

Washington DNR Timber Sales Program

Updated information is being provided for RED TRUCK timber sale documents as follows:

Documents amended:

Brief Description	DATE
fpa – amendment made to question #15 regarding suspending cables	02/21/2024



TIMBER NOTICE OF SALE

SALE NAME: RED TRUCK VRH VDT

AGREEMENT NO: 30-104520

AUCTION: February 28, 2024 starting at 10:00 a.m., **COUNTY:** Whatcom
Northwest Region Office, Sedro Woolley, WA

SALE LOCATION: Sale located approximately 1 mile north of Maple Falls, WA.

**PRODUCTS SOLD
AND SALE AREA:**

All timber bounded by white timber sale boundary tags, property lines, and the Silver Lake Road and the CSL-14 Road, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #1.

All timber bounded by white timber sale boundary tags, property lines, and adjacent young stands, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #2.

All timber bounded by white timber sale boundary tags, adjacent young stand, and the CSL-19 and RM-41 roads, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #3.

All timber bounded by white timber sale boundary tags, adjacent young stands, and the RM-ML and RM-46 roads, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #4.

All timber as described for removal in Schedule B located in the RMZ/WMZ thinning areas (beyond the blue special management tags up to the white timber sale boundary tags) within Units #1, #2, #3 and #4.

All timber bounded by orange right-of-way tags, except that title to the timber within the right-of-way associated with areas of road construction (located outside of units) is not conveyed to the Purchaser unless the road segment is actually constructed, except as described for removal in Schedule B.

All forest products above located on part(s) of Sections 12 and 13 all in Township 40 North, Range 5 East, Sections 18 and 19 all in Township 40 North, Range 6 East, W.M., containing 166 acres, more or less.

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



TIMBER NOTICE OF SALE

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	MBF by Grade								
				1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	15.5	10	1,063				19		319	646	78	1
Hemlock	15.6		689						321	292	76	
Redcedar	22		513							478	35	
Maple	17.5		347						196	82	61	8
Red alder	12.5		264						27	65	169	3
Grand fir	22.3		31						27	4		
Cottonwood	20.7		20						20			
Sale Total			2,927									

MINIMUM BID: \$668,000.00 **BID METHOD:** Sealed Bids

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

EXPIRATION DATE: March 31, 2026 **ALLOCATION:** Export Restricted

BID DEPOSIT: \$66,800.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Cable; Shovel, processor, feller-buncher, tracked skidder or “6-wheeled rubber-tired skidders with over-the-tire tracks spanning both sets of rear tires”, on sustained slopes 40% or less; self-leveling equipment on sustained slopes 50% or less (See below for restrictions); Tethered equipment in Units #3 and #4 (See below for restrictions).

Prior written approval of the Contract Administrator is required before tethered or self-leveling equipment may be used. If ground disturbance is causing excessive damage, as determined by the Contract Administrator, the use of this equipment will no longer be authorized. Ground Based Yarding will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator to reduce soil damage and erosion.

ROADS: 47.00 stations of required construction. 18.30 stations of optional construction. 378.10 stations of required prehaul maintenance. 18.70 stations of abandonment. 18.30 stations of abandonment, if built.

Road may be obtained from the following sources on State land at no charge to the Purchaser: Big Red Pit at station 2+00 of the RM-40 Road. Dave’s Bobcat Pit at station 34+30of the CSL-19 Road.

Rock may be obtained from the following source not on State land at no charge to the Purchaser: Sanfi Pit at station 7+10 of the CSL-1401-02 Road.

Development of existing rock sources will involve drilling, shooting, and processing rock to generate gravel pit run rock.

An estimated total quantity of rock needed for this proposal: 107 cubic yards of riprap, 6,370 cubic yards of ballast rock.



TIMBER NOTICE OF SALE

Road work and the hauling of rock will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator to reduce soil damage and siltation. The hauling of forest products will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator to reduce soil damage and siltation.

ACREAGE DETERMINATION

CRUISE METHOD: Acres determined by GPS traverse. Cruise was conducted via variable plot sample type. See Cruise Narrative for further details. Shapefiles of units are available upon request, and on the DNR website after the BNR meeting in which the sale is presented.

FEES:

1. Purchaser shall furnish the State with a check made payable to Sanfi Acres LLC, in the amount of \$9,000.00 on the day of sale for permit #55-105502, for road use. In addition to the monetary consideration, the creation of a 1,000 cubic yard stockpile of 3-inch-minus ballast rock, is required per Section 6-65 of the Red Truck Road Plan. 2. \$49,759.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

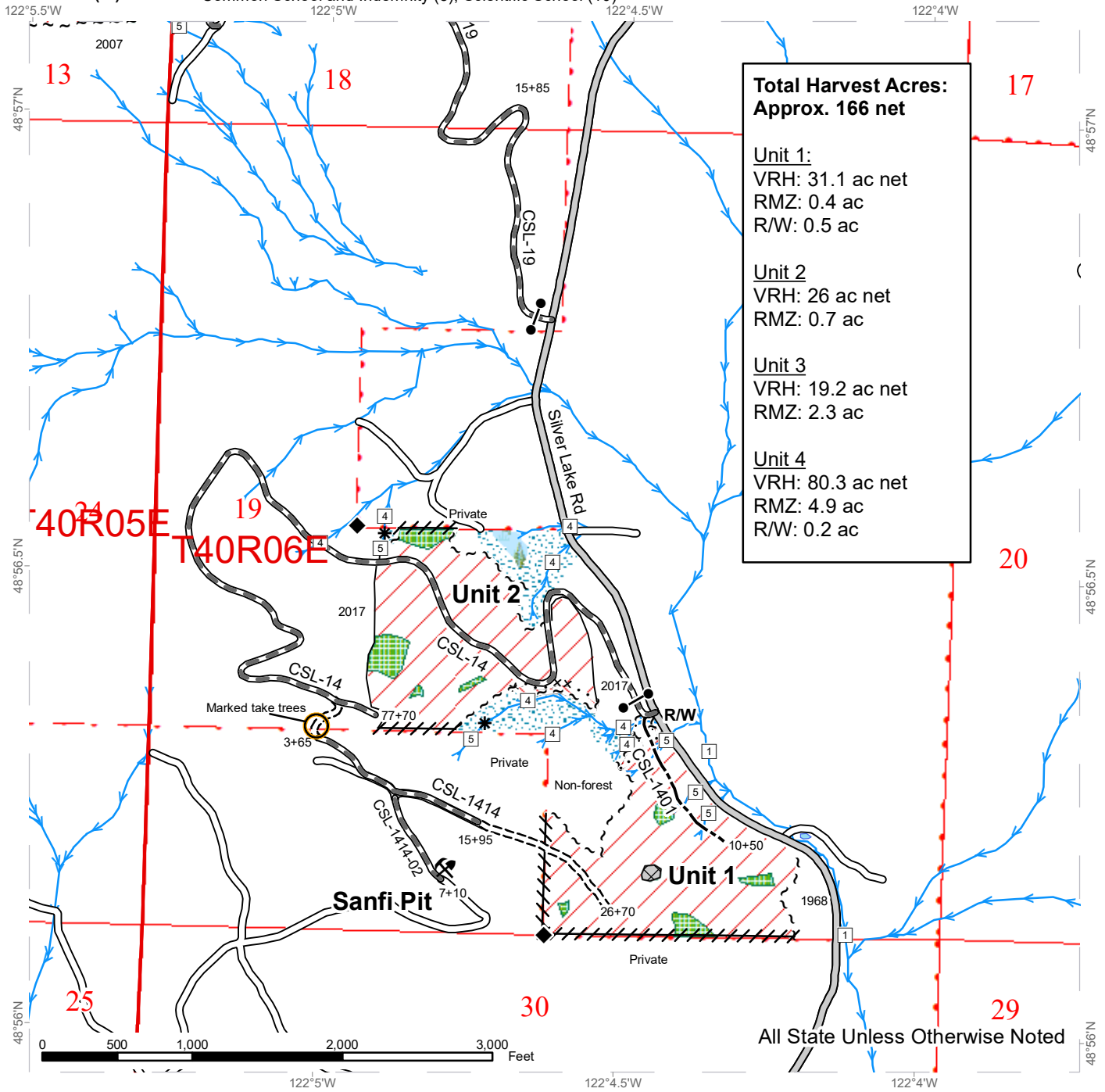
SPECIAL REMARKS:

1. Trees marked with a pink "X" represent the last take tree along property line boundaries.
2. Loaded rock or log trucks may not haul on the CSL-14 or CSL-19 on weekends and state recognized holidays or between 6:00 pm and 6:00 am on any other days.
3. Dust abatement requirements (C-130) may be achieved through water application or lignin application. Water application may be required multiple times per day. If dust is being generated during the dust abatement window, haul will be suspended until adequate dust abatement measures are in place as approved by the Contract Administrator.
4. Traffic control along Silver Lake Road is required during operations.
5. HQ DF noted within the sale area. See cruise for further details.
6. Redcedar and Douglas-fir poles were noted within the sale area.

TIMBER SALE MAP

SALE NAME: RED TRUCK
AGREEMENT #: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920



Total Harvest Acres: Approx. 166 net	
<u>Unit 1:</u>	
VRH:	31.1 ac net
RMZ:	0.4 ac
R/W:	0.5 ac
<u>Unit 2:</u>	
VRH:	26 ac net
RMZ:	0.7 ac
<u>Unit 3:</u>	
VRH:	19.2 ac net
RMZ:	2.3 ac
<u>Unit 4:</u>	
VRH:	80.3 ac net
RMZ:	4.9 ac
R/W:	0.2 ac

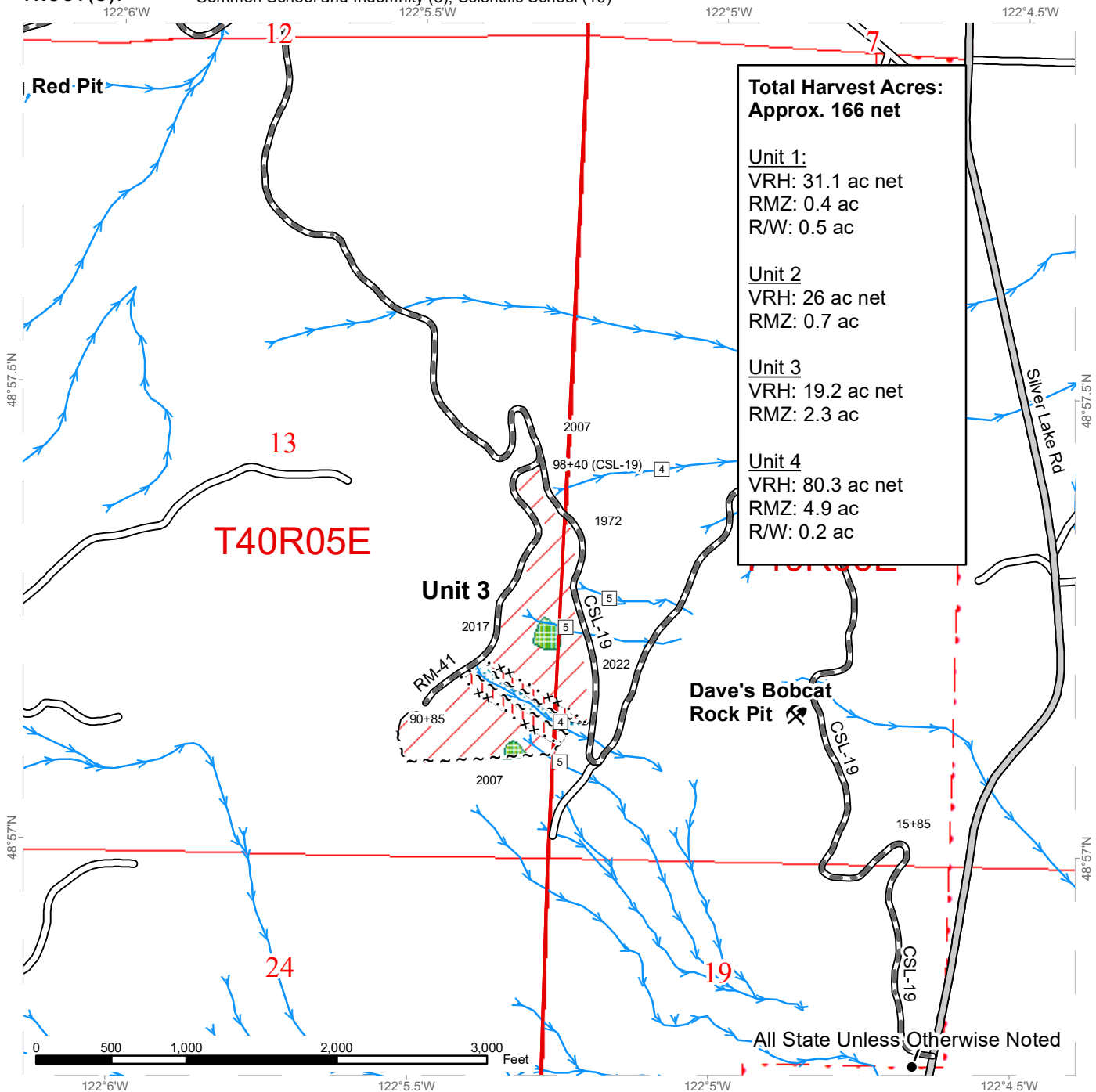
	Variable Retention Harvest		Sale Boundary Tags		County Road		Survey Monument
	Thinning (RMZ)		Special Mgmt Area		Existing Roads		Gate (F1-3)
	Riparian Restoration (RMZ)		Right of Way Tags		Required Pre-Haul Maintenance		Rock Pit
	DNR Managed Lands		Marked Property Line		Required Construction		
	Non-Tradeable Leave Clump		Timber Type Change		Optional Construction		
	Leave Tree Area				Streams		
	Riparian Mgt Zone				Stream Type		
	Forested Wetland				Stream Type Break		



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 Approx. 166 net**

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 RMZ: 0.4 ac
 R/W: 0.5 ac

Unit 2:
 VRH: 26 ac net
 RMZ: 0.7 ac

Unit 3:
 VRH: 19.2 ac net
 RMZ: 2.3 ac

Unit 4:
 VRH: 80.3 ac net
 RMZ: 4.9 ac
 R/W: 0.2 ac

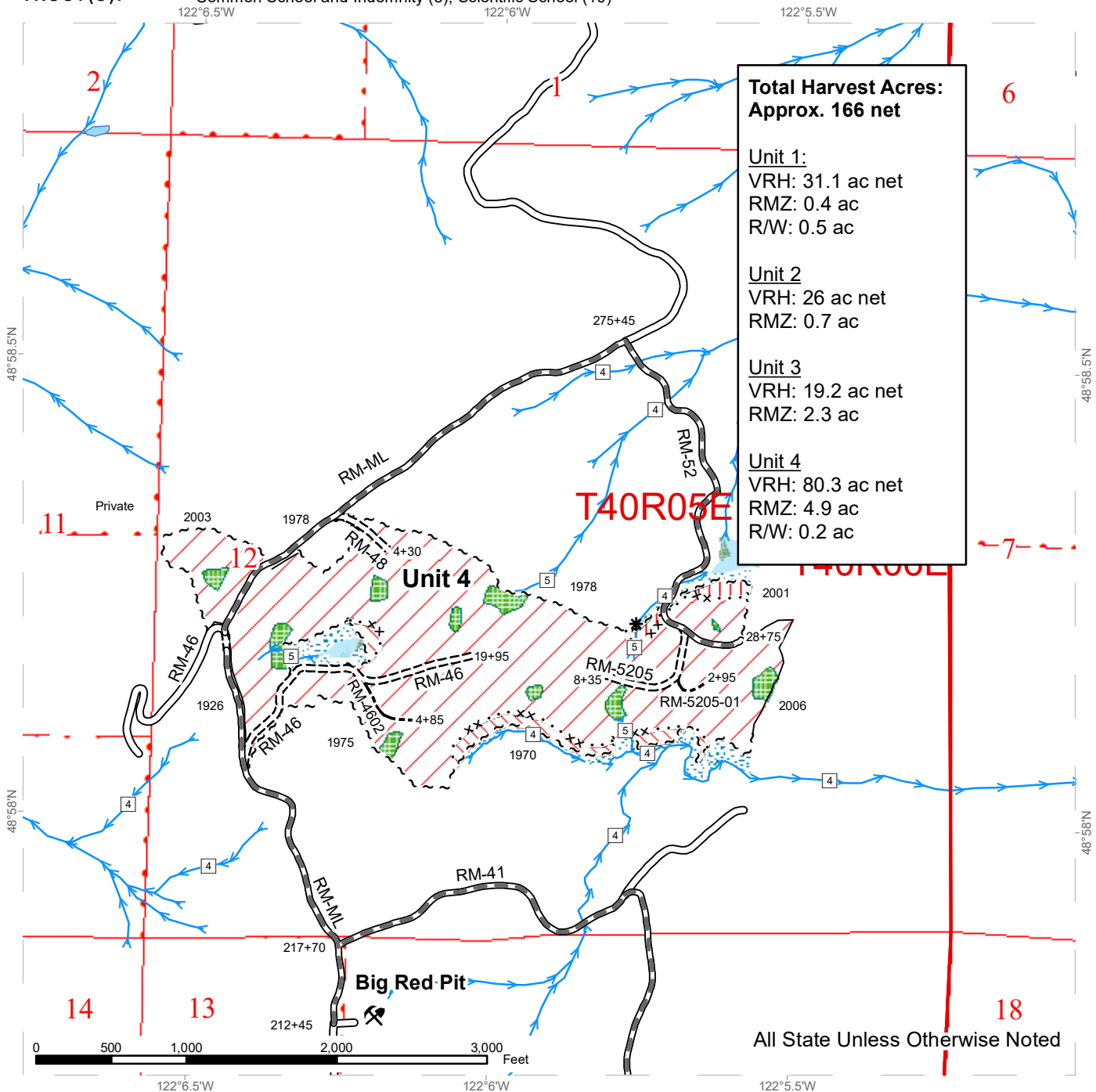
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	Leave Tree Area				Stream Type Break		
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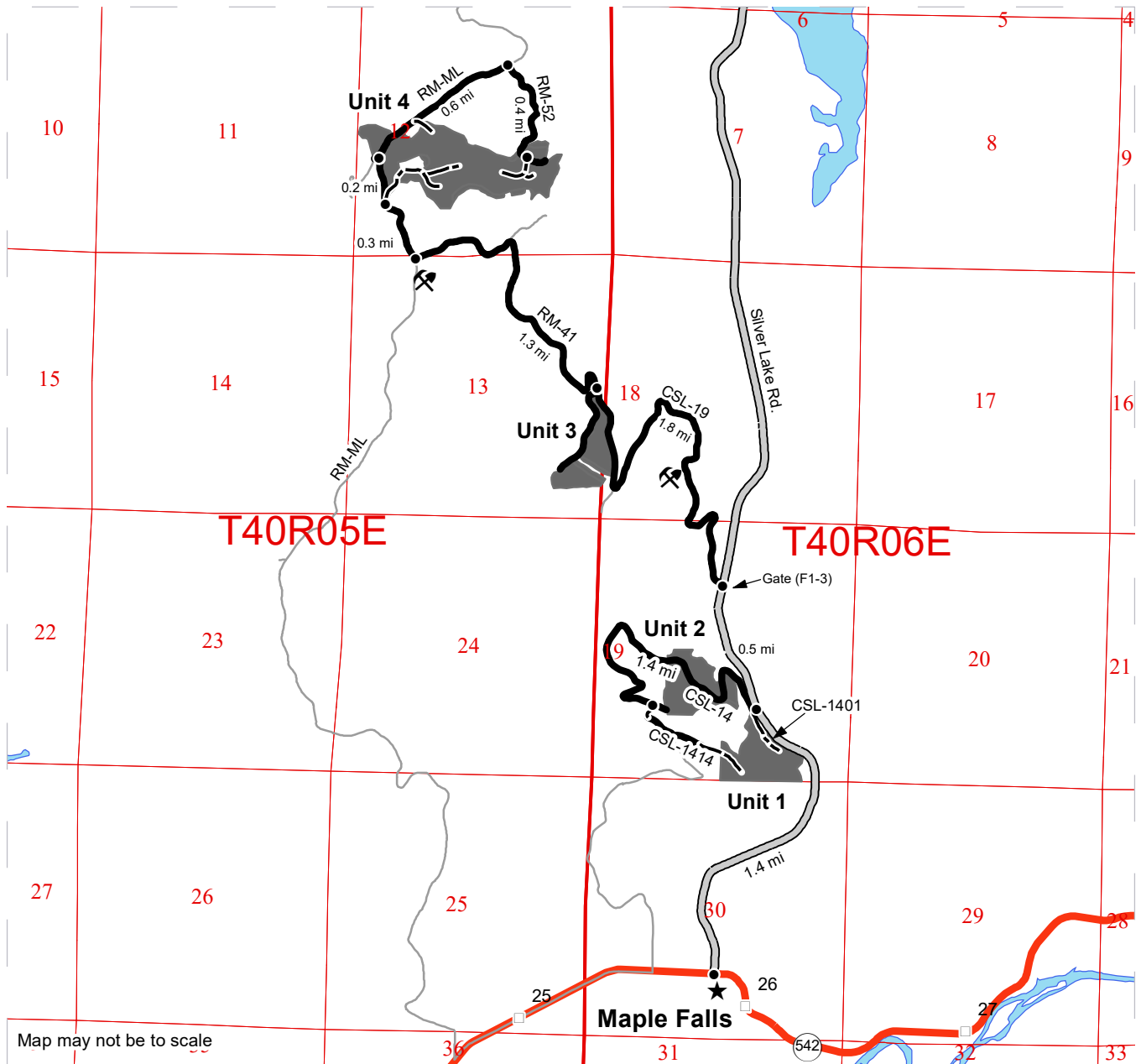
	Variable Retention Harvest		Sale Boundary Tags		Existing Roads		Survey Monument
	Thinning (RMZ)		Special Mgmt Area		Required Pre-Haul Maintenance		Rock Pit
	Riparian Restoration (RMZ)		Right of Way Tags		Required Construction		
	DNR Managed Lands		Marked Property Line		Optional Construction		
	Non-Tradeable Leave Clump		Timber Type Change		Streams		
	Leave Tree Area				Stream Type		
	Riparian Mgt Zone				Stream Type Break		
	Forested Wetland						



