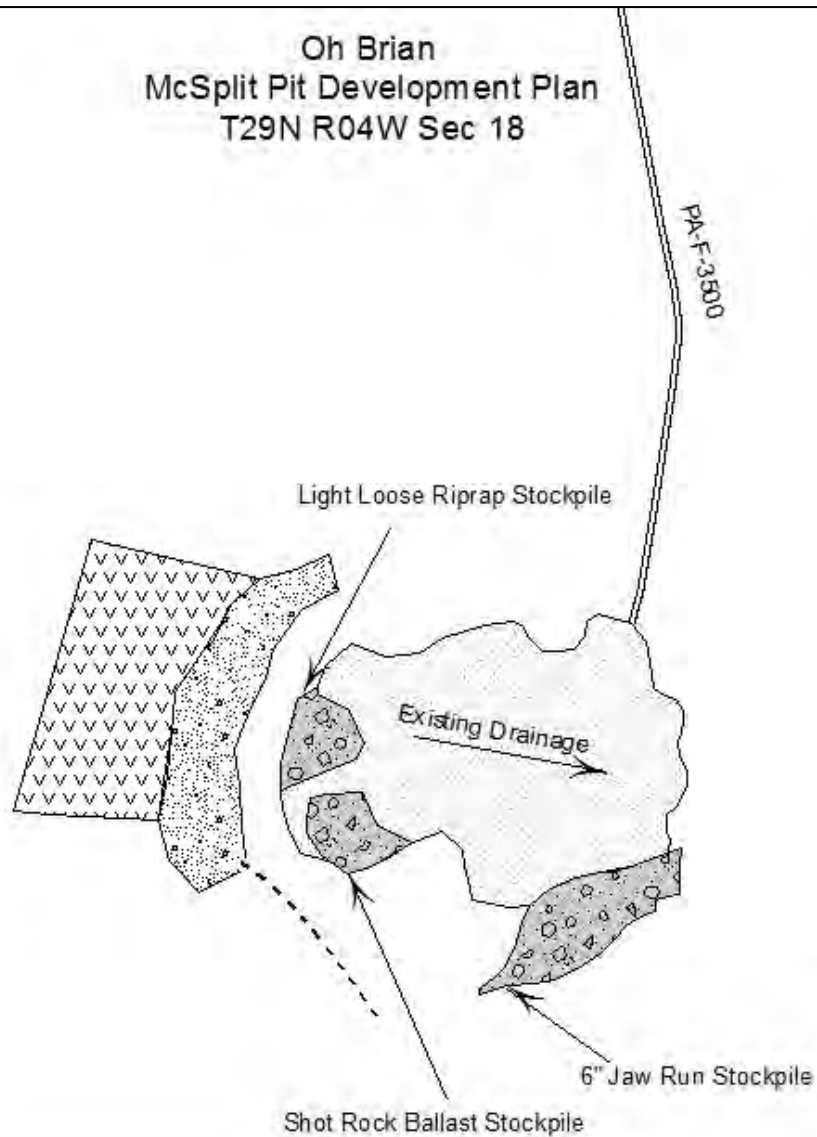
Note: Drawing not to Scale



Typical Large Culvert Detail


Stream Profile View  
Designed By: E. Hein  
Drawn By: E. Hein  
Date: 5/18/2023  
Sheet 2 of 2

Oh Brian  
 McSplit Pit Development Plan  
 T29N R04W Sec 18



**Legend**

- - - Drill Access Trail
- ==== Existing Road
- ▽▽▽ Development Area
- ◻ Stockpile
- ◻ Pit Floor
- ◻ Stripped Area



0 25 50 100 150 200 Feet

Scale 1:1200 (1" = 100')

**McSplit Pit**  
**ROCK SOURCE DEVELOPMENT PLAN**  
**SEC. 18, T29N, R04W**  
**PIT USE REQUIREMENTS**

1. Mining shall begin in the development shown on pit plan.
2. All vegetation including stumps shall be cleared a minimum 20 feet beyond the top of all working faces. Trees shall be cleared to a minimum of  $\frac{3}{4}$  of height of the tallest tree adjacent to the pit. The Contractor shall maintain a minimum of 10 foot wide stripped area from the pit face at all times.
3. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled in an area designated by the Contract Administrator.
4. All exposed soils shall be grass seeded in accordance with Road Plan clause 8-25.
5. Activity restrictions per Clause 1-25.
6. Only the quantities and sorts specified in this road plan for this sale may be used or manufactured, unless otherwise approved by the Contract Administrator in writing.
7. Maintain drainage of the pit floor and all drainage structures within the pit boundaries. The pit floor shall have continuity of slope be left in a smooth and neat condition, providing drainage to the southeast at a minimum of 2 percent. All knobs, bumps, or extrusions shall be removed to the designated floor level by excavation or drill and shoot techniques.
8. Excavated face height shall not exceed 20 feet and shall be sloped no steeper than 1/4:1.
9. Excavated slopes shall have a 1 1/2:1 back slope or less at the completion of operations unless otherwise stated in Clause 4-5.
10. A minimum 4 foot high berm shall be constructed and constantly maintained along the upper edge of excavated pit faces. No pit faces shall be left unblocked at any time.
11. All operations shall be completed prior to the end of each operating season, including but not limited to: drainage maintenance, sloping of the excavated face, and construction of berms, unless otherwise approved in writing by the Contract Administrator.
12. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material, benches shall have safety berms constructed or access blocked to highway vehicles. Upon completion of operations in the pit, the area will be left in a condition that will not endanger public safety, damage property, or be hazardous to animal or human life. The contractor shall use Light Loose Rip Rap to block the drill trail.
13. All material shall remain the property of the State.
14. At the conclusion of operations, Purchaser shall ask the Contract Administrator for written approval of the final rock source condition and compliance with the terms of this plan.
15. All work shall be conducted according to relevant specifications in this Road Plan, and the Contract Administrator.
16. Purchaser shall give the Contract Administrator a minimum of 7 days' notice prior to commencing any operations.

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES  
OLYMPIC REGION

**INFORMATIONAL BLASTING PLAN**

Timber Sale/Project Name: \_\_\_\_\_ App./Project No.: \_\_\_\_\_

1. Blaster-in-Charge: Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_
2. Quarry Name/Location: \_\_\_\_\_
3. Total Estimated Cubic Yards in Blast (loose): \_\_\_\_\_
4. Hole Spacing: \_\_\_\_\_
5. Burden: \_\_\_\_\_
6. Hole Diameter: \_\_\_\_\_
7. Hole Depth: \_\_\_\_\_
8. Sub Drill: \_\_\_\_\_
9. Number of Holes: \_\_\_\_\_
10. Stemming Depth: \_\_\_\_\_
11. Explosive (mfg., name, density, %, V.O.D.): \_\_\_\_\_  
\_\_\_\_\_
12. Type and Size of Primer (if applicable): \_\_\_\_\_
13. Total Weight of Primers for Shot: \_\_\_\_\_
14. Calculated Powder Factor/Cubic Yard: \_\_\_\_\_
15. Number of Delays (in M.S.): \_\_\_\_\_  
\_\_\_\_\_
16. Number of Holes Fired on Each Delay: \_\_\_\_\_  
\_\_\_\_\_
17. Total Amount of Explosives Fired on Each Delay: \_\_\_\_\_  
\_\_\_\_\_
18. Type of Blasting Machine: \_\_\_\_\_  
\_\_\_\_\_
19. Date, Start Drilling: \_\_\_\_\_
20. Date and Time, Start Loading: \_\_\_\_\_
21. Date and Time of Blast (approx.): \_\_\_\_\_

22. Detail drawing of delay system (show hole pattern and delays in milliseconds). Attach additional sheets if required:

23. Typical cross-section of hole (show primer, main charge, sub drill, and stemming):

23. Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

24. Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Note: Attach copies of manufacturer=s data sheet(s) for explosive and caps.