DRIVING MAP

SALE NAME: RED TRUCK
AGREEMENT#: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920



Map may not be to scale

	Timber Sale Unit
	Haul Route
	Other Road
	Milepost Markers
	Distance Indicator
	Rock Pit
	Highway

DRIVING DIRECTIONS:

Unit 1: From the intersection of State Route 542 and Silver Lake Rd, head north of Silver Lake Rd for 1.1 miles before reaching the timber harvest on your left. Continue for 0.3 miles before reaching the CSL-14 and start of construction of the CSL-1401 into the unit. Continue up the CSL-14 for 1.4 miles before reaching the beginning of construction of the CSL-1414 that will access the top of the unit.

Unit 2: From the intersection of the CSL-14 and Silver Lake Rd, continue on the CSL-14 for 0.2 miles before entering the unit.

Unit 3: From the intersection of the CSL-14 and Silver Lake Rd, continue north on Silver Lake Rd. for 0.5 miles and turn left onto the CSL-19. Proceed through the gate (F1-3) and continue for 1.4 miles before rounding a switch back and arriving at the timber sale on the uphill side. Continue for 0.4 miles along the downhill side of the unit before reaching the RM-41 and turn left to continue on the RM-41 along the uphill side of the unit.

Unit 4: From the intersection of the CSL-19 and RM-41, continue north of the RM-41 for 1.3 miles and turn right onto the RM-ML. Continue for 0.3 miles before reaching the unit and the start of construction of the RM-45 on your right. Continue for on the RM-ML for 0.2 miles, stay right and continue for another 0.6 miles before turning right on the RM-52. Continue on the RM-52 for 0.4 miles before re-entering the unit and encountering the beginning of construction for the RM-5204.



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted Lump Sum AGREEMENT NO. 30-104520

SALE NAME: RED TRUCK VRH VDT

**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 bounded by white timber sale boundary tags, property lines, and the Silver Lake Road and the CSL-14 Road, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #1.

All timber bounded by white timber sale boundary tags, property lines, and adjacent young stands, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #2.

All timber bounded by white timber sale boundary tags, adjacent young stand, and the CSL-19 and RM-41 roads, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #3.

All timber bounded by white timber sale boundary tags, adjacent young stands, and the RM-ML and RM-46 roads, except cedar salvage (cedar snags, preexisting dead and down cedar trees and cedar logs), trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management tags (WMZs/RMZs), and forest products tagged out by yellow leave tree area tags in Unit #4.

All timber as described for removal in Schedule B located in the RMZ/WMZ thinning areas (beyond the blue special management tags up to the white timber sale boundary tags) within Units #1, #2, #3 and #4.

All timber bounded by orange right-of-way tags, except that title to the timber within the right-of-way associated with areas of road construction (located outside of units) is not conveyed to the Purchaser unless the road segment is actually constructed, except as described for removal in Schedule B.

All forest products above located on approximately 166 acres on part(s) of Sections 12, and 13 all in Township 40 North, Range 5 East, Sections 18, and 19 all in Township 40 North, Range 6 East W.M. in Whatcom County(s) as designated on the sale area and as shown on the attached timber sale map.

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

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

G-020 Inspection By Purchaser

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

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
B	Thinning Prescription
D	Map

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to March 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 \$120.00 per acre per annum for the acres on which an operating release has not been issued in the RMZ/WMZ thinning areas. Payment of \$839.00 per acre per annum for the acres on which an operating release has not been issued in the Variable Retention Harvest (VRH) areas (for example, in Variable Density Thinning (VDT) Units 1 and 3, and the RMZ Thinning areas in Unit 2).
- 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 Sedro Woolley, 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; RM-ML, RM-40, RH-41, RM-46, RM-4602, RM-48, RM-52, RM-5205, RM-5205-01, CSL-14, CSL-1401, CSL-1414, CSL-

1414-02, and CSL-19. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330 Pre-work Conference

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

G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

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

G-370 Blocking Roads

Purchaser shall not block the CSL-14, CSL-19, RM-41, RM-ML, unless authority is granted in writing by the Contract Administrator.

G-380 Road Easement and Road Use Permit Requirements

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

RUP with:

Sanfi Acres LLC; #55-105502; dated July 13, 2023.

Purchaser shall furnish the State with a check made payable to Sanfi Acres LLC, in the amount of \$9,000.00 on the day of sale for permit #55-105502, for road use. In addition to the monetary consideration, the creation of a 1,000 cubic yard stockpile of 3-inch-minus ballast rock, is required per Section 6-65 of the Red Truck Road Plan.

G-430 Open Fires

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

G-450 Encumbrances

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

DATA MISSING

Section P: Payments and Securities

P-011 Initial Deposit

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

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$76,102.00. The total contract price consists of a \$0.00 contract bid price plus \$76,102.00 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-010 Cutting and Yarding Schedule

Ground Based Yarding will not be permitted from November 1 to March 31 unless authorized in writing by the Contract Administrator.

H-011 Certification of Fallers and Yarder Operators

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

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

Excessive 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

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 288 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 288 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-015 Skid Trail Requirements

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

Purchaser shall comply with the following during the yarding operation:

- a. Skid trails will not exceed 12 feet in width, including rub trees.
- b. Skid trails shall not cover more than 15 percent of the total acreage on one unit.
- c. Skid trail location will be pre-approved by the Contract Administrator.
- d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.
- e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.
- g. Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

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

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 8 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-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; shovel, processor, feller-buncher, tracked skidder or "6-wheeled rubber-tired skidders with over-the-tire tracks spanning both sets of rear tires" on sustained slopes 40% or less; self-leveling equipment on sustained slopes 50% or less (See H-141 for restrictions); also, tethered equipment in Units #3 and #4 (See H-141 for restrictions). Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-126 Tailholds on State Land

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

H-127 Tailholds on Private Land

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

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

A. The following types of equipment are considered ground-based equipment:

SHOVEL is defined as a low ground pressure track-mounted machine with hydraulic boom and grapple capable of picking up one end of the largest log 25 feet from the center of the machine.

LOG PROCESSOR/DE-LIMBER is defined as a mobile machine with a hydraulic boom capable of simultaneously bucking, delimiting and/or debarking and chipping whole trees while sitting stationary at the landing.

FELLER-BUNCHER/HARVESTER is defined as a track mounted machine with hydraulic boom and cutter head capable of felling, bucking, limbing, and decking logs in one operation.

FORWARDER is defined as a track or rubber tire machine used for transporting logs to a landing by use of a bunk with self-loading boom in which logs are carried free of the ground.

RUBBER-TIRED SKIDDER is defined as a skidder mounted on rubber tires used to drag logs to a landing. Logs are generally pulled in groups of six or less, with one end on the ground.

TRACKED SKIDDER is defined as any tracked tractor or skidder, fixed or articulated, used to drag logs to landings. Logs are generally pulled in groups of six or less, with one end on the ground.

B. Equipment shall remain at least 30 feet from all water courses or areas of wet/soft soils, except as necessary to cross at approved locations. Water course crossing structures must be approved by the Contract Administrator.

C. When yarding and loading operations are occurring simultaneously, an additional shovel shall be required for loading to avoid extra trips to the landing. Shovel yarding shall not be allowed to create ruts or soil puddling. Shovel routes should be dispersed to prevent creation of definable trails.

D. An on-site pre-work meeting that includes the Contract Administrator and Purchaser will be required after operations have been disrupted (leading to a cessation of operations) or operations moved off site for a period of more than two weeks before any activities resume on site.

E. Falling and yarding shall not be permitted on weekends and state recognized holidays or between 6:00 pm and 6:00 am on any other days in Unit 1 and 2.

F. Loaded rock or log trucks may not haul on the CSL-14 or CSL-19 on weekends and state recognized holidays or between 6:00 pm and 6:00 am on any other days.

G. Dust abatement requirements (C-130) may be achieved through water application or lignin application. Water application may be required multiple times per day. If dust is being generated during the dust abatement window, haul shall be suspended until adequate dust abatement measures are in place as approved by the Contract Administrator.

H. During all operations traffic control signs must be provided and posted, at the Purchaser's expense, along the county road as approved by the Contract Administrator.

I. During felling operations within a tree length and a half from the county road trained flaggers must be in place to control traffic as necessary to provide for public safety, at the Purchaser's expense.

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

H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

A. A copy of the timber sale map, contract, and the FPA shall be present on site during active operations.

B. Purchaser must obtain prior written approval from the Contract Administrator for areas as to where to utilize tethered harvester and/or shovel equipment prior to use. Trees may be felled and pre-bunched by the equipment but must be yarded by cable, if authorized by the Contract Administrator. If ground disturbance is causing excessive damage, as determined by the Contract Administrator, the equipment shall no longer be authorized.

C. Double banded blue painted leave trees shall not be traded.

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

H-190 Completion of Settings

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

H-220 Protection of Residual or Adjacent Trees

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

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 6/23/2023 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on the RM-ML, RM-40, RH-41, RM-46, RM-4602, RM-48, RM-52, RM-5205, RM-5205-01, CSL-14, CSL-1401, CSL-1414, CSL-1414-02, and CSL-19 (15+85 to end) roads. All work shall be completed to the specifications detailed in the Road Plan.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on the CSL-19 (0+00 to 15+85) road. 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 dust on the CSL-19 (0+00 to 15+85); between June 1 and October 1.

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-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 the RMZ/WMZ Thinning areas.

D-041 Reserve Tree Excessive Damage

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

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

Jay Guthrie

Print Name

Northwest Region Manager

Date: _____

Date: _____

Address:

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

STATE OF _____)

COUNTY OF _____)

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

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

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

Notary Public in and for the State of

My appointment expires _____

Schedule B
Thinning Prescription

Hardwood Removal Areas

Take Tree Description:

Designated take trees include any hardwood stems (red alder, black cottonwood, birch, bigleaf maple). Harvest any designated take tree that can be felled and yarded without causing damage to residual conifers beyond that permitted in the H-012. Any conifer that may need to be felled to facilitate safe operations must be approved by the Contract Administrator.

*Note: Trees with blue “Special Management Unit Boundary” tags that meet the description of a take tree may be cut. These trees are marked with another blue “Special Management Unit Boundary” tag on the stump to indicate RMZ unit boundaries if they are cut.

ADDITIONAL SPECIAL HARVEST REQUIREMENTS: *All cottonwood must be felled and yarded to a landing or girdled and left standing. Girdling requirements are two full greater than 3 inch wide rings around the bole that are greater than 3 inches apart. Felled cottonwood may not remain in the RMZ as large downed wood recruitment. *Any portion of a designated take tree felled into an inner gorge stream channel feature may not be yarded.

RMZ Thinning Areas

Following the prioritization list below, achieve a residual stand with an average of 100 evenly spaced trees per acre (approx. 20 x 20 feet) where those trees exist.

Take tree prioritization list:

- 1- Any hardwood
- 2- Smallest conifer diameter class

Other requirements:

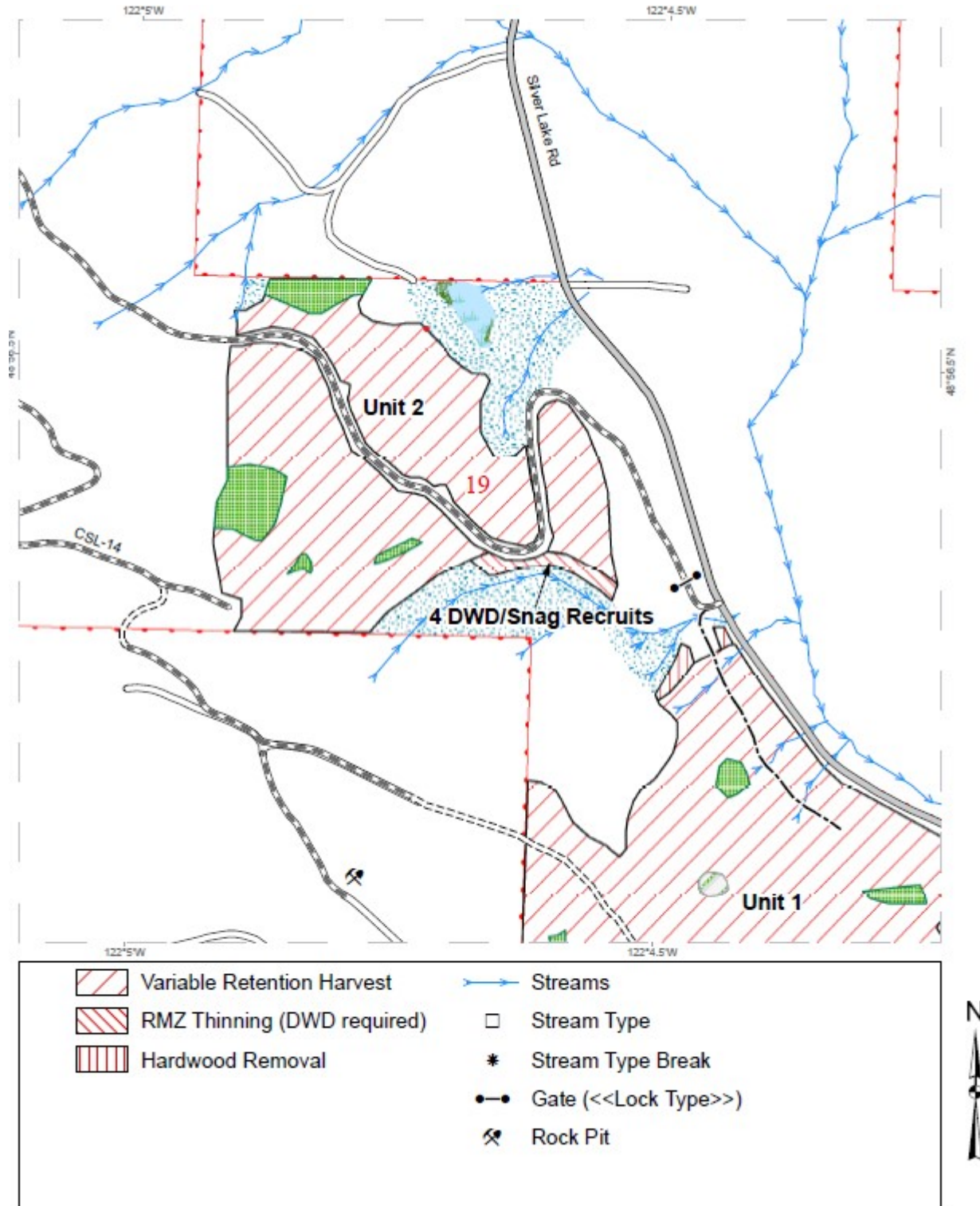
When operating along RMZs, the operator is required to fall five trees of the largest designated take trees towards the buffered creek to serve as downed woody debris (DWD) recruitment.

Requirements are as follows:

- Operator shall select the trees to be felled into the creek for DWD.
- Selected trees shall be from the largest diameter class of the designated take trees.
- There shall not be more than 200 feet between trees unless approved by the Contract Administrator.
- DWD recruit trees shall be selected from within 25 feet of the timber sale boundary tags.
- The DWD recruit trees shall be marked with orange paint on the butt and paint shall be visible from the interior of the sale.

See the attached Schedule D map for details.

**Schedule D
Map**





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: Red Truck	Region: Northwest
Agreement #: 30-104520	District: Baker
Contact Forester: Kyle Galloway Phone / Location: (360) 319-6720 / Deming	County(s): Whatcom,
Alternate Contact: Kody Beesley Phone / Location: (360) 391-2429 / Deming	Other information: Accessible from Silver Lake Rd. north of Maple Falls WA or State Route 542

Type of Sale: Lump Sum	
------------------------	--

**** See Logging Plan Map for Harvest Methods ****

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 Determinati on (List method and error of closure if applicable)
				No-cut RMZ/WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1 VRH	T40 R06E S19	03	46.5	7.2	1.6	-	6.6 (cliff)	31.1	GPS
1 HW	T40 R06E S19	03	0.4	-	-	-	-	0.4	GPS
1 R/W	T40 R06E S19	03	0.5	-	-	-	-	0.5	Estimate
2 VRH	T40 R06E S19	03	33.3	5	2.3	-	-	26	GPS
2 RMZ	T40 R06E S19	03	0.7	-	-	-	-	0.7	GPS
3 VRH	T40 R05E S13	10	22	1.8	1	-	-	19.2	GPS
3 HW	T40 R05E S13	10	2.3	-	-	-	-	2.3	GPS
4 VRH	T40 R05E S12	03	91.1	6.7	4.1	-	-	80.3	GPS
4 HW	T40 R05E S12	03	1.4	-	-	-	-	1.4	GPS
4 RMZ	T40 R05E S12	03	3.5	-	-	-	-	3.5	GPS
4 R/W	T40 R05E S12	03	0.2	-	-	-	-	0.2	Estimate
TOTAL ACRES			201.9	20.7	9	-	6.6	165.6	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
Unit 1 VRH	Harvest all timber bounded by Timber Sale Boundary (TSB) tags, Special Management Unit (SMU) tags, private property lines, and Silver Lake road; except for trees marked with blue paint on the bole and forest products bounded by Leave Tree Area (LTA) tags.	See RMZ Hardwood Removal, R/W, and RUP section below.	259 leave trees (LTs) have been retained in five leave tree areas (LTAs) and six additional LTs have been individually marked for retention.
Unit 1 HW	Harvest all trees eligible for take located on or beyond the SMU tags outlined by red paint and bounded by TSB tags, Silver Lake Rd, and new right of way.	Take trees described under the "Hardwood Removal" section of the Remarks below	n/a
Unit 1 R/W	Harvest all timber bounded by right-of-way tags outlined with orange paint	Includes six merchantable trees marked for removal to facilitate construction of the CSL-1414.	n/a
Unit 2 VRH	Harvest all timber bounded by TSB tags, SMU tags, private property lines, and plantations edges; except for trees marked with blue paint on the bole and forest products bounded by LTA tags.	See RMZ Thinning below.	219 LTs have been retained in four LTAs and nine additional LTs have been individually marked for retention.
Unit 2 RMZ	Harvest all trees eligible for take located on or beyond the SMU tag line and bounded by TSB tags and private property line.	Take trees described under the "RMZ Thinning" section of the Remarks below	This area is subject to downed wood recruitment requirements. See Remarks below
Unit 3 VRH	Harvest all timber bounded by TSB tags, SMU tags, plantations edges, and existing roads; except for trees marked with blue paint on the bole and forest products bounded by LTA tags.	See RMZ Hardwood Removal below	146 LTs have been retained in two LTAs and 16 additional LTs have been individually marked for retention.
Unit 3 HW	Harvest all trees eligible for take located on or beyond the SMU tags outlined by red paint and bounded by TSB tags and existing roads.	Take trees described under the "Hardwood Removal" section of the Remarks below	
Unit 4 VRH	Harvest all timber bounded by TSB tags, SMU tags, private property lines, plantations edges, and existing roads; except for trees marked with blue paint on the bole and forest products bounded by LTA tags.	See RMZ harvests and R/W harvest below	653 LTs have been retained in 10 LTAs and 38 additional LTs have been individually marked for retention.

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
Unit 4 HW	Harvest all trees eligible for take located on or beyond the SMU tags outlined by red paint and bounded by TSB tags, Silver Lake Rd, and new right of way.	Take trees described under the "Hardwood Removal" section of the Remarks below.	n/a
Unit 4 RMZ	Harvest all trees eligible for take located on or beyond the SMU tag line and bounded by TSB tags and private property line.	Take trees described under the "RMZ Thinning" section of the Remarks below.	This area subject to downed wood recruitment requirements. See Remarks below.
Unit 4 R/W	Harvest all timber bounded by right-of-way tags outlined with orange paint		

OTHER PRE-CRUISE INFORMATION:

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
Unit 1	BM, RA, RC DF, WH VRH: 775 mbf HW: 5 mbf R/W: 6 mbf	The unit is located along Silver Lake Rd. Cruisers can park on the CSL-14 and hike into the unit.	See driving map and traverse maps
Unit 2	BM, DF, RC WH, RA VRH: 650 mbf RMZ: 7 mbf	The CSL-14 winds through the unit and terminates at the upper landing.	
Unit 3	BM, RA, RC DF, WH VRH: 400 mbf HW: 12 mbf	This unit is accessed by the CSL-19. An F1-3 key will be required to get through the gate. This unit can also be accessed by the RM-ML as an alternative.	
Unit 4	DF, RA, WH RC, BM VRH: 2.4 mmbf HW: 8 mbf RMZ: 20 mbf R/W: 1 mbf	This unit is accessed by the RM-ML. The designated haul route will go out the CSL-19 and this is the shorter access point	
TOTAL MBF	4,284 mbf		

REMARKS:

Private property lines are marked with pink ribbon and carsonite posts every 100'-200'. Where the harvest area abuts private property, the last take tree before the property line is marked with a pink painted X facing towards the unit.

New road construction is marked with orange ribbon at centerline.

Unit 1: The lower reaches of the unit are dominated by hardwoods (maple, alder, birch) with occasional open-grown, large diameter conifer. The upper bench (SW corner) is well stocked with 60 year old cedar and fir, but they're relatively short due to poor site conditions

Unit 2: This small unit contains a wide range of stand types including ~50 year old DF plantation, older unmanaged hardwoods, and portions of a partially cut 100+ year old stand.

Unit 3: This stand was partially cut ~60 years ago leaving a wide variety of ages. Most of the stand is dominated by maple and alder but pockets of nice cedar and older DF can be found.

Unit 4: This stand is mostly ~55 year old DF plantation with hardwood patches found throughout. The western end along the RM-ML includes parts of a 100+ year old cedar and hemlock stand and similar aged islands are scattered throughout the 50 year old stand.

Hardwood Removal Areas

These areas are marked with Special Management Unit tags with **red paint** outlining the tags.

Take Tree Description:

Designated take trees include any hardwood stems (red alder, black cottonwood, birch, bigleaf maple). Harvest any designated take tree that can be felled and yarded without causing excessive damage to residual conifers. Any conifer that may need to be felled to facilitate safe operations must be approved by the Contract Administrator.

*Note: Trees with blue "Special Management Unit Boundary" tags that meet the description of a take tree may be cut.

RMZ Thinning Areas

These areas are marked with Special Management Unit tags with no paint.

Following the prioritization list below, achieve a residual stand with an average of 100 evenly spaced trees per acre (approx. 20' x 20') where those trees exist.

Take tree prioritization list:

- 1- Any hardwood
- 2- Smallest conifer diameter class

Other requirements:

When operating along streams (wetlands are exempt), the operator is required to fall five trees of the largest designated take trees towards the buffered creek to serve as downed woody debris (DWD) recruitment. Requirements are as follows:

- Operator shall select the trees to be felled into the creek for DWD.
- Selected trees shall be from the largest diameter class of the designated take trees.
- There shall not be more than 200' between trees.
- DWD recruit trees shall be selected from within 25' of the timber sale boundary tags.

*Note: Trees with blue "Special Management Unit Boundary" tags that meet the description of a take tree may be cut.

Prepared By: Kyle Galloway
Date: 5/31/2023

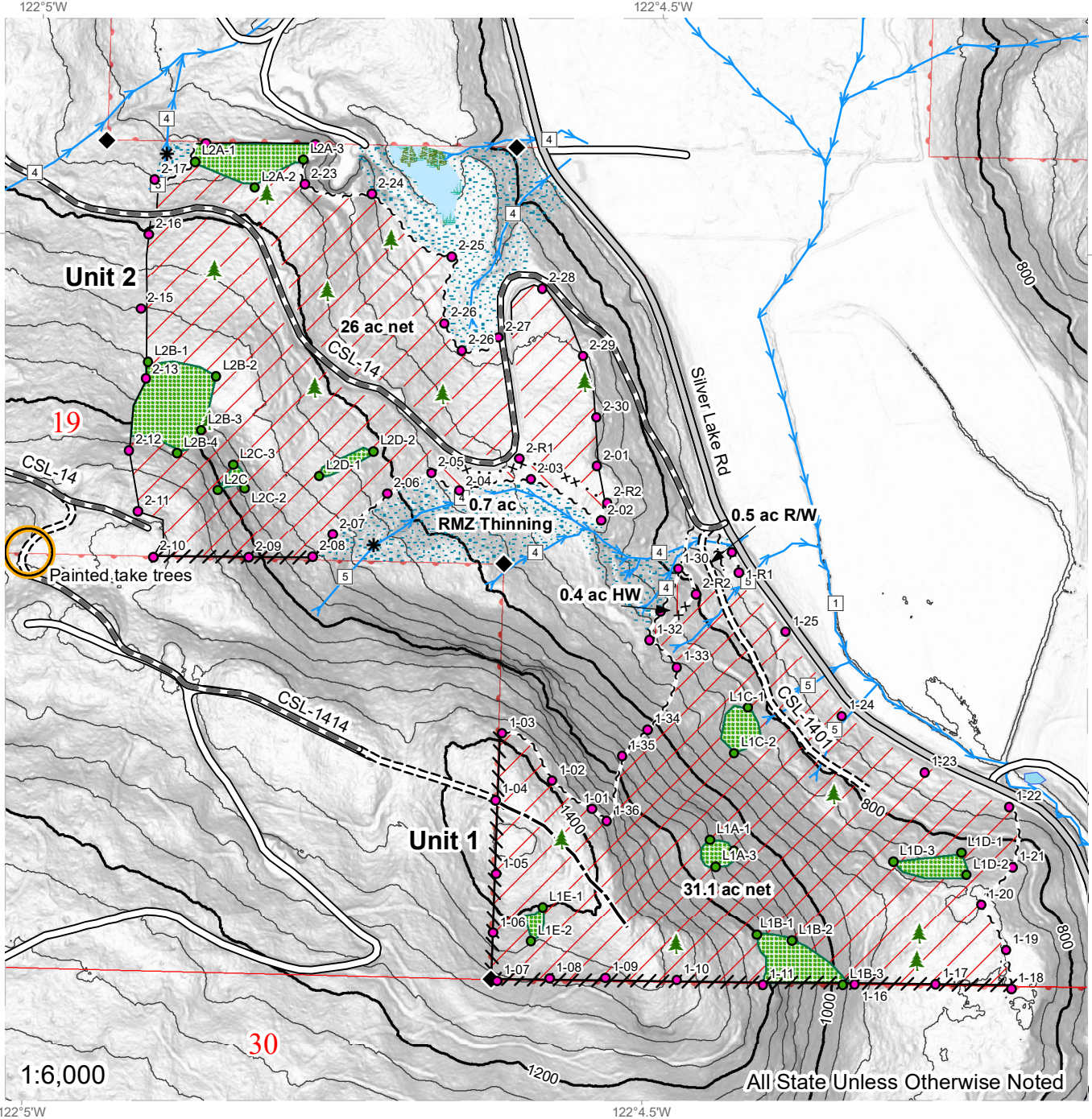
Title: Deming Unit Forester

CC:

TRAVERSE MAP

SALE NAME: RED TRUCK
AGREEMENT #: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920

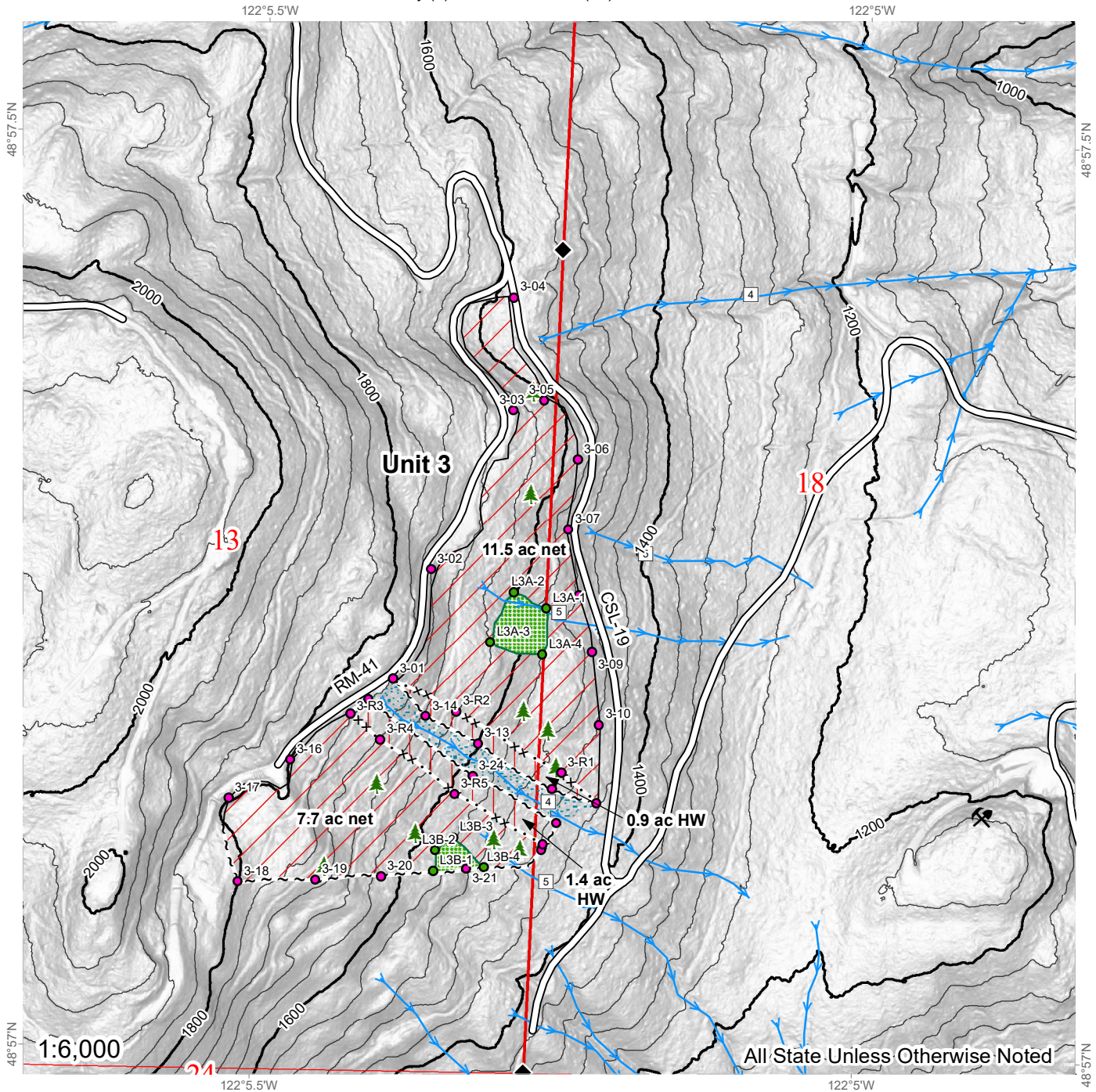


	Variable Retention Harvest		Sale Boundary Tags		County Road
	RMZ Thinning		Special Mgmt Area		Existing Roads
	Hardwood (HW) Removal		Leave Tree Tags		Required Pre-Haul Maintenance
	Leave Tree Area		Right of Way Tags		Required Construction
	Riparian Mgt Zone		Painted Property Line		Optional Construction
	Forested Wetland		Timber Type Change		Streams
	DNR Managed Lands		Individual Leave Trees		

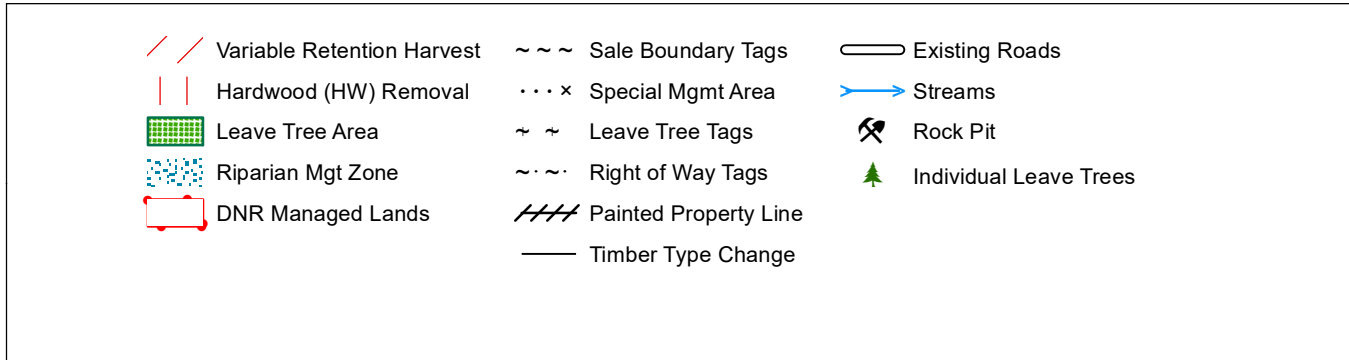
TRAVERSE MAP

SALE NAME: RED TRUCK
AGREEMENT #: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920



All State Unless Otherwise Noted



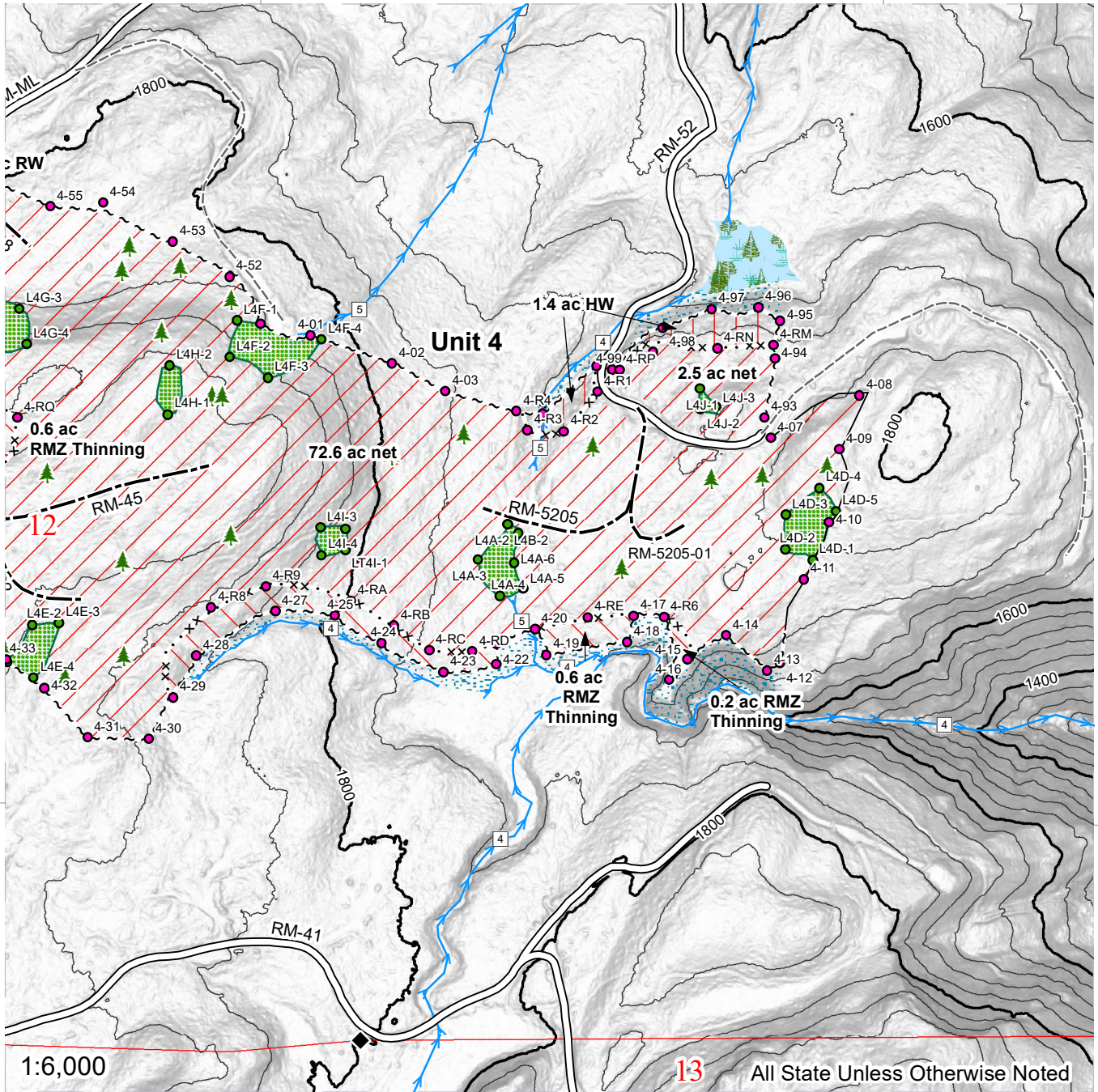
TRAVERSE MAP

SALE NAME: RED TRUCK
AGREEMENT #: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920