SALE NAME:	Oh Brian	CONTRACT#:	30-104795	SUMMARY - Road Development Costs				REGION:	Olympic	DISTRICT: Straits			
LEGAL DESCRIPTION:	0												
ROAD NAME:	F-2120 North	BPA-3763	F-3500	Erving Jacobs Rd.	John Jacobs Rd.	F-2100 North	4+10 Spur	1+45 Spur	2+70 Spur	F-2130 North	BPA-3763 Te	BPA-3763.1	BPA-3763.2
ROAD TYPE:	Recon.	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	7.15	9.20	150.00	11.60	18.85	2.65	4.10	1.45	2.70	7.90	1.20	4.40	4.50
SIDESLOPE:	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLEARING AND GRUBBING:	\$713	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$129	\$0	\$2,700	\$52	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EXCAVATION AND FILL:	\$1,616	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD GRADING:	\$46	\$60	\$975	\$75	\$123	\$17	\$27	\$9	\$18	\$51	\$8	\$29	\$29
DITCH CLEANING/CONSTRUCTION:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROCK TOTALS (Cu. Yds./ROCK COSTS):													
Ballast:	820	650	0	150	0	0	0	0	0	0	0	0	0
	\$22,364	\$17,458	\$0	\$3,505	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface:	60	20	100	30	50	0	0	0	0	0	0	0	0
	\$1,637	\$574	\$1,247	\$766	\$707	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Oversize:	0	0	0	10	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CULVERTS AND FLUMES:	\$3,388	\$924	\$0	\$5,124	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$42	\$54	\$878	\$68	\$110	\$16	\$24	\$8	\$16	\$46	\$7	\$26	\$26
OVERHEAD:	\$2,395	\$1,716	\$522	\$879	\$85	\$3	\$5	\$2	\$3	\$10	\$1	\$5	\$6
TOTAL COSTS:	\$32,331	\$20,785	\$6,321	\$10,650	\$1,024	\$36	\$56	\$20	\$37	\$107	\$16	\$60	\$61
COST PER STATION:	\$4,522	\$2,259	\$42	\$918	\$54	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14

SUMMARY - Road Development Costs									
SALENAME: Oh Brian	CONTRACT#: 30-104795	REGION: Olympic	DISTRICT: Straits						
LEGAL DESCRIPTION									
ROAD NAME:	1+46 Spur	F-2100 North	F-2110 North	F-2120 North	BPA -3763	F-3500	Erving Jacobs Rd.	John Jacobs Rd.	
ROAD TYPE:	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	1	73	13	7	9	150	12	19	
SIDESLOPE:	0%	0%	0%	0%	0%	0%	0%	0%	
CLEARING AND GRUBBING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
EXCAVATION AND FILL:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ROAD GRADING:	\$9	\$477	\$83	\$46	\$60	\$975	\$75	\$123	
DITCHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:									
Ballast:	0	0	0	0	0	0	0	0	
Surface:	0	0	0	0	0	300	50	50	
Oversize:	\$0	\$0	\$0	\$0	\$0	\$6,869	\$1,172	\$1,158	
CULVERTS AND FLUMES:	0	0	0	0	0	0	0	0	
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
MISC. EXPENSES:	\$9	\$429	\$75	\$42	\$54	\$878	\$68	\$110	
OVERHEAD:	\$2	\$91	\$16	\$9	\$11	\$872	\$132	\$139	
TOTAL COSTS:	\$20	\$997	\$173	\$97	\$125	\$9,594	\$1,447	\$1,530	
COST PER STATION:	\$14	\$14	\$14	\$14	\$14	\$64	\$125	\$81	

## **Forest Access Road Maintenance Specifications**

### **Cuts and Fills**

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

### **Surface**

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

### **Drainage**

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

## Forest Access Road Maintenance Specifications

### Preventative Maintenance

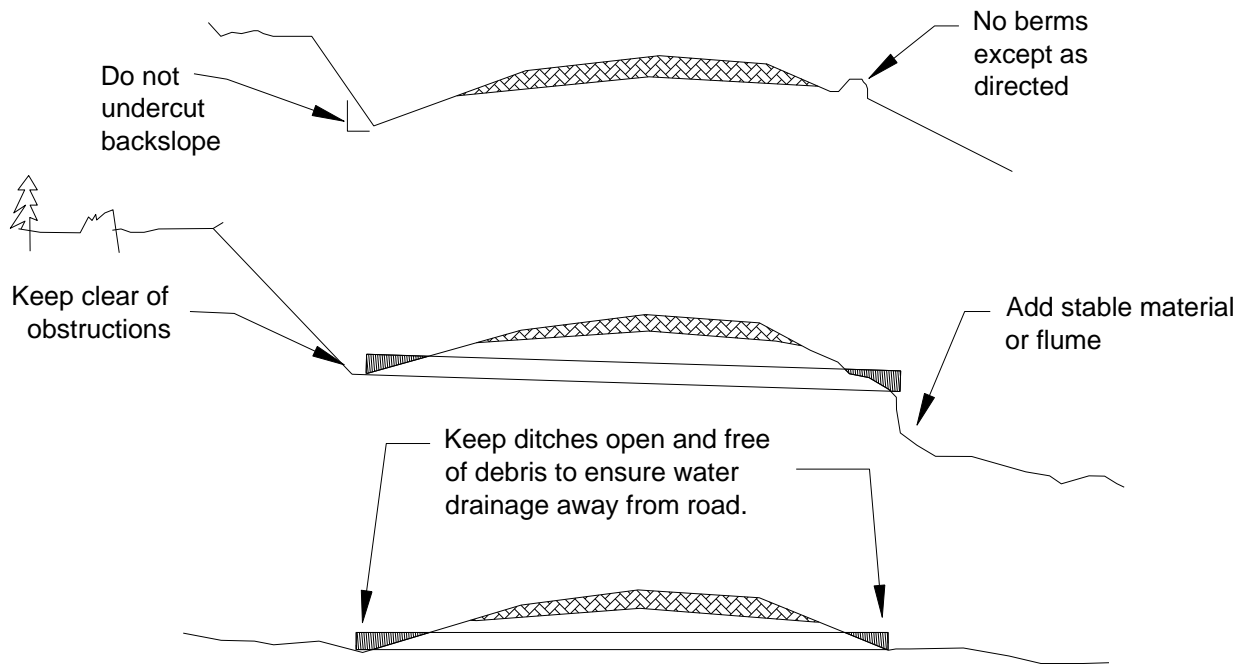
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