122°6'W

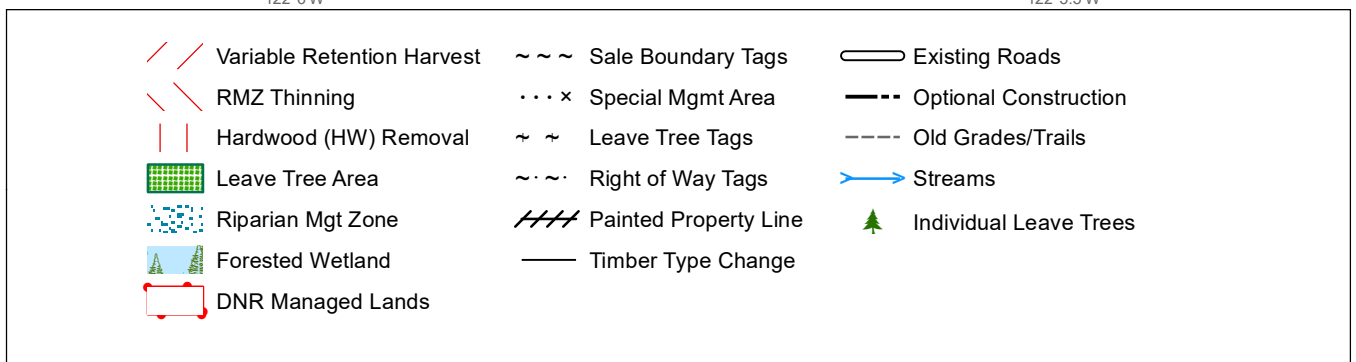
122°5.5'W



1:6,000

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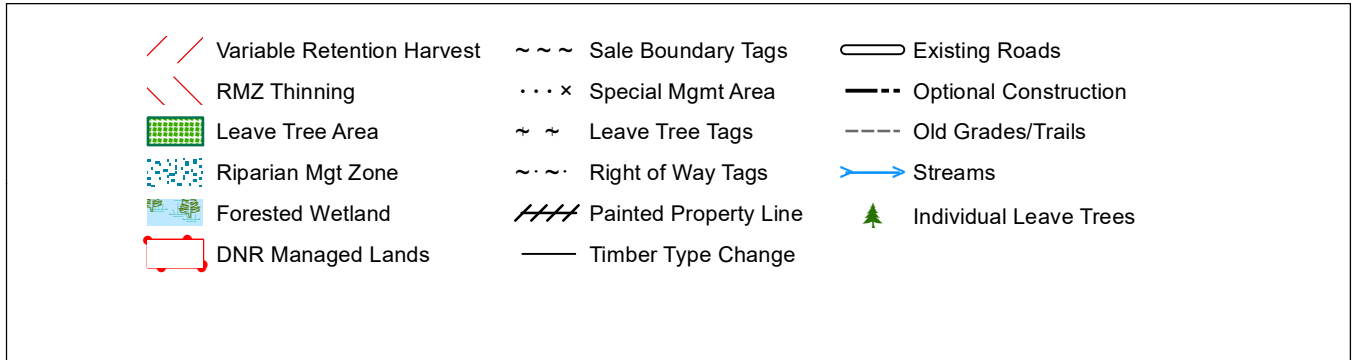
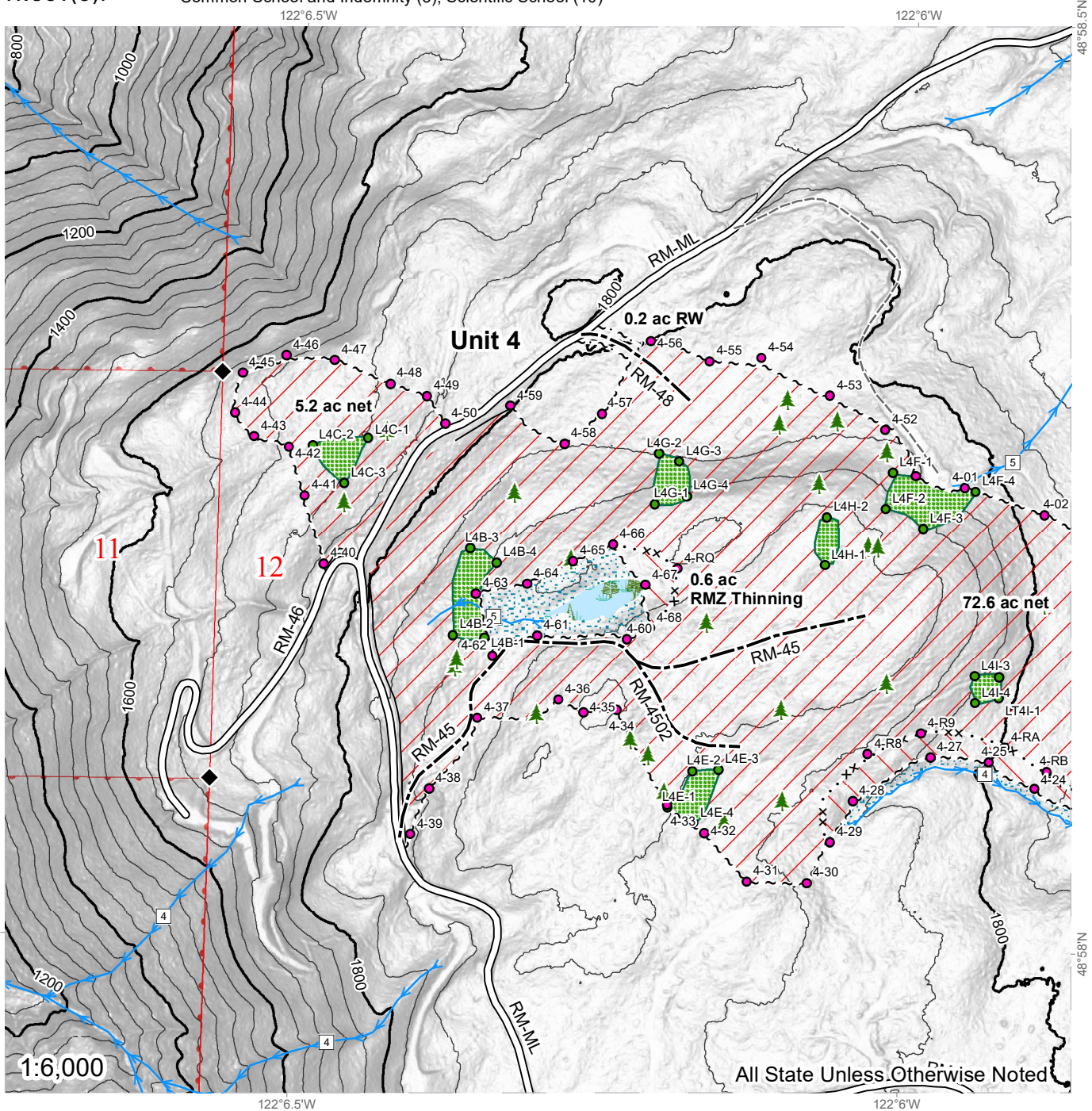
All State Unless Otherwise Noted



TRAVERSE MAP

SALE NAME: RED TRUCK
AGREEMENT #: 30-104520
TOWNSHIP(S): T40R5E, T40R6E
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Northwest Region
COUNTY(S): Whatcom
ELEVATION RGE: 760-1920



Project Name: Red Truck - NW

Sale Type: Lump Sum

Lead Cruiser: Matt Llobet - State Lands Check Cruiser

Other Cruisers: Bailey Vos - State Lands Forester

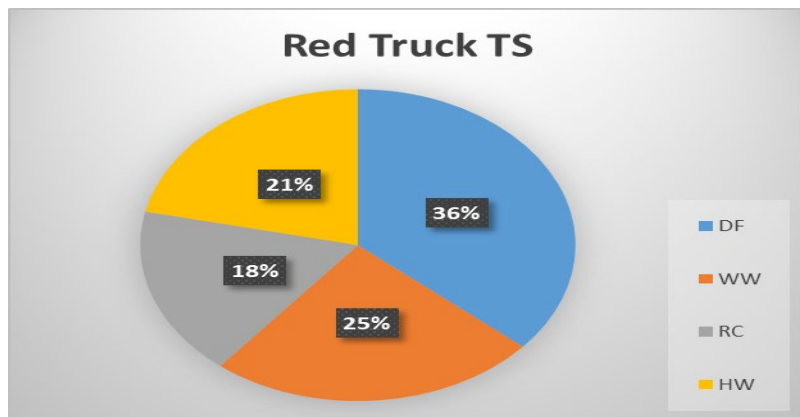
The Red Truck Timber Sale is a four unit timber sale located off Silver Lake Rd, north of Maple Falls. The sale ranges from 760 feet to 1920 feet in elevation and forest roads provide good drivable access to all four units.

Red Truck TS was sampled using a full 54.4/40.0 BAF and a 100% sample was applied. The RMZ and HW units were sample with 1/20th acre fix plots. The smallest merchantable tree cruised throughout the sale had a DBH of 7.0 inches and 5.0 inches at 16 feet. My plots were generated in GIS and located in the field using Avenza Maps. Bole height was measured with a Relascop/laser and taken to a 5" top or break point (40% of diameter at 16 feet). Trees were segmented into preferred west-side log lengths and defect was accounted for within each tree cruised.

- Conifer log lengths were cruised in 2 foot multiples - maximizing 32-40 ft. lengths.
- Hardwood log lengths were cruised in 10 foot multiples - no longer than 30 feet long.

My total net cruise volume for Red Truck is 2,927 MBF. The stand characteristics throughout the sale showed a highly variable stocking with a mix of species. Douglas fir and Western Hemlock were the dominant species with scattered Western Red Cedar and hardwoods throughout. Scattered hardwood groves were common in all four units and carried a lower volume per acre. The hardwood throughout is a combination of a high quality log suitable for sawmill manufacturing and low quality with significant decay. Some of the Big Leave Maple contain figured indicators suitable for music wood. Both species of poles were observed throughout the sale and the operator ground supported recovery. Poles cruised throughout the sale were primarily in distribution lengths, with a minor component of transmission lengths. Scattered HQ Douglas fir was cruised throughout - primarily in the first segments.

Red Truck Species Composition



RMZ Units:

Thin to an average spacing of 20' x 20' selecting trees from the smallest diameter class. The RMZ units consist of a uniform Douglas fir and Western Hemlock timber type with good operator ground.

HW Removal Units:

Designated take trees include any hardwood stems. Productive thinning ground was observed throughout the hardwood removal areas.

Right of Way:

The ROW volume associated with the Red Truck TS is a combination of fully timbered new construction and partially timbered old road grade.

Logging and Stand Conditions:

Red Truck TS consists of 82% ground-based harvest and 18% cable harvest.

Timber Sale Cruise Report Red Truck - NW

Sale Name: RED TRUCK

Sale Type: LUMP SUM

Region: NORTHWEST

District: BAKER

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	15.5	10.1		1,063	19	319	646	78	1
WH	15.6			689		321	292	76	
RC	22.0			514			478	35	
MA	17.5			347		196	82	61	8
RA	12.5			264		27	65	169	3
GF	22.3			31		27	4		
BC	20.7			20		20			
ALL	16.2	9.8		2,927	19	910	1,567	419	12

Timber Sale Notice Weight (tons)

Sp	Tons by Grade					
	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	8,056	114	2,323	4,943	664	11
WH	6,058		2,557	2,717	785	
RC	4,670			4,270	400	
MA	2,693		1,377	663	596	58
RA	2,134		189	485	1,428	32
GF	236		200	37		
BC	134		134			
ALL	23,982	114	6,780	13,115	3,872	101

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 (%)
179.1	4.7	99.8	1.7	17,997	5.0

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
RED TRUCK 1	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	31.1	32.8	25	25	1
RED TRUCK 1 HW	FX: FR plots (20 tree / acre expansion)	0.4	0.4	1	1	0
RED TRUCK 1 RW	FX: FR plots (20 tree / acre expansion)	0.5	0.5	2	2	0
RED TRUCK 2	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	26.0	28.3	23	23	0
RED TRUCK 2 RMZ	FX: FR plots (20 tree / acre expansion)	0.7	0.7	1	1	0
RED TRUCK 3	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	19.2	20.2	18	18	1
RED TRUCK 3 HW	FX: FR plots (20 tree / acre expansion)	2.3	2.4	3	3	0
RED TRUCK 4	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	80.3	84.4	60	60	0
RED TRUCK 4 RMZ	FX: FR plots (20 tree / acre expansion)	3.5	3.5	3	3	0
RED TRUCK 4 HW	FX: FR plots (20 tree / acre expansion)	1.4	1.4	1	1	0
RED TRUCK 4 RW	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.2	0.2	2	2	0
All		165.6	174.7	139	139	2

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
BC	LIVE	2 SAW	Domestic	10.3	35	118	118	0.0	134.1	19.5
DF	LIVE	2 SAW	Domestic	13.8	37	1,515	1,497	1.2	1,807.9	247.9
DF	LIVE	2 SAW	HQ-A	13.5	40	182	182	0.0	221.1	30.1
DF	LIVE	2 SAW	HQ-B	17.1	40	55	55	0.0	56.1	9.2

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Pole	13.3	36	194	194	0.0	238.1	32.2
DF	LIVE	3 SAW	Domestic	8.6	35	3,479	3,466	0.4	4,400.6	573.9
DF	LIVE	3 SAW	Pole	9.1	38	433	433	0.0	542.3	71.6
DF	LIVE	4 SAW	Domestic	5.9	26	475	472	0.6	664.2	78.2
DF	LIVE	CULL	Cull	9.1	15	10	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	16.6	40	112	112	0.0	114.3	18.6
DF	LIVE	UTILITY	Pulp	7.4	24	7	7	0.0	11.0	1.1
GF	LIVE	2 SAW	Domestic	14.5	39	176	165	5.8	199.7	27.4
GF	LIVE	3 SAW	Domestic	7.0	32	23	23	0.0	36.5	3.9
MA	LIVE	2 SAW	Domestic	14.0	23	1,256	1,183	5.8	1,376.7	195.8
MA	LIVE	3 SAW	Domestic	11.1	25	518	495	4.6	663.1	81.9
MA	LIVE	4 SAW	Domestic	8.9	24	376	369	1.8	595.7	61.1
MA	LIVE	CULL	Cull	18.5	20	21	0	100.0	0.0	0.0
MA	LIVE	UTILITY	Pulp	9.1	21	47	47	0.0	57.8	7.8
RA	LIVE	2 SAW	Domestic	13.0	27	165	163	1.2	189.2	27.1
RA	LIVE	3 SAW	Domestic	10.9	27	396	389	1.7	485.2	64.5
RA	LIVE	4 SAW	Domestic	7.5	26	1,026	1,018	0.7	1,427.7	168.7
RA	LIVE	CULL	Cull	10.6	14	66	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	6.3	27	20	20	0.0	32.3	3.3
RC	LIVE	3 SAW	Domestic	12.6	34	2,389	2,277	4.7	3,277.9	377.0
RC	LIVE	3 SAW	Pole	9.7	38	612	612	0.0	991.8	101.4
RC	LIVE	4 SAW	Domestic	6.5	24	195	190	2.4	372.7	31.5
RC	LIVE	4 SAW	Pole	8.1	24	22	22	0.0	27.8	3.7
RC	LIVE	CULL	Cull	16.0	11	202	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	14.1	36	1,984	1,940	2.2	2,556.8	321.2
WH	LIVE	3 SAW	Domestic	8.6	33	1,779	1,764	0.8	2,717.1	292.1
WH	LIVE	4 SAW	Domestic	6.0	27	459	457	0.3	784.5	75.8
WH	LIVE	CULL	Cull	14.3	10	103	0	100.0	0.0	0.0

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
BC	6+	LIVE	Domestic	11.0	37	118	0.0	134.1	19.5
DF	5 - 7	LIVE	Cull	6.1	20	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Pole	6.1	36	14	0.0	21.6	2.3
DF	5 - 7	LIVE	Domestic	6.3	30	1,377	0.3	1,857.3	228.0
DF	5 - 7	LIVE	Pulp	7.4	24	7	0.0	11.0	1.1
DF	8 - 11	LIVE	Pole	9.3	38	419	0.0	520.7	69.4

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	8 - 11	LIVE	Domestic	9.8	35	2,533	0.5	3,177.7	419.5
DF	12 - 15	LIVE	Domestic	13.3	36	1,172	0.8	1,432.0	194.1
DF	12 - 15	LIVE	Pole	13.3	36	194	0.0	238.1	32.2
DF	12 - 15	LIVE	HQ-A	13.5	40	182	0.0	221.1	30.1
DF	12 - 15	LIVE	Cull	14.9	6	0	100.0	0.0	0.0
DF	16 - 19	LIVE	Domestic	16.6	39	352	2.5	405.8	58.3
DF	16 - 19	LIVE	HQ-A	16.6	40	112	0.0	114.3	18.6
DF	16 - 19	LIVE	HQ-B	17.1	40	55	0.0	56.1	9.2
GF	5 - 7	LIVE	Domestic	6.5	32	11	0.0	18.9	1.8
GF	8 - 11	LIVE	Domestic	9.6	32	12	0.0	17.6	2.0
GF	12 - 15	LIVE	Domestic	13.5	39	108	0.0	136.9	17.8
GF	20+	LIVE	Domestic	20.3	40	58	15.0	62.7	9.6
MA	8+	LIVE	Pulp	10.1	21	47	0.0	57.8	7.8
MA	8+	LIVE	Domestic	11.4	25	2,046	4.8	2,635.4	338.9
MA	8+	LIVE	Cull	18.5	20	0	100.0	0.0	0.0
RA	5 - 9	LIVE	Pulp	6.1	23	20	0.0	32.3	3.3
RA	5 - 9	LIVE	Domestic	7.6	27	1,018	0.7	1,427.7	168.7
RA	5 - 9	LIVE	Cull	9.5	13	0	100.0	0.0	0.0
RA	10+	LIVE	Domestic	11.3	28	553	1.6	674.4	91.5
RA	10+	LIVE	Cull	12.3	16	0	100.0	0.0	0.0
RC	5+	LIVE	Pole	9.6	36	635	0.0	1,019.6	105.1
RC	5+	LIVE	Domestic	10.1	30	2,467	4.5	3,650.6	408.6
RC	5+	LIVE	Cull	16.0	12	0	100.0	0.0	0.0
WH	5 - 7	LIVE	Domestic	6.3	29	869	0.7	1,481.3	143.9
WH	8 - 11	LIVE	Domestic	9.6	32	1,353	0.8	2,020.2	224.0
WH	12 - 15	LIVE	Domestic	13.6	36	1,367	1.5	1,844.8	226.4
WH	12 - 15	LIVE	Cull	14.0	10	0	100.0	0.0	0.0
WH	16 - 19	LIVE	Cull	17.4	12	0	100.0	0.0	0.0
WH	16 - 19	LIVE	Domestic	17.5	37	572	3.8	712.0	94.8

Cruise Unit Report RED TRUCK 1

Unit Sale Notice Volume (MBF): RED TRUCK 1

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	16.6	12.0		267	19	93	130	25	
RC	17.9			71			62	9	
MA	16.0			69		21	31	16	1
WH	19.9			47		28	18	1	
RA	13.9			7			4	3	
ALL	16.9	12.0		461	19	143	245	54	1

Unit Cruise Design: RED TRUCK 1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	31.1	32.8	25	25	1

Unit Cruise Summary: RED TRUCK 1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	33	33	1.3	1
RC	20	22	0.9	0
MA	20	23	0.9	0
WH	7	7	0.3	0
RA	2	2	0.1	0
ALL	82	87	3.5	1

Unit Cruise Statistics: RED TRUCK 1

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	71.9	128.9	25.8	119.3	28.6	5.0	8,575	132.0	26.2
RC	35.2	213.4	42.7	64.8	38.1	8.5	2,280	216.8	43.5
MA	36.8	156.6	31.3	60.1	18.7	4.2	2,212	157.7	31.6
WH	15.2	163.7	32.7	99.8	37.7	14.2	1,521	167.9	35.7
RA	3.2	346.1	69.2	70.2	18.3	13.0	225	346.6	70.4
ALL	162.3	67.5	13.5	91.3	42.8	4.7	14,812	80.0	14.3

Unit Summary: RED TRUCK 1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	33	ALL	16.6	66	84	8,671	8,575	1.1	47.8	71.9	17.6	266.7
MA	LIVE	CUT	20	ALL	16.0	51	61	2,363	2,212	6.4	26.4	36.8	9.2	68.8
RA	LIVE	CUT	2	ALL	13.9	48	58	225	225	0.0	3.0	3.2	0.9	7.0
RC	LIVE	CUT	20	ALL	17.9	55	68	2,627	2,280	13.2	20.1	35.2	8.3	70.9
WH	LIVE	CUT	7	ALL	19.9	64	81	1,853	1,521	17.9	7.1	15.2	3.4	47.3
ALL	LIVE	CUT	82	ALL	16.9	59	74	15,738	14,812	5.9	104.4	162.3	39.4	460.7
ALL	ALL	ALL	82	ALL	16.9	59	74	15,738	14,812	5.9	104.4	162.3	39.4	460.7

Cruise Unit Report RED TRUCK 1 HW

Unit Sale Notice Volume (MBF): RED TRUCK 1 HW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	3 Saw	4 Saw	Utility
MA	16.9			2	2	1	
RA	15.0			1		1	0
ALL	16.2			4	2	2	0

Unit Cruise Design: RED TRUCK 1 HW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	0.4	0.4	1	1	0

Unit Cruise Summary: RED TRUCK 1 HW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA	3	3	3.0	0
RA	1	2	2.0	0
ALL	4	5	5.0	0

Unit Cruise Statistics: RED TRUCK 1 HW

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 (%)
MA	93.6	0.0	0.0	57.3	30.2	17.4	5,360	30.2	17.4
RA	49.1	0.0	0.0	73.3	0.0	0.0	3,600	0.0	0.0
ALL	142.7	0.0	0.0	62.8	26.6	13.3	8,960	26.6	13.3

Unit Summary: RED TRUCK 1 HW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
MA	LIVE	CUT	3	ALL	16.9	57	69	5,700	5,360	6.0	60.1	93.6	22.8	2.1
RA	LIVE	CUT	1	ALL	15.0	50	60	3,600	3,600	0.0	40.0	49.1	12.7	1.4
ALL	LIVE	CUT	4	ALL	16.2	54	65	9,300	8,960	3.7	100.1	142.7	35.4	3.6
ALL	ALL	ALL	4	ALL	16.2	54	65	9,300	8,960	3.7	100.1	142.7	35.4	3.6

Cruise Unit Report RED TRUCK 1 RW

Unit Sale Notice Volume (MBF): RED TRUCK 1 RW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
MA	19.0			2	2	1	
RC	15.0			1			1
RA	14.0			0		0	
ALL	17.3			3	2	1	1

Unit Cruise Design: RED TRUCK 1 RW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	0.5	0.5	2	2	0

Unit Cruise Summary: RED TRUCK 1 RW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA	3	4	2.0	0
RC	1	2	1.0	0
RA	1	1	0.5	0
ALL	5	7	3.5	0

Unit Cruise Statistics: RED TRUCK 1 RW

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 (%)
MA	79.1	53.6	37.9	61.0	14.4	8.3	4,820	55.6	38.8
RC	24.5	141.4	100.0	53.0	0.0	0.0	1,300	141.4	100.0
RA	10.7	141.4	100.0	66.4	0.0	0.0	710	141.4	100.0
ALL	114.3	6.5	4.6	59.7	13.2	5.9	6,830	14.7	7.5

Unit Summary: RED TRUCK 1 RW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
MA	LIVE	CUT	3	ALL	19.0	54	65	5,790	4,820	16.8	40.2	79.1	18.1	2.4
RA	LIVE	CUT	1	ALL	14.0	52	63	710	710	0.0	10.0	10.7	2.9	0.4
RC	LIVE	CUT	1	ALL	15.0	50	62	1,300	1,300	0.0	20.0	24.5	6.3	0.7
ALL	LIVE	CUT	5	ALL	17.3	52	64	7,800	6,830	12.4	70.2	114.3	27.3	3.4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	ALL	ALL	5	ALL	17.3	52	64	7,800	6,830	12.4	70.2	114.3	27.3	3.4

Cruise Unit Report RED TRUCK 2

Unit Sale Notice Volume (MBF): RED TRUCK 2

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	14.4	10.0		346	83	247	16	1
MA	18.4			148	97	30	22	
WH	19.3			60	38	19	3	
RC	23.5			44		43	1	
RA	13.2			14		3	11	
BC	22.0			11	11			
ALL	16.2	10.0		624	229	342	53	1

Unit Cruise Design: RED TRUCK 2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	26.0	28.3	23	23	0

Unit Cruise Summary: RED TRUCK 2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	39	39	1.7	1
MA	35	35	1.5	0
WH	7	7	0.3	0
RC	9	9	0.4	0
RA	4	4	0.2	0
BC	1	1	0.0	0
ALL	95	95	4.1	1

Unit Cruise Statistics: RED TRUCK 2

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	92.3	125.0	26.1	144.3	19.5	3.1	13,323	126.5	26.3
MA	60.9	164.4	34.3	93.7	22.6	3.8	5,706	166.0	34.5
WH	16.6	208.6	43.5	139.5	28.4	10.7	2,311	210.6	44.8
RC	15.7	149.0	31.1	107.9	28.9	9.6	1,688	151.8	32.5
RA	7.0	331.3	69.1	78.8	32.4	16.2	548	332.9	71.0

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
BC	2.4	479.6	100.0	178.4	0.0	0.0	422	479.6	100.0
ALL	194.7	46.2	9.6	123.2	29.7	3.0	23,999	54.9	10.1

Unit Summary: RED TRUCK 2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
BC	LIVE	CUT	1	ALL	22.0	98	123	422	422	0.0	0.9	2.4	0.5	11.0
DF	LIVE	CUT	39	ALL	14.4	69	103	13,370	13,323	0.4	81.6	92.3	24.3	346.4
MA	LIVE	CUT	35	ALL	18.4	71	90	5,847	5,706	2.4	33.0	60.9	14.2	148.4
RA	LIVE	CUT	4	ALL	13.2	52	67	548	548	0.0	7.3	7.0	1.9	14.3
RC	LIVE	CUT	9	ALL	23.5	73	92	1,777	1,688	5.0	5.2	15.7	3.2	43.9
WH	LIVE	CUT	7	ALL	19.3	76	97	2,545	2,311	9.2	8.2	16.6	3.8	60.1
ALL	LIVE	CUT	95	ALL	16.2	69	97	24,508	23,999	2.1	136.2	194.7	47.9	624.0
ALL	ALL	ALL	95	ALL	16.2	69	97	24,508	23,999	2.1	136.2	194.7	47.9	624.0

Cruise Unit Report RED TRUCK 2 RMZ

Unit Sale Notice Volume (MBF): RED TRUCK 2 RMZ

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	13.3			6	4	2
ALL	13.3			6	4	2

Unit Cruise Design: RED TRUCK 2 RMZ

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	0.7	0.7	1	1	0

Unit Cruise Summary: RED TRUCK 2 RMZ

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA		1	1.0	0
DF	4	8	8.0	0
ALL	4	9	9.0	0

Unit Cruise Statistics: RED TRUCK 2 RMZ

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 (%)
RA	12.0	0.0	0.0						
DF	126.8	0.0	0.0	106.5	26.6	13.3	13,513	26.6	13.3
ALL	138.9	0.0	0.0	106.5	26.6	13.3	14,795	26.6	13.3

Unit Summary: RED TRUCK 2 RMZ

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	4	ALL	13.3	56	83	8,540	8,260	3.3	80.4	77.5	21.3	5.8
ALL	LIVE	CUT	4	ALL	13.3	56	83	8,540	8,260	3.3	80.4	77.5	21.3	5.8
ALL	ALL	ALL	4	ALL	13.3	56	83	8,540	8,260	3.3	80.4	77.5	21.3	5.8

Cruise Unit Report RED TRUCK 3

Unit Sale Notice Volume (MBF): RED TRUCK 3

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
RC	23.0			102		95	7	
MA	18.3			50	30	3	12	7
RA	12.1			49	4	10	34	1
WH	14.2			39	12	23	5	
DF	22.1	10.0		24	19	5		
GF	22.0			10	8	2		
ALL	17.2	10.0		274	72	138	57	7

Unit Cruise Design: RED TRUCK 3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	19.2	20.2	18	18	1

Unit Cruise Summary: RED TRUCK 3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC	31	34	1.9	0
MA	16	18	1.0	0
RA	12	14	0.8	0
WH	7	7	0.4	0
DF	2	3	0.2	1
GF	1	1	0.1	0
ALL	69	77	4.3	1

Unit Cruise Statistics: RED TRUCK 3

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 (%)
RC	75.6	102.5	24.2	70.3	37.9	6.8	5,309	109.3	25.1
MA	40.0	108.5	25.6	65.3	20.6	5.2	2,612	110.4	26.1
RA	31.9	111.3	26.2	79.5	21.1	6.1	2,536	113.2	26.9
WH	21.2	179.4	42.3	96.2	40.5	15.3	2,037	184.0	45.0
DF	9.1	308.7	72.8	138.4	8.0	5.6	1,255	308.8	73.0

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
GF	3.0	424.3	100.0	169.7	0.0	0.0	513	424.3	100.0
ALL	180.7	60.6	14.3	78.9	36.8	4.4	14,262	70.9	15.0

Unit Summary: RED TRUCK 3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	22.1	84	106	1,255	1,255	0.0	3.4	9.1	1.9	24.1
GF	LIVE	CUT	1	ALL	22.0	85	108	513	513	0.0	1.1	3.0	0.6	9.9
MA	LIVE	CUT	16	ALL	18.3	53	64	2,856	2,612	8.6	21.9	40.0	9.4	50.1
RA	LIVE	CUT	12	ALL	12.1	54	69	2,560	2,536	0.9	40.0	31.9	9.2	48.7
RC	LIVE	CUT	31	ALL	23.0	59	72	5,977	5,309	11.2	26.2	75.6	15.8	101.9
WH	LIVE	CUT	7	ALL	14.2	50	64	2,109	2,037	3.4	19.3	21.2	5.6	39.1
ALL	LIVE	CUT	69	ALL	17.2	55	70	15,271	14,262	6.6	111.9	180.7	42.5	273.8
ALL	ALL	ALL	69	ALL	17.2	55	70	15,271	14,262	6.6	111.9	180.7	42.5	273.8

Cruise Unit Report RED TRUCK 3 HW

Unit Sale Notice Volume (MBF): RED TRUCK 3 HW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	Utility
RA	16.5			5	2	2	1
MA	18.1			4	3	1	
ALL	17.3			9	5	3	1

Unit Cruise Design: RED TRUCK 3 HW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	2.3	2.4	3	3	0

Unit Cruise Summary: RED TRUCK 3 HW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA	2	2	0.7	0
MA	2	2	0.7	0
ALL	4	4	1.3	0

Unit Cruise Statistics: RED TRUCK 3 HW

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 (%)
RA	19.8	87.1	50.3	100.6	22.3	15.7	1,993	89.9	52.7
MA	23.9	92.7	53.5	76.9	26.3	18.6	1,833	96.3	56.6
ALL	43.7	62.5	36.1	87.6	26.2	13.1	3,827	67.7	38.4

Unit Summary: RED TRUCK 3 HW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
MA	LIVE	CUT	2	ALL	18.1	52	63	2,080	1,833	11.9	13.3	23.9	5.6	4.2
RA	LIVE	CUT	2	ALL	16.5	64	79	2,047	1,993	2.6	13.3	19.8	4.9	4.6
ALL	LIVE	CUT	4	ALL	17.3	58	71	4,127	3,827	7.3	26.6	43.7	10.5	8.8
ALL	ALL	ALL	4	ALL	17.3	58	71	4,127	3,827	7.3	26.6	43.7	10.5	8.8

Cruise Unit Report RED TRUCK 4

Unit Sale Notice Volume (MBF): RED TRUCK 4

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
WH	14.9			536	243	227	66	
DF	15.5	9.0		414	125	254	36	
RC	22.4			296		279	18	
RA	12.4			175	21	41	111	2
MA	16.4			71	44	16	11	
GF	22.5			21	20	2		
BC	19.0			9	9			
ALL	15.9	9.0		1,522	460	819	241	2

Unit Cruise Design: RED TRUCK 4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	80.3	84.4	60	60	0

Unit Cruise Summary: RED TRUCK 4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	53	61	1.0	0
DF	40	44	0.7	1
RC	65	71	1.2	0
RA	35	41	0.7	0
MA	18	20	0.3	0
GF	2	2	0.0	0
BC	1	1	0.0	0
ALL	214	240	4.0	1

Unit Cruise Statistics: RED TRUCK 4

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 (%)
WH	55.3	113.8	14.7	120.6	28.4	3.9	6,676	117.3	15.2
DF	39.9	152.4	19.7	129.2	20.0	3.2	5,160	153.7	19.9
RC	47.6	130.9	16.9	77.6	44.8	5.6	3,690	138.3	17.8

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 (%)
RA	27.3	165.0	21.3	79.5	31.1	5.3	2,174	167.9	21.9
MA	13.6	248.5	32.1	64.8	17.2	4.1	880	249.1	32.3
GF	1.8	543.1	70.1	147.0	22.5	15.9	267	543.5	71.9
BC	0.9	774.6	100.0	117.3	0.0	0.0	106	774.6	100.0
ALL	186.5	51.3	6.6	101.6	38.0	2.6	18,952	63.8	7.1

Unit Summary: RED TRUCK 4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
BC	LIVE	CUT	1	ALL	19.0	72	89	106	106	0.0	0.5	0.9	0.2	8.5
DF	LIVE	CUT	40	ALL	15.3	65	88	5,194	5,160	0.7	31.3	39.9	10.2	414.3
GF	LIVE	CUT	2	ALL	22.5	80	101	288	267	7.3	0.7	1.8	0.4	21.4
MA	LIVE	CUT	18	ALL	16.4	53	64	960	880	8.3	9.3	13.6	3.4	70.6
RA	LIVE	CUT	35	ALL	11.9	49	71	2,336	2,174	6.9	35.4	27.3	7.9	174.5
RC	LIVE	CUT	65	ALL	22.5	56	70	4,026	3,690	8.4	17.2	47.6	10.0	296.3
WH	LIVE	CUT	53	ALL	14.8	61	77	6,790	6,676	1.7	46.3	55.3	14.4	536.1
ALL	LIVE	CUT	214	ALL	15.6	58	76	19,700	18,952	3.8	140.7	186.5	46.5	1,521.8
ALL	ALL	ALL	214	ALL	15.6	58	76	19,700	18,952	3.8	140.7	186.5	46.5	1,521.8

Cruise Unit Report RED TRUCK 4 RMZ

Unit Sale Notice Volume (MBF): RED TRUCK 4 RMZ

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
WH	12.5			7	5	1
DF	14.0			5	5	1
ALL	13.0			12	10	2

Unit Cruise Design: RED TRUCK 4 RMZ

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	3.5	3.5	3	3	0

Unit Cruise Summary: RED TRUCK 4 RMZ

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
GF		1	0.3	0
RA		2	0.7	0
RC		2	0.7	0
WH	4	10	3.3	0
DF	2	6	2.0	0
ALL	6	21	7.0	0

Unit Cruise Statistics: RED TRUCK 4 RMZ

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
GF	6.1	173.2	100.0						
RA	11.8	173.2	100.0						
RC	14.3	173.2	100.0						
WH	92.8	103.1	59.5	82.8	30.2	15.1	7,683	107.4	61.4
DF	63.5	104.0	60.1	107.5	4.9	3.5	6,831	104.1	60.2
ALL	188.6	19.6	11.3	92.8	25.8	10.5	17,504	32.4	15.4

Unit Summary: RED TRUCK 4 RMZ

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	14.0	65	86	1,613	1,540	4.5	13.4	14.3	3.8	5.4
WH	LIVE	CUT	4	ALL	12.5	52	65	1,873	1,873	0.0	26.6	22.6	6.4	6.6
ALL	LIVE	CUT	6	ALL	13.0	57	72	3,487	3,413	2.1	40.0	37.0	10.2	11.9
ALL	ALL	ALL	6	ALL	13.0	57	72	3,487	3,413	2.1	40.0	37.0	10.2	11.9

Cruise Unit Report RED TRUCK 4 HW

Unit Sale Notice Volume (MBF): RED TRUCK 4 HW

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
RA	13.3			11	4	8
ALL	13.3			11	4	8

Unit Cruise Design: RED TRUCK 4 HW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	1.4	1.4	1	1	0

Unit Cruise Summary: RED TRUCK 4 HW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA	4	4	4.0	0
ALL	4	4	4.0	0

Unit Cruise Statistics: RED TRUCK 4 HW

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 (%)
RA	77.7	0.0	0.0	104.5	17.9	8.9	8,120	17.9	8.9
ALL	77.7	0.0	0.0	104.5	17.9	8.9	8,120	17.9	8.9

Unit Summary: RED TRUCK 4 HW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
RA	LIVE	CUT	4	ALL	13.3	57	83	8,120	8,120	0.0	80.6	77.7	21.3	11.4
ALL	LIVE	CUT	4	ALL	13.3	57	83	8,120	8,120	0.0	80.6	77.7	21.3	11.4
ALL	ALL	ALL	4	ALL	13.3	57	83	8,120	8,120	0.0	80.6	77.7	21.3	11.4

Cruise Unit Report RED TRUCK 4 RW

Unit Sale Notice Volume (MBF): RED TRUCK 4 RW

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
RA	10.9			1	0	1
ALL	10.9			1	0	1

Unit Cruise Design: RED TRUCK 4 RW

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	0.2	0.2	2	2	0

Unit Cruise Summary: RED TRUCK 4 RW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RA	4	4	2.0	0
ALL	4	4	2.0	0

Unit Cruise Statistics: RED TRUCK 4 RW

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 (%)
RA	80.0	0.0	0.0	79.4	17.4	8.7	6,351	17.4	8.7
ALL	80.0	0.0	0.0	79.4	17.4	8.7	6,351	17.4	8.7

Unit Summary: RED TRUCK 4 RW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
RA	LIVE	CUT	4	ALL	10.9	60	74	6,351	6,351	0.0	123.5	80.0	24.2	1.3
ALL	LIVE	CUT	4	ALL	10.9	60	74	6,351	6,351	0.0	123.5	80.0	24.2	1.3
ALL	ALL	ALL	4	ALL	10.9	60	74	6,351	6,351	0.0	123.5	80.0	24.2	1.3