### Termination of Use or End of Season

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

### Debris

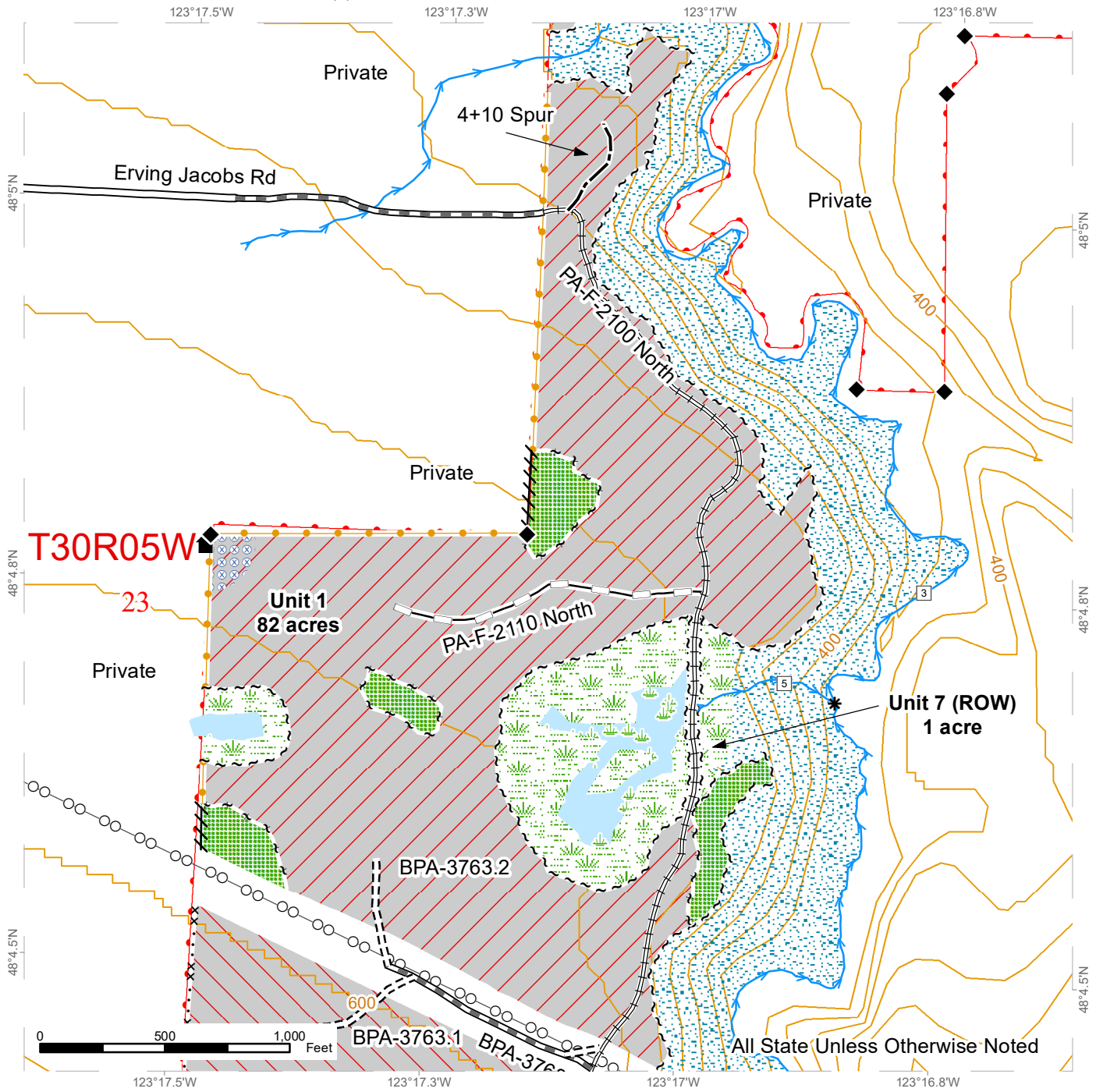
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



# LOGGING PLAN MAP

SALE NAME: OH BRIAN  
 AGREEMENT#: 30-104795  
 TOWNSHIP(S): T29R5W, T30R5W  
 TRUST(S): State Forest Transfer (1)

REGION: Olympic Region  
 COUNTY(S): Clallam  
 ELEVATION RGE: 320-1720



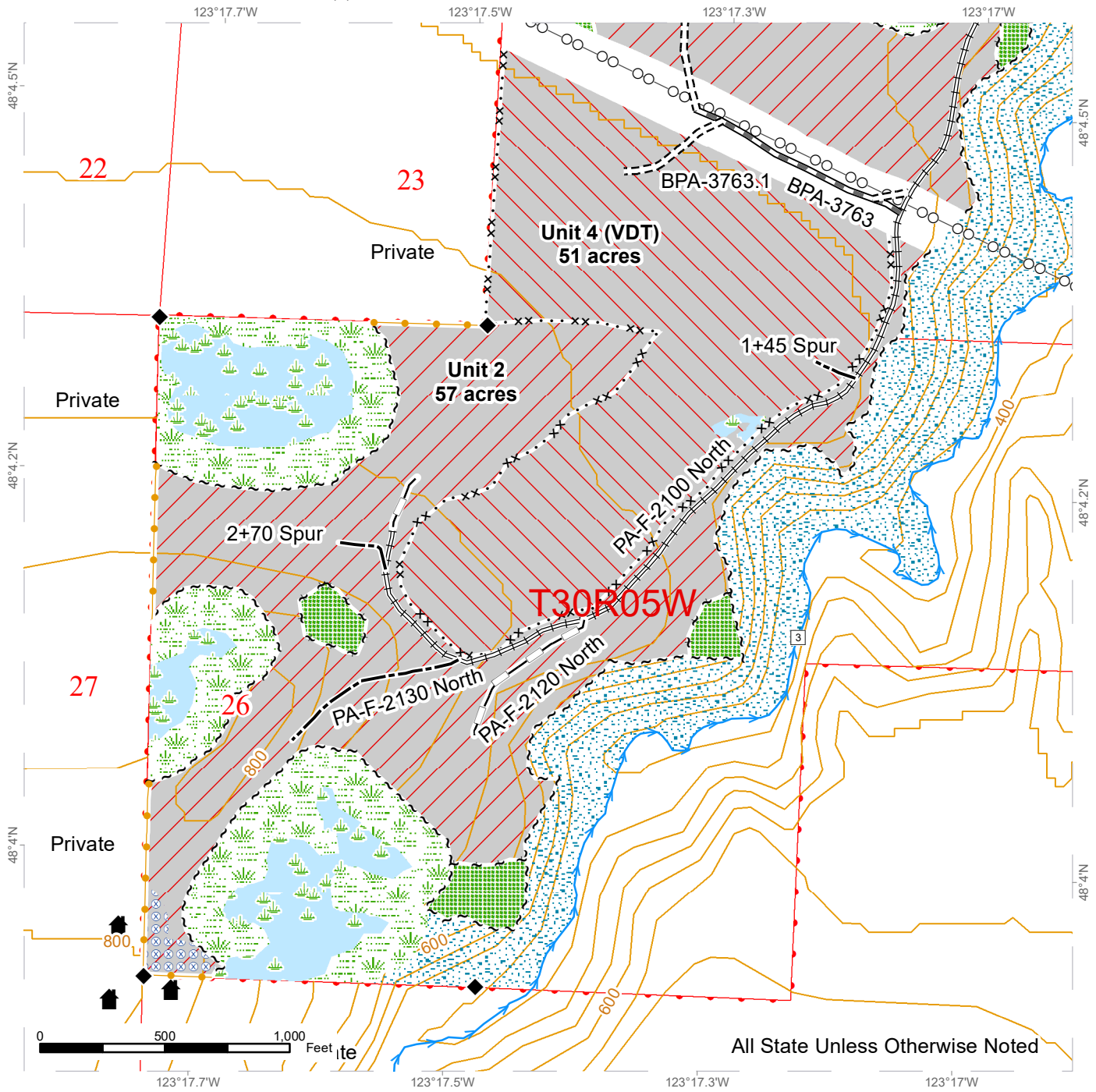
Variable Retention Harvest	Sale Boundary Tags	Existing Roads	Stream Type
Variable Density Thinning	Right of Way Tags	Optional Reconstruction	Stream Type Break
Ground Based	Special Mgmt Area	Optional Pre-Haul Maintenance	Bridge
Wetlands - Non-forested	Leave Tree Tags	Required Pre-Haul Maintenance	Gate
Hazard Abatement Area	Take / Removal Trees	Required Construction	Structure
Leave Tree Area	Flag Line	Required Reconstruction	Waste Area
Riparian Mgt Zone	Power Lines	Optional Construction	Survey Monument
Wetland Mgt Zone	Contours 40-foot	Streams	



# LOGGING PLAN MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** 30-104795  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720