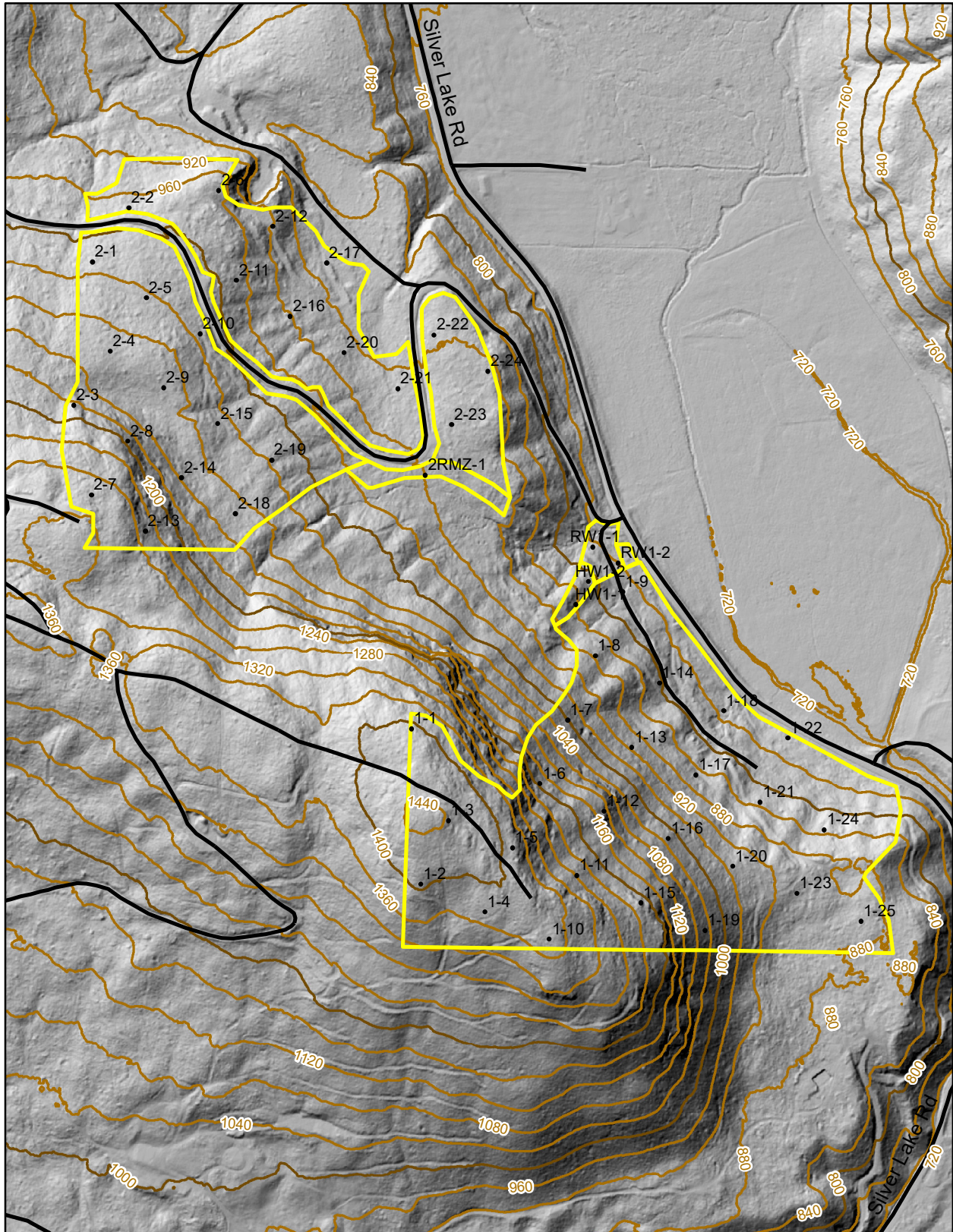




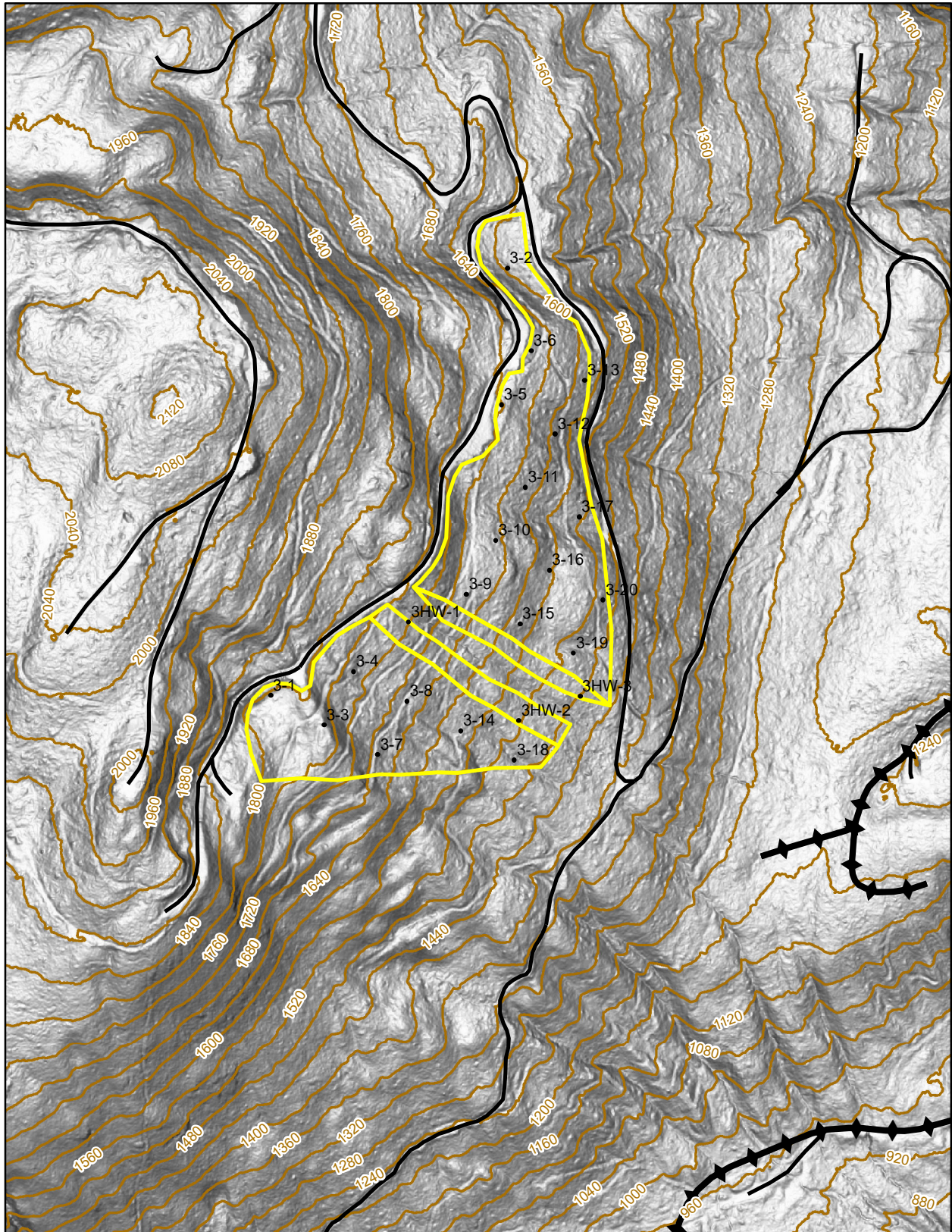




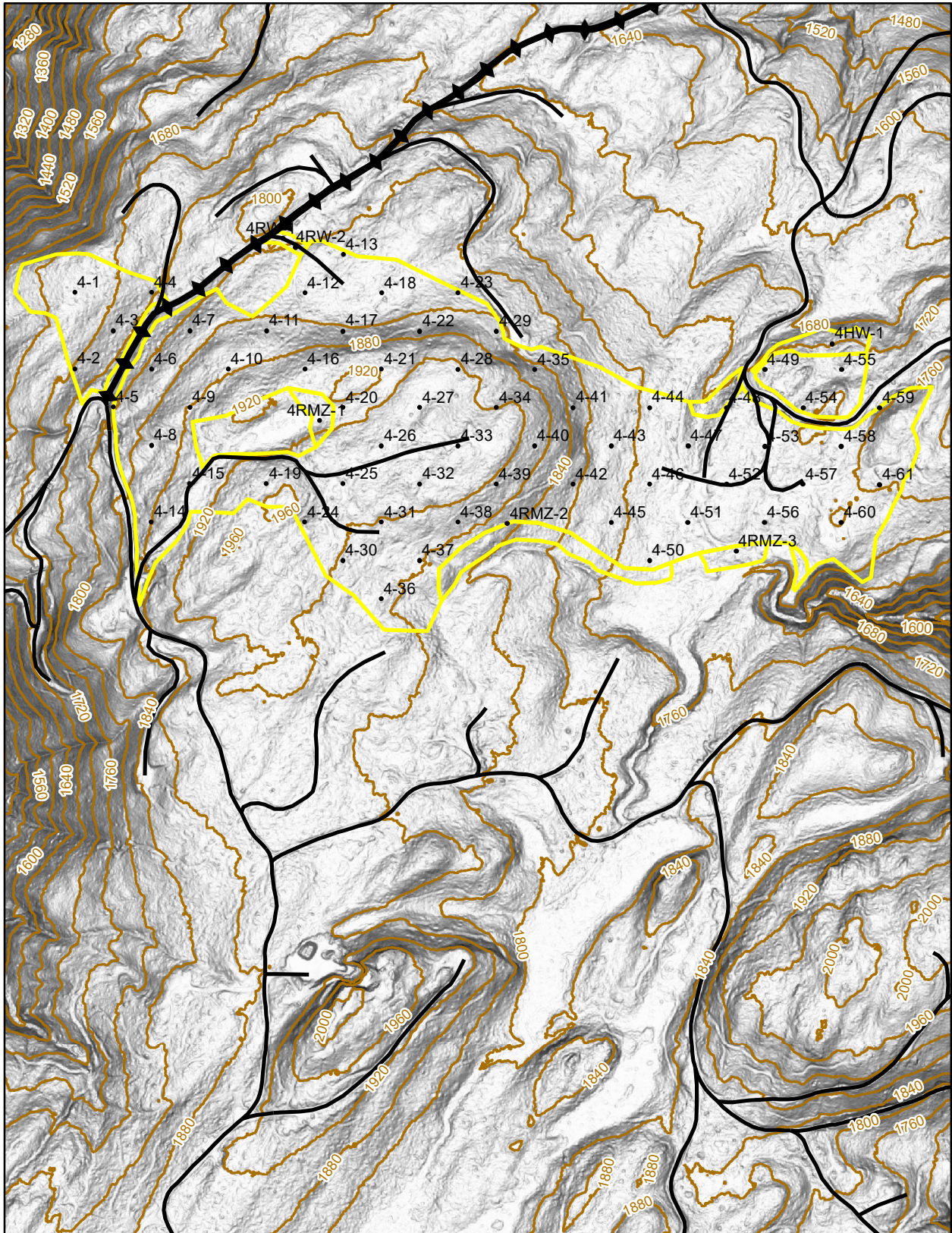
Red Truck Timber Sale - Units 1 & 2



Red Truck Timber Sale - Unit 3



Red Truck Timber Sale - Unit 4





FPA/N No: 2819198

Date of Service: 2/21/2024

Red Truck Agr

Reference: #30-104520

Forest Practices Application/Notification Request to Amend Notice of Decision

Decision

- Approved** This request to amend is approved and subject to the conditions listed below.
- Disapproved** This request to amend is disapproved for the reasons listed below.
- Withdrawn** Applicant has withdrawn amendment request.

Conditions on Approval/Reasons for Disapproval

Notes:

Potential for suspending cables across Np and Ns streams was submitted in the FPA narrative of the original proposal. The original proposal was approved.

Suspending cables:

In order to achieve adequate deflection, cables may be suspended over type 4 and 5 streams.

Issued By: Megan Pike

Region: Northwest

Title: Resource Protection Forester

Date: 2/20/2024

Copies to: Landowner, Timber Owner and Operator

Issued in person: LO TO OP By: Teresa Guard

Date: 2/21/2024



For DNR Region Office Use Only	
Region:	NW
Date of Receipt:	2/15/2024

Forest Practices Application/Notification Request to Amend

Approved FPA/N No.: 2819198
 Project Name: Red Truck Agr #30-104520

Use this to request an amendment to an approved Forest Practices Application/Notification.

1. Landowner, Timber Owner and Operator

Legal Name of Landowner Department of Natural Resources	Legal Name of Timber Owner <input checked="" type="checkbox"/> Same as Landowner	Legal Name of Operator <input checked="" type="checkbox"/> Same as Landowner
Mailing Address 919 N. Township St.	Mailing Address	Mailing Address
City, State, Zip Sedro-Woolley, WA 98284	City, State, Zip	City, State, Zip
Phone: (360) 856-3500	Phone:	Phone:
Email: laurie.bergvall@dnr.wa.gov	Email:	Email:

Contact Person Laurie Bergvall	Phone: (360) 856-3500 Email: DNRreNWTimberSales@dnr.
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2. Describe the proposed amendment to the approved FPA/N. You can attach revised pages of an FPA/N, or give specific details below. Include a new Activity Map if you are proposing any changes to the original.

For question #15, please update to reflect that Suspending Cables Activities can occur over Type NP Water.

3. We acknowledge the following:

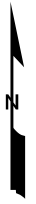
- The information on this application/notification amendment is true.
- We understand this proposed forest practice is subject to:
 - The Forest Practices Act and Rules, AND
 - All other federal, state or local regulations.
- Compliance with the Forest Practices Act and Rules does not ensure compliance with the Endangered Species Act or other federal, state or local laws.
- I understand that this amendment is a request for a Notice to Comply for an authorized deviation as described in WAC 222-20-060.

Signature of Legal Landowner <i>Waverly Crawford</i>	Signature of Timber Owner * (if different than landowner)	Signature of Operator (if different than landowner)
Printed Name Waverly Crawford	Printed Name	Printed Name
Date Signed 2/15/2024	Date Signed	Date Signed

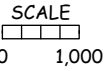
*NOTE: if you are a "Perpetual Timber Rights Owner," and are submitting this without the landowner's signature, provide written evidence the landowner has been notified.



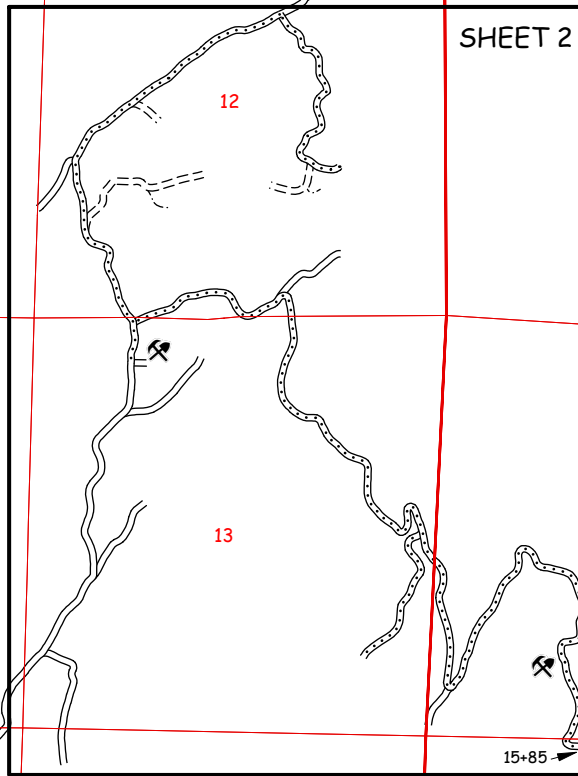
ROAD PLAN AND SPECIFICATIONS #30-104520 RED TRUCK



10



LEGEND	
PRE-HAUL MAINTENANCE
REQUIRED CONSTRUCTION	-----
OPTIONAL CONSTRUCTION	- - - - -
REQUIRED RECONSTRUCTION	=====
OPTIONAL RECONSTRUCTION	-----

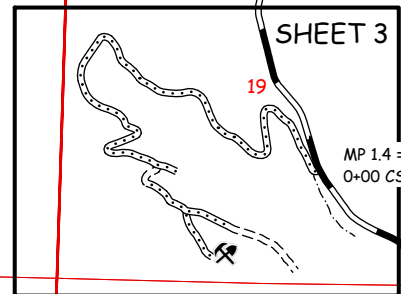


T40R05E

RED MOUNTAIN MAINLINE (RM-ML)
NOT FOR HAULING
PICKUP TRAFFIC ONLY

T40R06E

GATE MP 1.9 =
0+00 CSL-19



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24

SHEET INDEX	
PROJECT MAP.....	1-3
ROAD CLAUSES.....	4-28
TYPICAL SECTION.....	29-31
MATERIAL LIST.....	32-33
FARMS.....	34-35
STANDARD DETAILS.....	36-38

25

SILVER LAKE RD.

30

MP 25.8 =
MP 0.0 SILVER LK. RD.