All State Unless Otherwise Noted

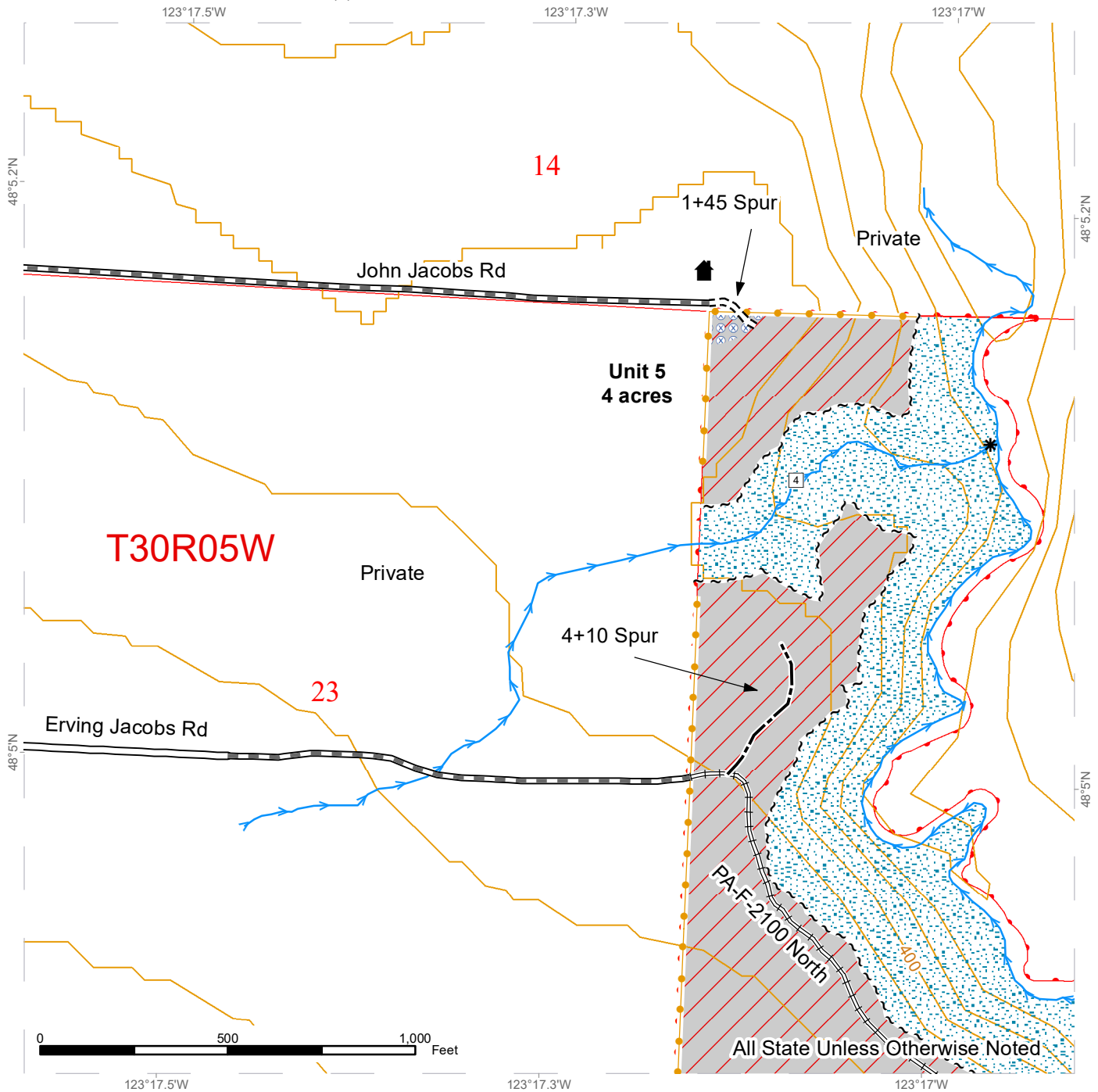
Variable Retention Harvest	Sale Boundary Tags	Existing Roads	Stream Type
Variable Density Thinning	Right of Way Tags	Optional Reconstruction	Stream Type Break
Ground Based	Special Mgmt Area	Optional Pre-Haul Maintenance	Bridge
Wetlands - Non-forested	Leave Tree Tags	Required Pre-Haul Maintenance	Gate
Hazard Abatement Area	Take / Removal Trees	Required Construction	Structure
Leave Tree Area	Flag Line	Required Reconstruction	Waste Area
Riparian Mgt Zone	Power Lines	Optional Construction	Survey Monument
Wetland Mgt Zone	Contours 40-foot	Streams	



# LOGGING PLAN MAP

**SALE NAME:** OH BRIAN  
**AGREEMENT#:** 30-104795  
**TOWNSHIP(S):** T29R5W, T30R5W  
**TRUST(S):** State Forest Transfer (1)

**REGION:** Olympic Region  
**COUNTY(S):** Clallam  
**ELEVATION RGE:** 320-1720



Variable Retention Harvest	Sale Boundary Tags	Existing Roads	Stream Type
Variable Density Thinning	Right of Way Tags	Optional Reconstruction	Stream Type Break
Ground Based	Special Mgmt Area	Optional Pre-Haul Maintenance	Bridge
Wetlands - Non-forested	Leave Tree Tags	Required Pre-Haul Maintenance	Gate
Hazard Abatement Area	Take / Removal Trees	Required Construction	Structure
Leave Tree Area	Flag Line	Required Reconstruction	Waste Area
Riparian Mgt Zone	Contours 40-foot	Optional Construction	Survey Monument
Wetland Mgt Zone		Streams	







WASHINGTON STATE DEPARTMENT OF  
**NATURAL RESOURCES**  
HILARY S. FRANZ | COMMISSIONER OF PUBLIC LANDS

## ROAD USE PERMIT

Permit No. 55-104832

**THIS PERMIT**, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2023, by and between Robert E. & Chantelle Reandeau, herein called the "Grantor," and the State of Washington, acting by and through the Department of Natural Resources, herein called the "Grantee."

**Conveyance.** Grantor, for and in consideration of the terms and conditions specified herein, hereby grants and conveys to the Grantee, for the purpose of hauling forest products and administrative purposes a nonexclusive permit to use a road over and across a strip of land, hereinafter defined as the "premises," in the SE1/4SW1/4 of Section 14, Township 30 North, Range 05 West, W.M., in Clallam County, State of Washington. The location of said premises is located approximately as shown on Exhibit A, attached hereto. Said premises shall be confined to be 30 feet in width, running 15 feet on each side of the centerline. The word premises, when used herein, means a strip of land whether or not there is an existing road located thereon. The word "road" shall mean roads now existing or hereafter constructed on the premises, or any segment of such road.

The permit is subject to the terms and conditions hereinafter set out.

**Consideration.** The consideration is as follows: Five Hundred and no/100 Dollars (500.00). The consideration is not due until thirty days after the Grantee enters into a timber sale contract for the "Oh Brian" Timber Sale, and this permit shall not be effective until the consideration is tendered to Grantor.

**Termination.** This permit shall terminate 10/31/2026, or earlier when requested by the Grantee; provided, however, that this permit may be suspended or terminated upon the breach of any of the conditions herein.

**Reservations.** Grantor reserves all rights incident to fee ownership of the premises and the profits thereon (including timber) and the right of use for any purpose including but not limited to the right to remove profits within the premises; the right at all times to cross and re-cross the premises at any place on grade or otherwise; and the right to use, maintain, patrol, reconstruct or repair the premises. Grantor may grant to third parties any and all rights reserved.

**Compliance with Laws.** For all activities conducted pursuant to this Permit, each party shall, at its own expense, comply with all applicable laws in effect now and as hereafter modified.

**Permittees.** The Grantee may permit its respective employees, agents, contractors, licensees, lessees, purchasers of timber or other profits and their agents, herein individually referred to as "Permittee" and collectively referred to as "Permittees", to exercise the rights granted to the Grantee herein. Acts or omissions of the Permittees operating under this Permit shall be deemed an act of the Grantee. Restrictions or requirements placed on the Grantee herein shall apply equally to the Permittees.

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

When a road is being used solely by one party, that party shall be solely responsible for maintaining that portion of the road so used to the standards existing at the time sole use is commenced. During periods when either party and/or other parties with an easement or license jointly use the road(s), or any portion thereof, the cost of maintenance and resurfacing shall be allocated among such users on the basis of their respective use including that of their Permittees.

During periods of joint maintenance, the users shall meet at times to be set by mutual agreement and establish necessary maintenance provisions. Such provisions shall include, but not be limited to the following:

The appointment of a maintainer, which may be one of the parties or any third party, to perform or contract the maintenance;

The extent of resurfacing necessary to keep the road safe and to reduce environmental impacts; and

A method of payment by which each party using the road or a portion thereof shall pay its pro rata share of the cost of maintenance and resurfacing.

**Repairs.** Grantee shall repair, or cause to be repaired at its sole cost, that damage to the Road arising out of its use which is in excess of that which it would cause through normal and prudent usage. Damage caused by an unauthorized user shall be repaired at the expense of the Grantee if the Grantee is the sole user of the road, the Grantor if the Grantor is the sole user of the road and shared jointly if there is joint use of the road.

**Improvements.** Unless the parties agree in writing to share the cost of improvements in advance of such improvements being made, such improvements shall be solely for the account of the improver.

**Prior rights.** This permit is subject to any rights and valid claims previously conveyed by Grantor, and to any rights and valid claims pending on said premises. Grantee rights herein are subject to all matters of public record and to all prior unrecorded or recorded easements, permits, leases and options affecting said lands or Grantee rights across, over or upon such lands. Grantee rights herein are also subject to the rights of the Grantor to use its own lands for any and all legal purposes including the use of the land by third parties with the permission of the Grantor.

**Operational Restrictions.** Site-specific operational requirements are listed in Exhibit B. Non-compliance with these requirements shall constitute a breach of contract and may result in the Grantor suspending operations until the breach is remedied.

**Damage.** Grantee shall take all reasonable precautions to protect Grantor-owned timber, crops and improvements. The Grantee must notify the Grantor two (2) weeks in advance of completion of said operations for the purpose of inspection for compliance with the terms hereof. Grantee shall pay Grantor for any damage to timber, crops and improvements not identified and paid for under the terms and conditions of this Permit. Grantor shall appraise the damage at market value at the time of damage and bill Grantee for said damages at said value.

**Waste.** Grantee shall not cause nor permit any filling activity to occur in or on the premises, except by prior written approval of the Grantor. Grantee shall not deposit refuse, garbage, or other waste matter or use, store, generate, process, transport, handle, release, or dispose of any hazardous substance, or other pollutants in or on the premises except in accordance with all applicable laws. The term hazardous substance means any substance or material as those terms are now or are hereafter defined or regulated under any federal, state, or local law including but not limited to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 42 USC 9601 *et seq.*), or the Washington Model Toxic Control Act (MTCA RCW 70.105D.010.). Grantee shall immediately notify the Grantor if the Grantee becomes aware of any release or threatened release of hazardous substance on the premises or adjoining property. If a release of hazardous substance occurs in, on, under, or above the premises arising out of any action of the Grantee, its contractors, subcontractors, invitees, agents, employees, licensees, or permittees, the Grantee shall, at its sole expense, promptly take all actions necessary or advisable to clean up, contain, and remove the hazardous substance in accordance with applicable laws.

**Survey Markers.** Grantee shall not destroy any land survey monuments marking local control points, geodetic control points, and land boundary survey corners without prior written approval from the landowner, which shall not be unreasonably withheld. Land survey monuments that must necessarily be disturbed or destroyed during construction or maintenance activities must be adequately referenced and replaced, at the Grantee's expense, under the direction of a Professional Land Surveyor, licensed in the State of Washington, in accordance with all applicable laws of the State of Washington in force at the time of construction, including but not limited to RCW 58.24, and all Department of Natural Resources regulations pertaining to preservation of such monuments. As directed under Chapter 332-120 WAC, a Land Surveyor or Engineer must submit an application with the Department of Natural Resources for permission to temporarily remove or destroy a survey monument.

**Fire Prevention and Control.** The Grantee shall be responsible for satisfying the requirements of the laws of the State of Washington pertaining to Forest Protection and, in addition thereto, the Grantee shall during the closed season of April 15 through October 15 contact Grantor who shall determine any extra requirements pertaining to burning procedure, blasting, watchman, extra patrol, pumpers, tankers, fire hoses, fire tools, etc., which are deemed necessary for prevention and suppression of fire which may result from the Grantee's operations.

**Indemnity by Grantee.** Grantee shall defend, indemnify and hold harmless the Grantor from all claims that arise out of the negligence of the State or its Permittees in their use of the permit. A "claim" as used in this section means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property including the resulting loss of use. Notwithstanding the foregoing, State's obligation to defend, indemnify, and hold harmless the Grantor from any judgment, decree or arbitration award shall extend only to the percentage of negligence of State and its Permittee in contribution to such claim. State waives its immunity under Title 51 RCW only to the extent it is required to indemnify, defend and hold harmless Grantor. This indemnification shall survive the expiration or termination of the permit.

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

To State:  
DEPARTMENT OF NATURAL RESOURCES  
Olympic Region  
411 Tillicum Lane  
Forks, WA. 98331

To Grantor:  
ROBERT E. & CHANTELE REANDEAU  
1235 Evans Rd,  
Sequim, WA. 98382

**Integrated Agreement; Modification.** This Permit constitutes the entire agreement and understanding of the parties with respect to the subject matter of the Permit and supersedes all prior negotiations and representations. This Permit may not be modified except in writing signed by the parties. The parties agree to execute any additional documents reasonably necessary to effectuate the provisions and purposes of this Permit.

**Severability.** If any provision of this Permit is held to be invalid or unenforceable, this provision shall not affect or invalidate the remainder of this Permit, and to this end the provisions of this Permit are declared to be severable. If any such invalidity becomes known or apparent to the parties, the parties agree to negotiate promptly in good faith in an attempt to amend such provision as nearly as possible to be consistent with the intent of this Permit.

**Waiver.** Failure of either party to insist upon the strict performance of any of the terms and conditions of this Permit, or failure to exercise any rights or remedies provided in this Permit or by law, or to notify the other party in the event of breach, shall not release the other party of any of its obligations under this Permit, nor shall any purported oral modification or rescission of this Permit by either party operate as a waiver of any of the terms hereof. No waiver by either party of any breach, default, or violation of any term, warranty, representation, agreement, covenant, right, condition, or provision of this Permit shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, agreement, covenant, right, condition, or provision.

**Assignment.** This Permit, and any of the rights granted herein, shall not be assigned without prior written consent of Grantor, except that said rights granted herein may be used by any Permittee, while engaged in the Grantee's operations.

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

**Exhibits.** All exhibits referred to in this Permit are deemed to be incorporated in this Permit in their entirety.

**Headings.** The headings in this Permit are for convenience only and are not intended to, and shall not be construed to, limit, enlarge, or affect the scope or intent of this Permit nor the meaning of any of its provisions.

**Counterparts.** This Permit may be executed in one or more counterparts, each of which shall be deemed an original, and all of which counterparts together shall constitute the same instrument which may be sufficiently evidenced by one counterpart. Execution of this Permit at different times and places by the parties shall not affect its validity so long as all the parties execute a counterpart of this Permit.

IN WITNESS WHEREOF, the parties hereto have caused this Permit to be executed as below subscribed

Dated: MAY 8, 2023.

ROBERT E. REANDEAU

*Robert E. Reandeau*

Robert E. Reandeau  
Land Owner  
1235 Evans Rd.  
Sequim, WA. 98382  
(206) 423-3325

Dated: MAY 8, 2023.