SR-542

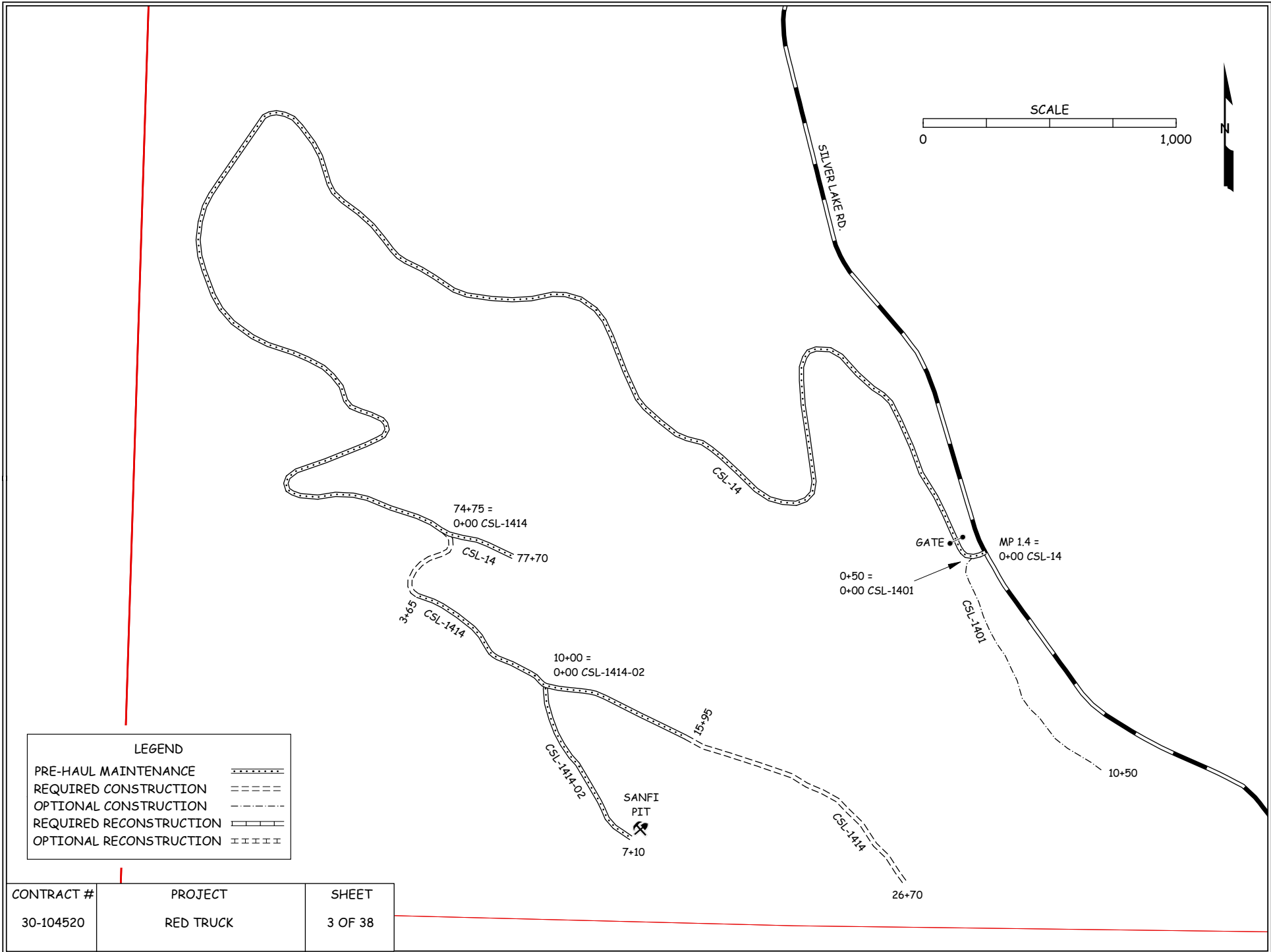
GATE

MP 24.7 =
0+00 RM-ML

34

35

DESIGNED BY	REVIEWED BY	APPROVED BY	PLAN DATE	SHEET
CARLSON	ZYLSTRA 12/15/2023	ZYLSTRA 12/15/2023	6/23/2023	1 OF 38



LEGEND	
PRE-HAUL MAINTENANCE	-----
REQUIRED CONSTRUCTION	=====
OPTIONAL CONSTRUCTION	-----
REQUIRED RECONSTRUCTION	=====
OPTIONAL RECONSTRUCTION	-----

CONTRACT #	PROJECT	SHEET
30-104520	RED TRUCK	3 OF 38

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

RED TRUCK TIMBER SALE ROAD PLAN
WHATCOM COUNTY
BAKER DISTRICT
NORTHWEST REGION

AGREEMENT NO.: 30-104520

STAFF ENGINEER: CARLSON

DATE: JUN 23, 2023

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>
RM-ML	212+45 to 275+45	Pre-haul Maintenance
RM-41	0+00 to 90+85	Pre-haul Maintenance
RM-46	0+00 to 19+95	Construction
RM-48	0+00 to 4+30	Construction
RM-52	0+00 to 28+75	Pre-haul Maintenance
RM-5205	0+00 to 8+35	Construction
CSL-14	0+00 to 77+70	Pre-haul Maintenance
CSL-1414	0+00 to 3+65	Construction
CSL-1414	3+65 to 15+95	Pre-haul Maintenance
CSL-1414	15+95 to 26+70	Construction
CSL-1414-02	0+00 to 7+10	Pre-haul Maintenance
CSL-19	0+00 to 98+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>
RM-4602	0+00 to 4+85	Construction
RM-5205-01	0+00 to 2+95	Construction
CSL-1401	0+00 to 10+50	Construction

0-4 CONSTRUCTION

Construction includes, but is not limited to clearing, grubbing, excavation and embankment to sub-grade, turnout, turnaround, and landing construction, culvert installation, geotextile installation, and application of 3-inch minus ballast rock.

0-6 PRE-HAUL MAINTENANCE

All pre-haul maintenance includes, but is not limited to the following items:

- Brushing
- Cleaning of all culvert inlets, headwalls, and catch basins
- Blading, shaping, and ditching the road prism to the dimensions shown in the TYPICAL SECTION

Specific pre-haul maintenance specifications include:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
RM-ML	212+45 to 241+40	Culvert installation. See Clause 11-1.
RM-41	19+00 to 28+45	Sediment trap construction.
CSL-1414	3+65 to 15+95	9 inch lift of 3-inch minus ballast. No grader maintenance required, shape subgrade with dozer prior to rock application.

0-7 POST-HAUL MAINTENANCE

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

0-10 ABANDONMENT

This project includes abandonment listed in Clause 9-21 ROAD ABANDONMENT.

0-12 DEVELOP ROCK SOURCE

Purchaser shall develop existing rock sources. Rock source development will involve drilling, shooting, and processing rock to generate gravel pit run. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

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

1-2 UNFORESEEN CONDITIONS

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

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan, unless controlled by construction stakes.

1-4 ROAD TOLERANCES

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

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

1-6 ORDER OF PRECEDENCE

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

1. Addenda.
2. Road Plan Clauses.
3. Typical Section Sheet.
4. Standard Lists.
5. Standard Details.

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

1-8 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.

1-18 REFERENCE POINT DAMAGE

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

1-21 HAUL APPROVAL

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

1-23 ROAD WORK PHASE APPROVAL

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

- Right-of-way
 - Falling/decking
 - Clearing/grubbing
- Subgrade Construction
 - Excavation and embankment to subgrade
 - Culvert installation
 - Ditch construction
 - Subgrade compaction
- Rock application
 - Rock compaction
 - Rock depth
- Erosion and sediment control
- Revegetation
- Abandonment

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure periods unless authorized in writing by the Contract Administrator.

<u>Activity</u>	<u>Closure Period</u>
All Activities	November 1 to March 31

1-26 OPERATING DURING CLOSURE PERIOD

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

1-33 SNOW PLOWING RESTRICTION

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

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

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

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

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.

2-5 MAINTENANCE GRADING – EXISTING ROAD

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

<u>Road</u>	<u>Stations</u>
RM-ML	212+45 to 275+45 see Clause 0-6 PRE-HAUL MAINTENANCE
RM-41	0+00 to 90+85 see Clause 0-6 PRE-HAUL MAINTENANCE
RM-52	0+00 to 28+75 see Clause 0-6 PRE-HAUL MAINTENANCE
CSL-14	0+00 to 77+70 see Clause 0-6 PRE-HAUL MAINTENANCE
CSL-1414-02	0+00 to 7+10 see Clause 0-6 PRE-HAUL MAINTENANCE
CSL-19	0+00 to 98+40 see Clause 0-6 PRE-HAUL MAINTENANCE

2-6 CLEANING CULVERTS

On the following roads, Purchaser shall use an excavator or backhoe to clean the inlets and outlets of all culverts and shall obtain written approval from the Contract Administrator before any hauling.

<u>Road</u>	<u>Stations</u>
RM-ML	212+45 to 275+45
RM-41	0+00 to 90+85
RM-52	0+00 to 28+75
CSL-14	0+00 to 77+70
CSL-1414	3+65 to 15+95
CSL-1414-02	0+00 to 7+10
CSL-19	0+00 to 98+40

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following roads, Purchaser shall use an excavator or backhoe to clean ditches, headwalls, and catch basins. Work must be done in accordance with the TYPICAL SECTION and Purchaser shall obtain written approval from the Contract Administrator before any hauling

<u>Road</u>	<u>Stations</u>
RM-ML	212+45 to 275+45
RM-41	0+00 to 90+85
RM-52	0+00 to 28+75
CSL-14	0+00 to 77+70
CSL-1414	3+65 to 15+95
CSL-1414-02	0+00 to 7+10
CSL-19	0+00 to 98+40

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following road, Purchaser shall cut vegetative material up to 6 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>
RM-ML	212+45 to 275+45
RM-41	0+00 to 90+85
RM-52	0+00 to 28+75
CSL-14	0+00 to 77+70
CSL-1414	3+65 to 15+95
CSL-1414-02	0+00 to 7+10
CSL-19	0+00 to 98+40

3-5 CLEARING

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

3-8 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 50%.
- Against standing trees.

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Grubbing must be completed before starting excavation and embankment.

3-20 ORGANIC DEBRIS DEFINITION

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

3-21 DISPOSAL COMPLETION

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

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

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

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 50%.
- 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 clearing limits in natural openings unless otherwise detailed in this road plan.

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

Purchaser shall use a track mounted hydraulic excavator for construction work, unless 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 500 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

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

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

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

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 50 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.

4-5 CUT SLOPE RATIO

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

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	¾:1	133
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.

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

4-21 TURNOUTS

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

4-22 TURNAROUNDS

At the end of all roads exceeding five stations, purchaser shall construct turnarounds as shown on the TURNAROUND DETAIL. Turnaround type and location are subject to written approval by the Contract Administrator.

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

Purchaser shall reconstruct ditches into the subgrade on the following road segments to the specifications on the TYPICAL SECTION SHEET. Work shall be accomplished using an excavator or backhoe.

<u>Road</u>	<u>Stations</u>
CSL-1414	3+65 to 15+95
CSL-1414-02	0+00 to 7+10

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

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

4-35 WASTE MATERIAL DEFINITION

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

4-36 DISPOSAL OF WASTE MATERIAL

Purchaser may sidecast waste material on side slopes up to 50% if the waste material is compacted and free of organic debris. On side slopes greater than 50%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas identified in Clause 4-37 WASTE AREA LOCATION.

4-37 WASTE AREA LOCATION

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

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against standing timber.
- Outside the clearing limits.

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.

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material by routing equipment over the entire width of each lift.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades by routing equipment over the entire width.

4-70 SUBGRADE REINFORCEMENT

On the following road, Purchaser shall provide and install geotextile fabric. Geotextile must be installed to a width that is 2 feet more than the subgrade width, including turnouts. Geotextile fabric must overlap by a minimum of 2 feet at all joints. The geotextile fabric must be covered with a minimum of 18 inches of compacted 3-inch minus ballast. Geotextile fabric must meet the specifications in Clause 10-2 GEOTEXTILE FOR SEPARATION.

<u>Road</u>	<u>Stations</u>
RM-48	1+55 to 2+70

SECTION 5 – DRAINAGE

5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on MATERIALS LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts may be new or used material (if specified in Clause 5-7) and must meet the specifications in Clauses 10-15 through 10-24.

5-7 USED CULVERT MATERIAL

On the following roads, Purchaser may install used culverts. All other roads must have new culverts installed. Purchaser shall obtain approval from the Contract Administrator for the quality of the used culverts before installation.

<u>Road</u>
RM-4602
RM-5205-01
CSL-1401
CSL-1414

5-12 UNUSED MATERIALS STATE PROPERTY

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

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

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

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts, Energy dissipater installation is subject to approval by the Contract Administrator.

Rock used for energy dissipaters must be light/loose riprap. Energy dissipaters must extend a minimum of 1 foot to each side of the culvert at the outlet and a minimum of 2 feet beyond the outlet. Rock must be set in place by machine. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed. Rock type shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

5-25 CATCH BASINS

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

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts. Rock used for headwalls must weigh at least 50 pounds. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. 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

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

SECTION 6 – ROCK AND SURFACING

6-1 ROCK SOURCE NOT ON STATE LAND

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from the following source on private land at no charge to the Purchaser. Purchaser shall notify the Contract Administrator a minimum of 7 calendar days before starting any operations in the listed locations.

Purchaser shall obtain written approval from the Contract Administrator for the use of material from any alternate source.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Sanfi pit	Sta. 7+10 of the CSL-1401-02	Riprap 3-inch minus ballast rock

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from the following sources 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 sources, a joint operating plan must be developed. All parties shall follow this plan.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Big Red pit	Sta. 2+00 of the RM-40	Riprap 3-inch minus ballast rock

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS LIST may be obtained from the following stockpile on state land at no charge to the Purchaser. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
Dave’s Bobcat pit *	34+30 of the CSL-19	3-inch minus ballast rock	All available

* For use in construction of the CSL-1414 road from 0+00 to 3+65

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the TYPICAL SECTION and MATERIALS 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.

6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER

Purchaser shall conduct rock source development and use at the following source, 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 operation. 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.

<u>Source</u>
Big Red pit
Sanfi pit

Rock source development plans prepared by the Purchaser must show the following information:

- Rock source location.
- Rock source overview showing access roads, development areas, stockpile locations, waste areas, and floor drainage.
- Rock source profiles showing development areas, bench locations including widths, and wall faces including heights.

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following:

- 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% outslope 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.

6-23 ROCK GRADATION TYPES

Purchaser shall provide rock in accordance with the types and amounts listed in the TYPICAL SECTION and MATERIALS LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles or during manufacture and placement into a stockpile. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator.

6-34 3-INCH MINUS BALLAST ROCK

Ballast rock must be 100% equal to, or smaller than, 3 inches in at least one dimension.

Rock may contain no more than 5 percent organic debris, dirt, and trash. All percentages are by weight.

6-50 LIGHT LOOSE RIP RAP

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

<u>At Least/Not More Than</u>	<u>Weight Range</u>
20% / 90%	300 lbs. to 1 ton
80% / --	50 lbs. to ½ ton
10% / 20%	50 lbs. max

6-51 HEAVY LOOSE RIP RAP

Rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects. Heavy loose riprap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

<u>At Least/Not More Than</u>	<u>Weight Range</u>	<u>Size Range</u>
30% / 90%	1 ton to 3 ton	36" - 54"
70% / 90%	500 lbs. to 1 ½ ton	24" - 42"
10% / 30%	50 lbs. max	3" - 8"

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

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

6-65 ROCK STOCKPILE LOCATION

Purchaser shall stockpile rock as listed below. Rock stockpiles must be in accordance with Clause 6-67 ROCK STOCKPILE SPECIFICATIONS.

<u>Rock Source</u>	<u>Rock Type</u>	<u>Quantity (c.y.)</u>	<u>Stockpile Location</u>
Sanfi Pit	3-inch minus ballast rock	1000	SE portion of pit

6-67 ROCK STOCKPILE SPECIFICATIONS

Rock stockpiles listed in Clause 6-65 ROCK STOCKPILE LOCATION must meet the following specifications:

Before placing aggregates upon the stockpile site, the site must be cleared of vegetation, trees, stumps, brush, rocks, or other debris and the ground leveled to a smooth, firm, uniform surface.

When completed, the stockpile must be neat and regular in shape. Stockpiles in excess of 200 cubic yards must be built up in layers of not more than 4 feet deep. Stockpile layers must be constructed by trucks, clamshells, or other methods approved in writing by the Contract Administrator. Each layer must be completed over the entire area of the pile before depositing aggregates in the next layer. The aggregates may not be dumped so that they run down and over the lower layers in the stockpile.

Stockpiles of different types or sizes of aggregate must be spaced far enough apart, or separated by suitable walls or partitions, to prevent the mixing of the aggregates.

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for culvert installation, ditch construction, ditch reconstruction, headwall construction, headwall reconstruction, subgrade shape, and compaction before rock application.

6-71 ROCK APPLICATION

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

6-73 ROCK FOR WIDENED PORTIONS

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

6-80 WATERING FOR DUST ABATEMENT

Purchaser shall use water for dust abatement on the following road.

<u>Road</u>	<u>Stations</u>
CSL-19	0+00 to 15+85

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

On the following road, Purchaser shall install sediment control structures as listed.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
RM-41	19+00	Construct sediment traps in all ditchlines entering stream channel.
RM-41	24+85	Construct sediment trap in far side ditchline entering stream channel.
RM-41	28+45	Construct sediment trap in near side ditchline entering stream channel.
CSL-1401	0+40	Construct sediment trap in near side ditchline entering stream channel.

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 50 feet of a stream or wetland. Soils must be covered before the first anticipated storm event.

8-15 REVEGETATION

Purchaser shall spread seed and fertilizer on all exposed soils within the grubbing limits resulting from road work activities. Cover all exposed soils using manual dispersal of grass seed and fertilizer. Other methods of covering must be approved in writing by the Contract Administrator.

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the required grass seed and fertilizer.

8-17 REVEGETATION TIMING

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

8-18 PROTECTION FOR SEED

Purchaser shall provide a protective cover for seed if revegetation occurs between July 1 and March 31. The protective cover may consist of dispersed straw, jute matting, or clear plastic sheets. The protective cover requirement may be waived in writing by the Contract Administrator if Purchaser is able to demonstrate a revegetation plan that will result in the establishment of a uniform dense crop (at least 50% coverage) of 3-inch tall grass by October 31.

8-19 ASSURANCE FOR SEEDED AREA

Purchaser shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Purchaser shall reapply the grass seed and fertilizer 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 fertilizer at no addition cost to the state.

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil inside the grubbing limits at a rate of 50 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.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>
Creeping Red Fescue	50
Elf Perennial Rye Grass	25
Highland Colonial Bentgrass	15
White Clover	10
Inert and Other Crop	0.5

8-27 FERTILIZER

Purchaser shall evenly spread the fertilizer listed below on all exposed soil inside the grubbing limits at a rate of 200 pounds per acre of exposed soil. Fertilizer must meet the following specifications:

<u>Chemical Component</u>	<u>% by Weight</u>
Nitrogen	16
Phosphorous	16
Potassium	16
Sulphur	3
Inerts	49

SECTION 9 – POST-HAUL ROAD WORK

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

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

9-5 POST-HAUL MAINTENANCE

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

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

9-12 LANDING EMBANKMENT REMOVAL

Purchaser shall reduce or relocate the landing embankment. Place excavated material in a waste area approved in writing by the Contract Administrator.

9-21 ROAD ABANDONMENT

Purchaser shall abandon the following before the termination of this contract.

<u>Road</u>	<u>Stations</u>
RM-4602	0+00 to 4+85
RM-48	0+00 to 4+30
RM-5205-01	0+00 to 2+95
CSL-1401	0+00 to 10+50
CSL-1414	0+00 to 3+65
CSL-1414	15+95 to 26+70

9-22 ABANDONMENT

- Remove all ditch relief culverts. The resulting slopes must be 1:1 or flatter. Place and compact the removed fill material in a location that will not erode into any Type 1 through 5 waters or wetlands.
- Remove all culverts in natural drainages. The resulting slopes must be 1½ :1 or flatter. Strive to match the existing native stream bank gradient. The natural streambed width must be re-established. Place and compact the removed fill material in a location that will not erode into any Type 1 through 5 waters or wetlands.
- Transport all removed culverts off site. All removed culverts are the property of the Purchaser.
- Construct non-drivable waterbars at natural drainage points and at a spacing that will produce a vertical drop of no more than 20 feet between waterbars and with a maximum horizontal spacing of 400 feet.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Inslope or outslope the road as appropriate.
- Remove bridges and other structures.
- Pull back unstable fill that has potential of failing and entering any Type 1 through 5 waters or wetlands. Place and compact removed material in a stable location.
- Remove berms except as designed.
- Block the road by constructing an aggressive barrier of dense interlocked large woody debris (logs, stumps, root wads, etc.) so that four wheel highway vehicles cannot pass the point of abandonment. Typical barrier dimensions are 10 feet high by 20 feet deep, spanning the entire road prism from top of cutslope to toe of fillslope. Long term effectiveness is the primary objective. If necessary construct a vehicular turn-around near the point of abandonment.
- Apply grass seed to all exposed soils resulting from the abandonment work and in accordance with Section 8 EROSION CONTROL.

SECTION 10 MATERIALS

10-1 GEOTEXTILE FOR SUBSURFACE DRAINAGE

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

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Non-woven
Apparent opening size	D 4751	No. 80 max
Water permittivity	D 4491	0.3 sec ⁻¹
Grab tensile strength	D 4632	160 lb
Grab tensile elongation	D 4632	>= 50%
Puncture strength	D 6241	310 lb
Tear strength	D 4533	50 lb
Ultraviolet stability	D 4355	50% retained after 500 hours of exposure

10-15 CORRUGATED STEEL CULVERT

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

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.