CHANTELLE REANDEAU

*Chantelle Reandeau*

Chantelle Reandeau  
Land Owner  
1235 Evans Rd.  
Sequim, WA. 98382  
(206) 423-3325

Dated: May 11, 2023.

STATE OF WASHINGTON  
Department Of Natural Resources

*Mona Griswold*

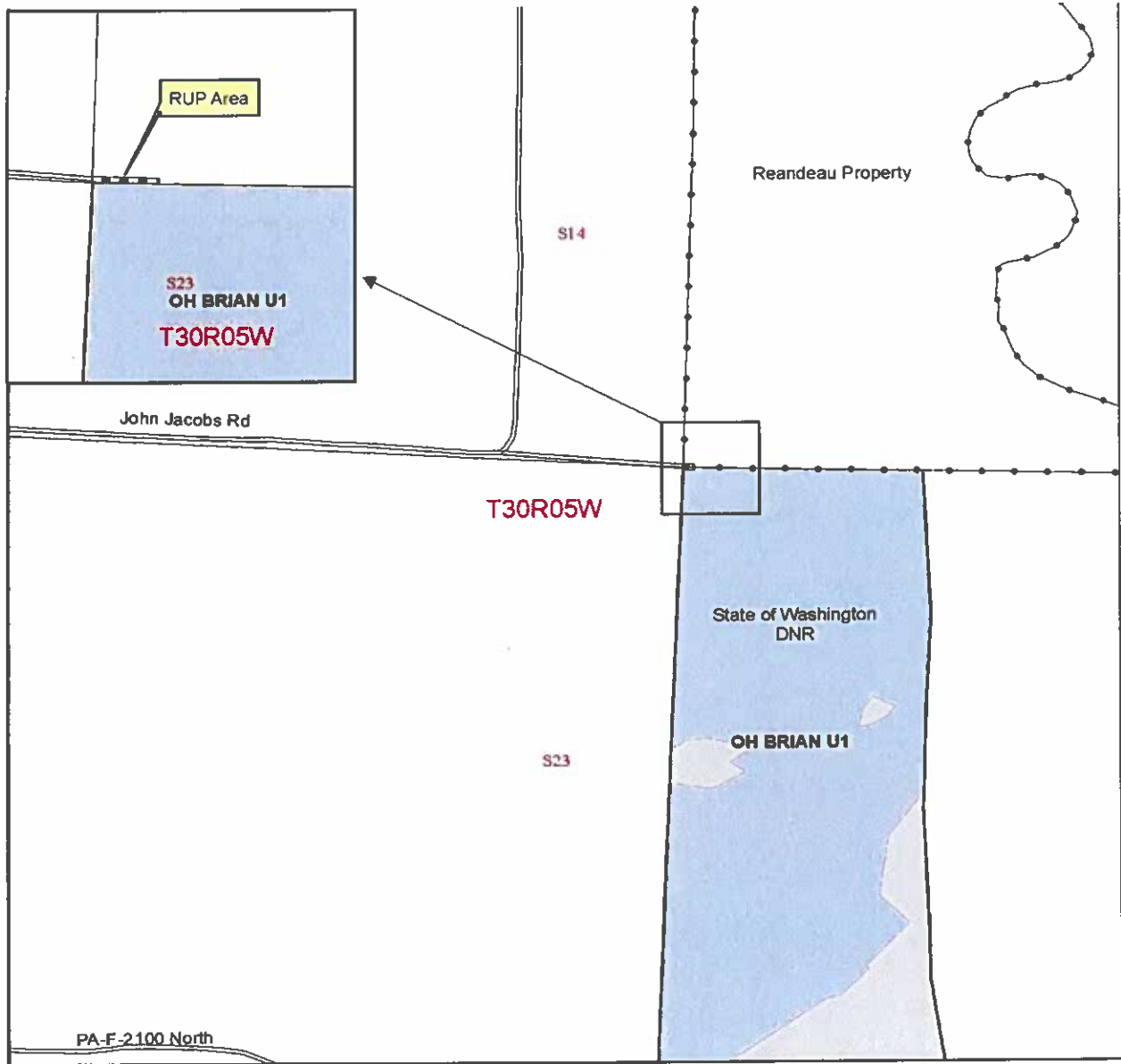
Mona Griswold  
Olympic Region Manager  
411 Tillicum Lane  
Forks, WA. 98331  
(360) 374-2800



Approved as to Form this  
11<sup>th</sup> day of June, 2004.  
By: James Schwartz  
Assistant Attorney General  
State of Washington



Revised as to Form this  
11<sup>th</sup> day of March, 2008  
Roger Braden, Assistant Attorney General

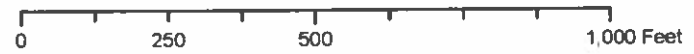
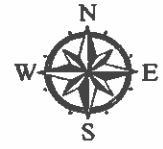
## Exhibit A Permit Premises



**LEGEND**

-  State Property
-  Reandeau Property
-  Timber Sale Area

-  Existing Roads
-  Road Use Permit Area



When recorded return to:  
Department of Natural Resources  
Olympic Region  
Attn: Albert Huggins  
411 Tillicum Lane  
Forks, WA. 98331

CLALLAM COUNTY TREASURER  
EXCISE TAX EXEMPT

DATE DEC 13 2022

BY: Julia Gaudie, Dep



WASHINGTON STATE DEPARTMENT OF  
**NATURAL RESOURCES**  
HILARY S. FRANZ | COMMISSIONER OF PUBLIC LANDS

Release of Easement: (Partial Release)  
Grantor: ADAM TARGAN QUALIFIED PERSONAL RESIDENCE TRUST  
Grantee: WASHINGTON STATE, DEPARTMENT OF NATURAL RESOURCES  
Legal Description: SW1/4SW1/4, S11, T29N, R5W, W.M., Clallam County, State of Washington  
Assessor's Property Tax Parcel Number: 05291130000  
Cross Reference: AFN 463741  
DNR Easement No. 55-001442

Grant of Easement:  
Grantor: ADAM TARGAN QUALIFIED PERSONAL RESIDENCE TRUST  
Grantee: WASHINGTON STATE, DEPARTMENT OF NATURAL RESOURCES  
Legal Description: S1/2SW1/4, S1/2SE1/4, S11, T29N, R5 W, W.M., Clallam County, State of Washington.  
Assessor's Property Tax Parcel Number(S): 052911300000, 052911400020  
Cross Reference: Record of Survey, AFN 2001-1067514  
DNR Easement No. 55-103924

**EASEMENT**

THIS AGREEMENT, made and entered into this 9<sup>th</sup> day of NOVEMBER, 2022, by and between ADAM TARGAN QUALIFIED PERSONAL RESIDENCE TRUST, herein called "Grantor," and STATE OF WASHINGTON, acting by and through the Department of Natural Resources, herein called "State," WITNESSETH:

**Agreement.** State and Grantor agree to the following Easement agreement, with the final easement being mutually agreeable. Grantor agrees to grant State the easement over Grantor's property as described in Exhibit "A" (hereafter Burdened Parcel) and shown on Exhibit



“B” (hereafter Easement Area). In exchange for the grant of easement, State agrees to release that portion of easement previously granted by ITT Rayonier INC. as shown in Exhibit “B-1” (hereafter Easement Area) and described herein.

**Conveyances.**

**A. Partial Release of Easements. From State to Grantor.** State hereby releases and quit claims its rights and interests in that portion of the easements granted by ITT Rayonier INC. in the “Easement” dated January 6, 1977, and filed with Clallam County Auditor’s office under file number 463741 and with the State of Washington in Olympia, Washington, under file number 55-001442 that is located in portions of Section 11, in Township 29 North, Range 5 West, W.M. in Clallam County, Washington and shown approximately as shown on Exhibit “B-1”.

**B. Grant of Easements. Grantor to State.** Grantor, for and in consideration of the mutual promises and covenants herein contained, and other good and valuable consideration, the mutual receipt and sufficiency of which is hereby acknowledged, the parties agree to the following terms and hereby grants, conveys, and warrants to State, its successors and assigns, a permanent Easement over parcels of land in Clallam County legally described as set forth in Exhibit "A", said Easement to be sixty (60) feet in width running Thirty (30) feet on each side of a centerline of a road located approximately as shown on Exhibit "B".

**Purpose.** The Easement is conveyed to provide road access to and from lands owned by the State for forest management activities. Authorized use shall include the right to travel, maintain, repair, construct or reconstruct the Easement Area. No rights of public access are allowed in the Easement Area unless permission is granted by Grantor.

**Appurtenant.** This Easement shall be deemed appurtenant to the real property now owned by State located in Clallam County, legally described as set forth in Exhibit “C” attached hereto (hereafter Benefited Parcels).

**Reservations.** Grantor reserves the right at all times for any purpose, to cross and recross the Easement Area at any place on grade or otherwise. Grantor may grant to third parties any or all of the rights reserved therein; provided that use by such party shall be subject to the terms and conditions of this Easement and shall not unreasonably interfere with the rights granted to State herein. Grantor reserves all timber now on or hereafter growing within the rights of way on said lands and the right to remove said timber via the right of way herein granted.

**Relocation.** State shall have the right, with Grantor's prior consent, which will not be unreasonably withheld, to relocate the Easement at State's sole cost so long as the new location does not unreasonably interfere with the reserved rights of the Grantor herein.

**Maintenance.** The cost of road maintenance and resurfacing shall be allocated on the basis of respective uses of said roads. When any party uses a road, that party shall perform or cause to be performed, or contribute or cause to be contributed, that share of maintenance and resurfacing occasioned by such use as hereinafter provided. During periods when a road is being used solely by one party, such party shall maintain that portion of said road so used to the standards existing at the time use is commenced. During periods when more than one party is using the same road, or any portion thereof, the parties hereto shall meet and establish necessary maintenance provisions. Such provisions shall include, but shall not be limited to:

- a. The appointment of a maintainer, which may be one of the parties hereto or any third party, who will perform or cause to be performed at a reasonable and agreed upon rate the maintenance and resurfacing of the road or the portion thereof being used; and
- b. A method of payment by which each party using said road or a portion thereof, shall pay its pro rata share of the cost incurred by said maintainer in maintaining or resurfacing said road or portion thereof.

For purposes of this agreement, maintenance is defined as the work normally necessary to preserve and keep the roadway, road structure and road facilities as nearly as possible in their present condition or as hereafter improved.

**Repairs.** Each party using any portion of a road shall repair, or cause to be repaired, at its sole cost and expense, that damage to said road occasioned by it which is in excess of that which it would cause through normal and prudent usage. Should damage be caused by an unauthorized user, the cost of repair shall be treated as ordinary maintenance and handled as set forth above.

**Improvements.** Unless the parties agree in writing to share the cost of improvements in advance of such improvements being made, such improvements shall be solely for the account of the improver.

**Permittees.** State may permit its respective agents, contractors, licensees, lessees, purchasers of timber or other valuable materials, and their agents, hereinafter individually referred to as "Permittee" and collectively referred to as "Permittees," to exercise the rights granted to it

herein. Provided, that when State or one of its Permittees plans to use any portion of said road(s) for the purpose of hauling timber or other valuable materials, such party shall notify Grantor at least fifteen (15) days prior to the commencement of use of said rights, advising of the portion of road to be used, the approximate dates when such use will begin and end, and upon the completion of such use notify Grantor.

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

**Indemnity.** State shall defend, indemnify and hold harmless the Grantor from all claims that arise out of the negligence of State or its Permittee in their use of the easement. A "claim" as used in this section means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property including the resulting loss of use. Notwithstanding the foregoing, State's obligation to defend, indemnify, and hold harmless the Grantor from any judgment, decree or arbitration award shall extend only to the percentage of negligence of State and its Permittee in contribution to such claim. State waives its immunity under Title 51 RCW only to the extent it is required to indemnify, defend and hold harmless Grantor. This indemnification shall survive the expiration or termination of the easement.

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

ADAM TARGAN QUALIFIED  
PERSONAL RESIDENCE TRUST

Dated: 11/8, 2022

Adam Targan  
ADAM TARGAN  
Trustee  
5478 Blue Mountain RD.  
Port Angeles, WA. 98362  
(908) 229-2968

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

Dated: December 6th, 2022.

Duane Emmons  
DUANE EMMONS  
Acting Deputy Supervisor for State Uplands  
PO Box 7000  
1111 Washington Street SE  
Olympia, WA. 98504-7000  
(360) 902-1600



Approved as to Form this  
11th day of March, 2008.  
By: Roger Braden  
Assistant Attorney General  
State of Washington



REPRESENTATIVE ACKNOWLEDGMENT

State of Washington

County of Clallam

I certify that I know or have satisfactory evidence that Adam Targan is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Trustee of the Adam Targan Qualified Personal Residence Trust to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 11/8/22

[Handwritten Signature]  
(Signature)

(Seal or stamp)

Brian Kirst  
(Print Name)



Notary Public in and for the State of Washington,

residing at Port Angeles, WA.

My appointment expires 8/23/23

STATE ACKNOWLEDGMENT

State of Washington

County of Thurston

I certify that I know or have satisfactory evidence that Duane Emmons is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Acting Deputy Supervisor for State Uplands of the Department of Natural Resources of the State of Washington to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 12/16/2022

Tami K. Kellogg  
(Signature)

(Seal or stamp)

Tami K. Kellogg  
(Print Name)



Notary Public in and for the State of Washington,

residing at McCleary

My appointment expires 11/28/2024

**EXHIBIT A  
Burdened Parcels**

**Legal Description of Grantor Burdened Parcels**

**Township 29 North, Range 5 West, W.M., Clallam County, Washington.**

<b>Section</b>	<b>Legal Description</b>	<b>Tax Parcel Number</b>
11	SW1/4	052911300000
	S1/2SE1/4	052911400020

**Shown as Parcel 2 on that Record of Survey, recorded July 25, 2001 in Book 47 of Surveys, page 46 under Clallam County Recording No. 2001-1067514.**

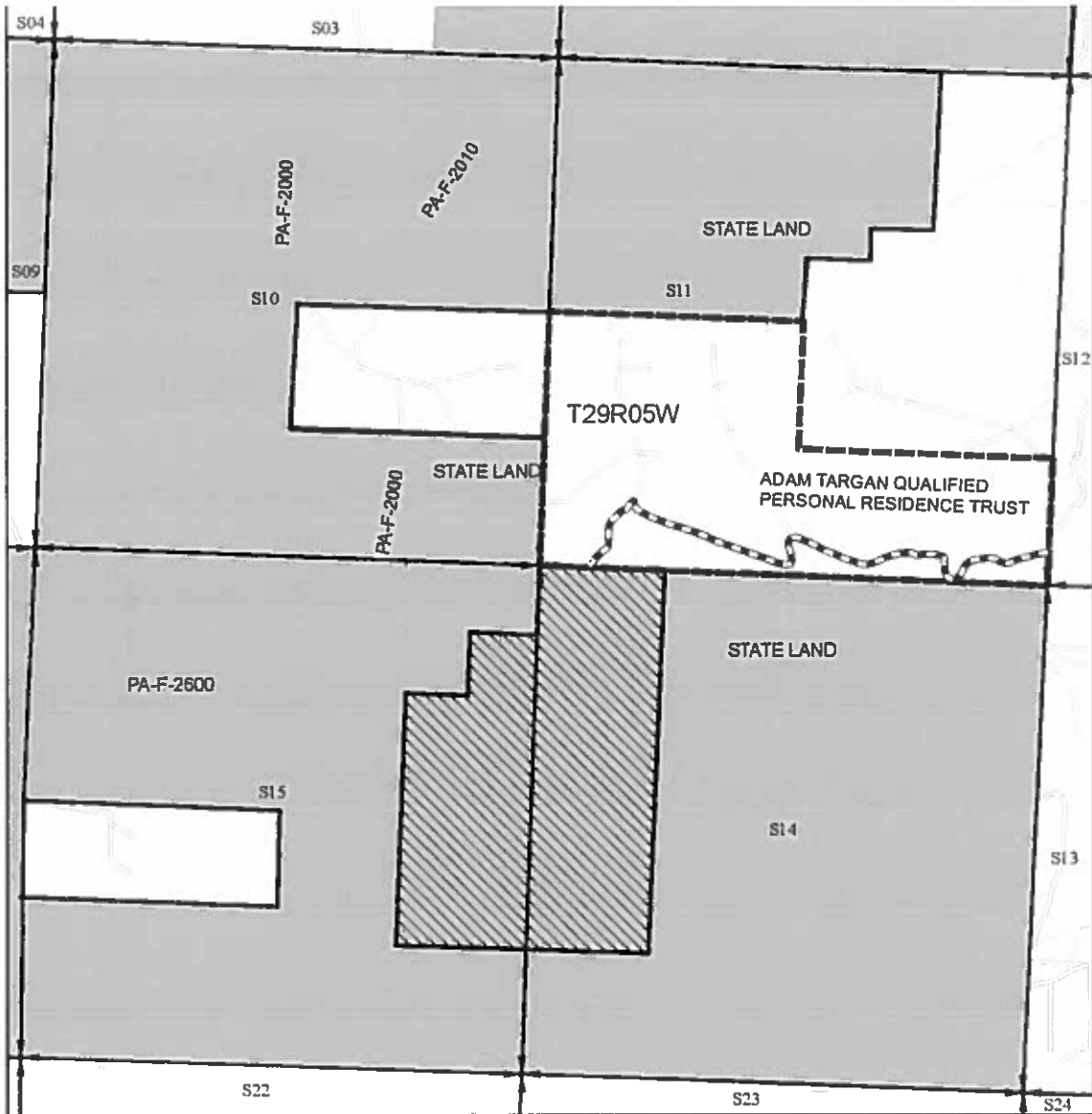
**Legal Description of State Easement Release**

**Township 29 North, Range 5 West, W.M., Clallam County, Washington.**

<b>Section</b>	<b>Legal Description</b>	<b>Tax Parcel Number</b>
11	SW1/4	052911300000



## EXHIBIT B EASEMENT AREA

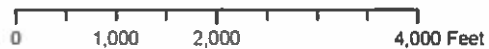
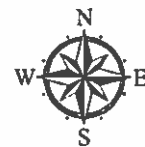


**LEGEND**

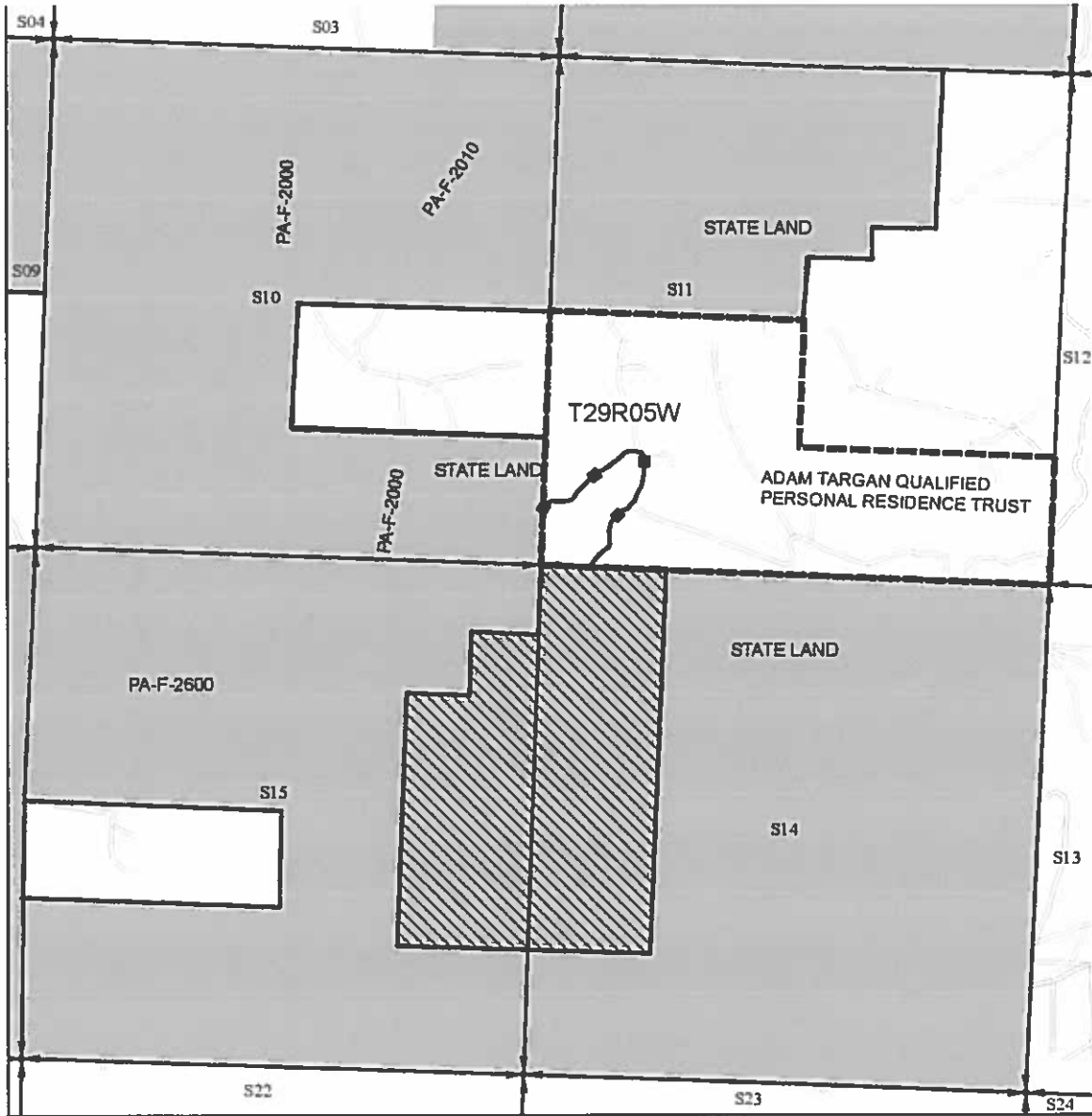
- State Land
- Grantor Land
- State Benefitted Parcel

State Easement Acquisition Area  
6041 ft, 60 ft width, 8.3 acres




Roads





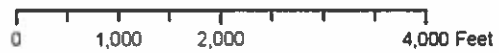
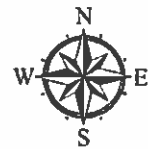
## EXHIBIT B-1 EASEMENT RELEASE



**LEGEND**

-  State Land
-  Grantor Land
-  State Benefitted Parcel

-  State Easement Release Area  
2664 Ft, 60 Ft width, 3.6 acres
-  Roads



**EXHIBIT C**

**Legal Description of State Benefited Parcels**

**Township 29 North, Range 5 West, W.M., Clallam County, WA.**

<b>Section</b>	<b>Legal Description</b>	<b>Tax Parcel Number</b>
<b>14</b>	<b>W1/2NW1/4, NW1/4SW1/4</b>	<b>052914000000</b>
<b>15</b>	<b>NE1/4NE1/4, SE1/4NE1/4, NE1/4SE1/4</b>	<b>052915000000</b>