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

Metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

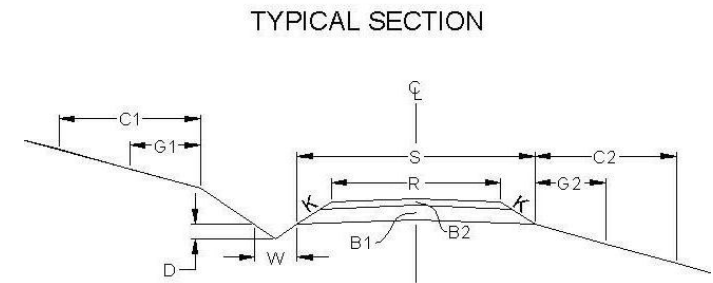
<u>Diameter</u>	<u>Gage</u>	<u>Corrugation</u>
18"	16 (0.064")	2 2/3" X 1/2"
24" to 48"	14 (0.079")	2 2/3" X 1/2"
54" to 96"	14 (0.079")	3" X 1"

SECTION 11 SPECIAL NOTES

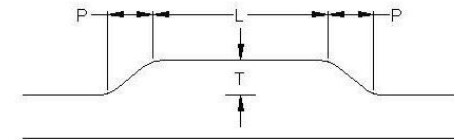
11-1 RM-ML PRE-HAUL MAINTENANCE REQUIREMENTS

On the RM-ML from station 212+45 to 241+40, Purchaser is not required to clean-out ditches to the depths specified in the TYPICAL SECTION in the through cut sections of the road. Instead Purchaser shall blade ditches to the deepest depth feasible with pre-haul grading operations.

ROAD #		RM-ML	RM-41	RM-46	RM-4602
REQUIRED / OPTIONAL		REQUIRED	REQUIRED	REQUIRED	OPTIONAL
CONSTRUCT / RECONSTRUCT		PRE-HAUL	PRE-HAUL	CONSTRUCT	CONSTRUCT
TOLERANCE CLASS (A/B/C)		A	A	C	C
STATION / MP TO		212+45	0+00	0+00	0+00
STATION / MP		275+45	90+85	19+95	4+85
ROAD WIDTH	R	12	12	12	12
CROWN (INCHES @ C/L)		3	3	3	3
DITCH WIDTH	W	3	3	3	2
DITCH DEPTH	D	1	1	1	1
TURNOUT LENGTH	L	50	50	50	25
TURNOUT WIDTH	T	10	10	10	10
TURNOUT TAPER	P	25	25	25	25
GRUBBING	G1	--	--	5	5
	G2	--	--	5	5
CLEARING	C1	--	--	10	10
	C2	--	--	10	10
ROCK FILLSLOPE	K:1	--	--	1½	1½
❖ BALLAST DEPTH	B1	--	--	12	12
CUBIC YARDS / STATION		--	--	72	72
➤ TOTAL CY BALLAST		20*	--	1435	350
❖ SURFACING DEPTH	B2	--	--	--	--
CUBIC YARDS / STATION		--	--	--	--
➤ TOTAL CY SURFACING		--	--	--	--
➤ TOTAL CUBIC YARDS		20	--	1435	350
SUBGRADE WIDTH	S	--	--	15.0	15.0
BRUSHCUT (Y/N)		Y	Y	N	N
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	N	N



TURNOUT DETAIL (PLAN VIEW)



SYMBOL NOTES

- ❖ Specified Rock Depth is FINISHED COMPACTED DEPTH in inches.
- Specified Rock Quantity is LOOSE MEASURE (Truck Cubic Yards) needed to accomplish specified FINISHED COMPACTED DEPTH. Rock quantities include volume for turnouts, curve widening and landings.

* BALLAST ROCK QUANTITY OVER CULVERT INSTALLATION
TOTAL 3-INCH MINUS BALLAST ROCK FOR ROADS = 5370 CY
ADDITIONAL 3-INCH MINUS BALLAST STOCKPILE = 1000 CY

TOTAL RIPRAP = 107 CY

ROAD #		RM-48	RM-52	RM-5205	RM-5205-01	CSL-14	CSL-1401	CSL-1414	CSL-1414
REQUIRED / OPTIONAL		REQUIRED	REQUIRED	REQUIRED	OPTIONAL	REQUIRED	OPTIONAL	REQUIRED	REQUIRED
CONSTRUCT / RECONSTRUCT		CONSTRUCT	PRE-HAUL	CONSTRUCT	CONSTRUCT	PRE-HAUL	CONSTRUCT	CONSTRUCT	PRE-HAUL
TOLERANCE CLASS (A/B/C)		C	A	C	C	A	C	C	A
STATION / MP TO		0+00	0+00	0+00	0+00	0+00	0+00	0+00	3+65
STATION / MP		4+30	28+75	8+35	2+95	77+70	10+50	3+65	15+95
ROAD WIDTH	R	12	12	12	12	12	12	12	12
CROWN (INCHES @ C/L)		3	3	3	3	3	3	3	3
DITCH WIDTH	W	3	3	3	2	3	2	3	2
DITCH DEPTH	D	1	1	1	1	1	1	1	1
TURNOUT LENGTH	L	50	50	50	25	50	25	50	--
TURNOUT WIDTH	T	10	10	10	10	10	10	10	--
TURNOUT TAPER	P	25	25	25	25	25	25	25	--
GRUBBING	G1	5	--	5	5	--	5	5	--
	G2	5	--	5	5	--	5	5	--
CLEARING	C1	10	--	10	10	--	10	10	--
	C2	10	--	10	10	--	10	10	--
ROCK FILLSLOPE	K:1	1½	--	1½	1½	--	1½	1½	--
❖ BALLAST DEPTH	B1	12	--	12	12	--	12	12	9
CUBIC YARDS / STATION		72	--	72	72	--	72	72	53
➤ TOTAL CY BALLAST		310	--	600	210	--	755	265	650
❖ SURFACING DEPTH	B2	--	--	--	--	--	--	--	--
CUBIC YARDS / STATION		--	--	--	--	--	--	--	--
➤ TOTAL CY SURFACING		--	--	--	--	--	--	--	--
➤ TOTAL CUBIC YARDS		310	--	600	210	--	755	265	650
SUBGRADE WIDTH	S	15.0	--	15.0	15.0	--	15.0	15.0	14.25
BRUSHCUT (Y/N)		N	Y	N	N	Y	N	N	Y
BLADE, SHAPE, & DITCH (Y/N)		N	Y	N	N	Y	N	N	Y

ROAD #		CSL-1414	CSL-1414-02	CSL-19				
REQUIRED / OPTIONAL		REQUIRED	REQUIRED	REQUIRED				
CONSTRUCT / RECONSTRUCT		CONSTRUCT	PRE-HAUL	PRE-HAUL				
TOLERANCE CLASS (A/B/C)		C	A	A				
STATION / MP TO		15+95	0+00	0+00				
STATION / MP		26+70	7+10	98+40				
ROAD WIDTH	R	12	12	12				
CROWN (INCHES @ C/L)		3	3	3				
DITCH WIDTH	W	3	2	3				
DITCH DEPTH	D	1	1	1				
TURNOUT LENGTH	L	25	--	--				
TURNOUT WIDTH	T	10	--	--				
TURNOUT TAPER	P	25	--	--				
GRUBBING	G1	5	--	--				
	G2	5	--	--				
CLEARING	C1	10	--	--				
	C2	10	--	--				
ROCK FILLSLOPE	K:1	1½	--	--				
❖ BALLAST DEPTH	B1	12	--	--				
CUBIC YARDS / STATION		72	--	--				
➤ TOTAL CY BALLAST		775	--	--				
❖ SURFACING DEPTH	B2	--	--	--				
CUBIC YARDS / STATION		--	--	--				
➤ TOTAL CY SURFACING		--	--	--				
➤ TOTAL CUBIC YARDS		775	--	--				
SUBGRADE WIDTH	S	15.0	--	--				
BRUSHCUT (Y/N)		N	Y	Y				
BLADE, SHAPE, & DITCH (Y/N)		N	Y	Y				

MATERIALS LIST

LOCATION		CULVERT			DWNSPT		RIPRAP			FILL TYPE	TOLERANCE	REMARKS		
ROAD #	STATION	DIAMETER	LENGTH	TYPE	LENGTH	TYPE	INLET	OUTLET	TYPE			<u>Note:</u> Galvanized metal culverts shall conform to the following specifications for gage and corrugation as a function of the diameter:		
												Diameter	Gage	Corrugation
		18"										18" 16 2 2/3" x 1/2"		
		24" – 48"										24" – 48" 14 2 2/3" x 1/2"		
		54" – 96"										54" – 96" 14 3" x 1"		
RM-ML	232+35	18	40	GM			2	3	L	NT	C			
RM-46	2+15	18	30	GM			2	3	L	NT	C			
RM-46	7+25	18	30	GM			2	3	L	NT	C			
RM-46	10+30	18	30	GM			2	3	L	NT	C			
RM-46	13+45	18	30	GM			2	3	L	NT	C			
RM-46	19+40	18	30	GM			2	3	L	NT	C	Dig outlet channel		
RM-4602	3+80	18	30	XX			2	3	L	NT	C			
RM-48	1+55	18	30	GM			2	3	L	NT	C			
RM-5205	7+10	18	30	GM			2	3	L	NT	C			
RM-5205-01	0+50	18	30	XX			2	3	L	NT	C			
CSL-1401	0+40	24	40	XX			3	5	H/L	NT	C	Type 4 Stream.		
CSL-1401	1+10	18	36	XX			2	3	L	NT	C			
CSL-1401	2+65	24	30	XX			3	5	H/L	NT	C	Type 5 Stream.		
CSL-1401	3+15	18	30	XX			2	3	L	NT	C			
CSL-1401	6+75	24	30	XX			3	5	H/L	NT	C	Type 5 Stream.		

GM – Galvanized Metal PS – Polyethylene Pipe Single Wall PD – Polyethylene Pipe Dual Wall AM – Aluminized Metal C – Concrete XX – PD or GM
 H – Heavy Loose Riprap L – Light Loose Riprap SR – Shot Rock NT – Native (Bank Run) QS – Quarry Spalls

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Cuts and Fills

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

Surface

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

Drainage

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

Preventative Maintenance

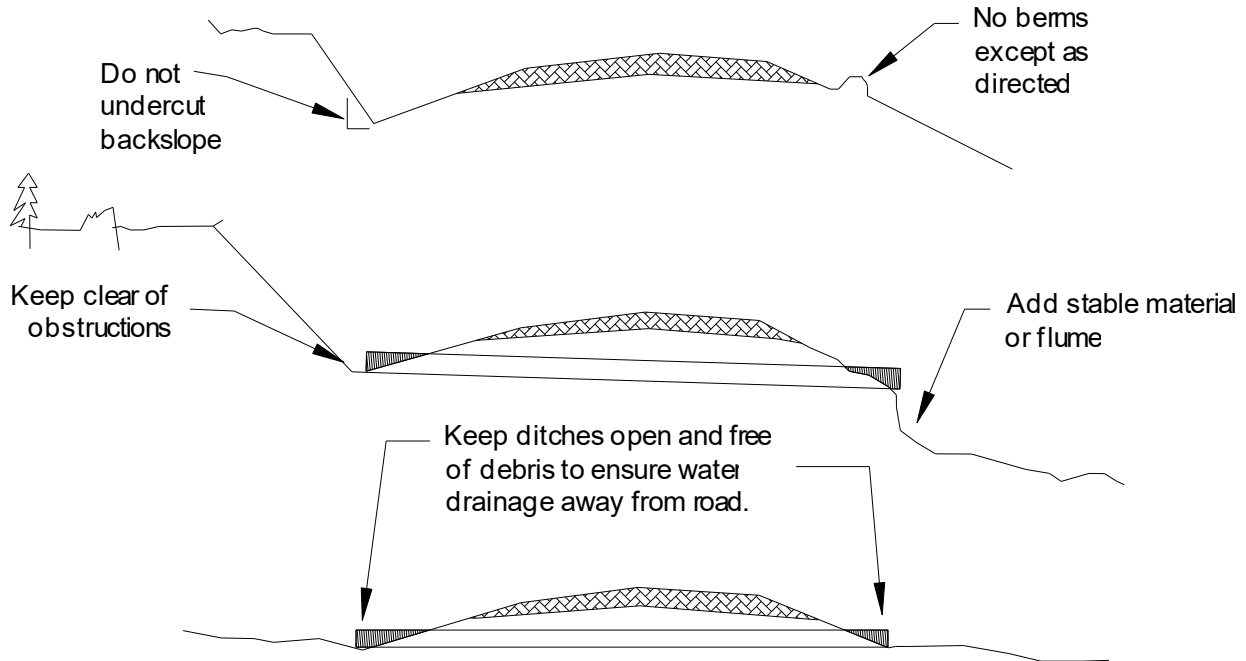
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

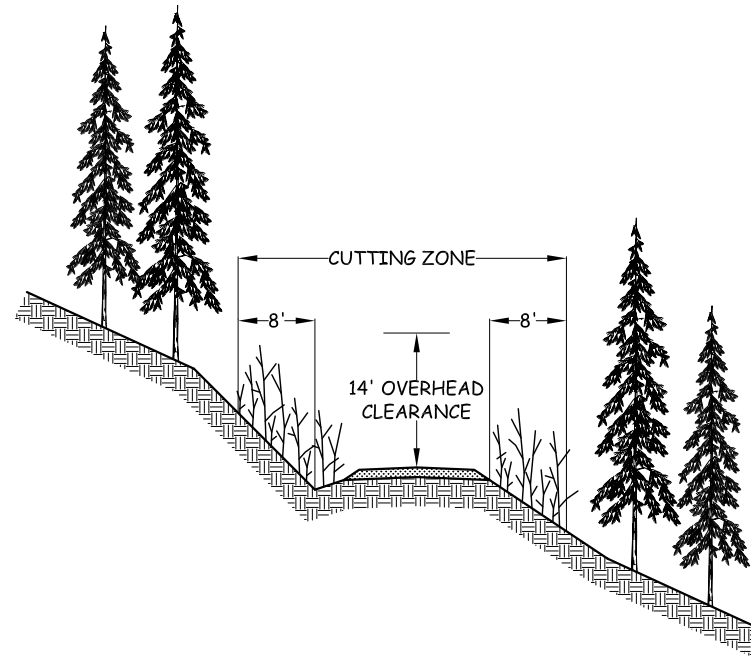
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

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



ROAD BRUSHING DETAILS



SPECIFICATIONS

BRUSH SHALL BE CUT ON THE ROAD SURFACE AND 8 ft. BACK FROM ROAD DITCH AND OUTSIDE EDGE OF RUNNING SURFACE.

ON THE INSIDE OF SWITCHBACKS AND TIGHT CURVES, BRUSH SHALL BE CUT BACK 16 ft. FOR VISIBILITY.

ON TRUCK TURNOUTS, BRUSH SHALL BE CUT 8 ft. BACK FROM OUTSIDE EDGE.

BRUSH SHALL BE CUT TO PROVIDE AN OVERHEAD CLEARANCE OF 14 ft. ABOVE THE ROAD RUNNING SURFACE.

BRUSH SHALL BE CUT TO WITHIN 6 in. OF THE GROUND.

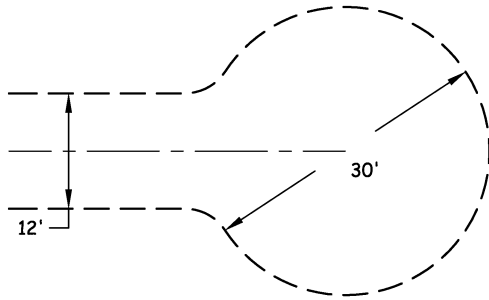
SLASH SHALL BE REMOVED FROM CUT SLOPES ABOVE THE ROAD AND SCATTERED ON EMBANKMENT SLOPES.

DITCHES SHALL BE CLEARED OF WOODY DEBRIS.

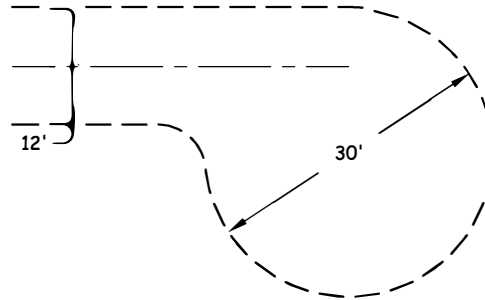
CULVERT INLETS AND OUTLETS SHALL BE CLEANED A MINIMUM DISTANCE OF TWO PIPE DIAMETERS AWAY.

CONTRACT #	PROJECT	SHEET
30-104520	RED TRUCK	36 OF 38

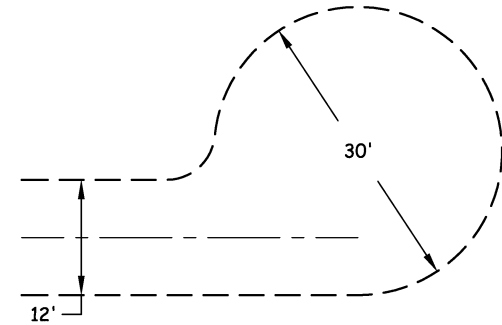
TURNAROUND DETAILS



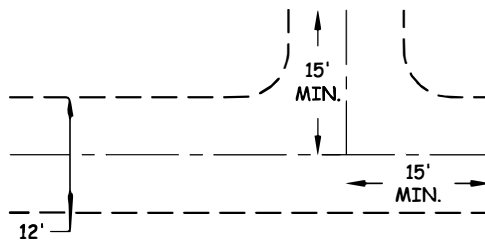
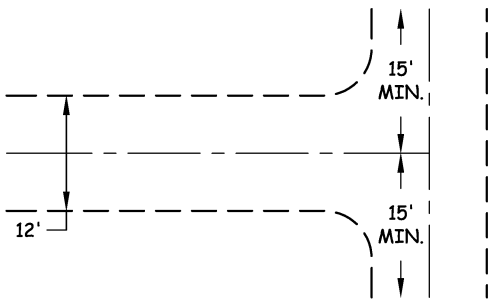
HAMMERHEAD



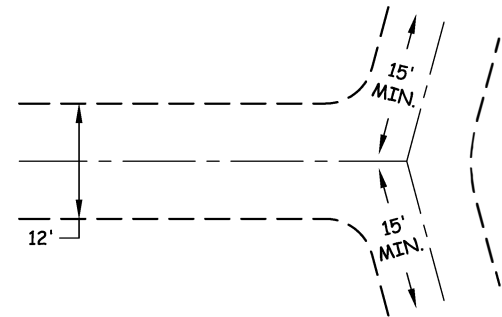
CUL-DE-SAC



3-POINT WYE



3-POINT SIDE



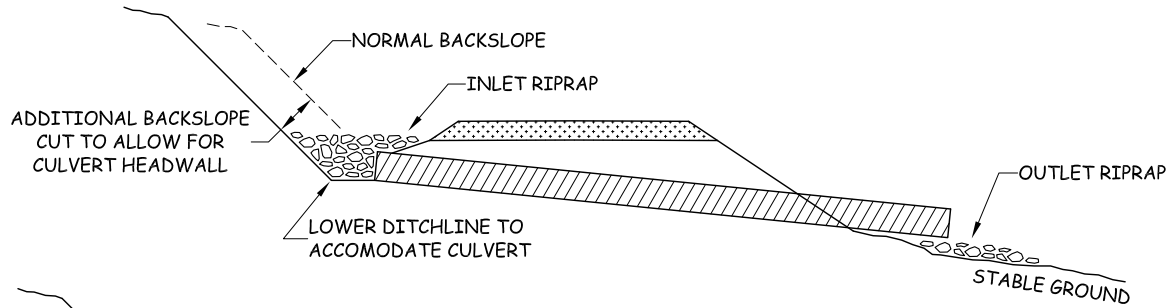
TURNAROUND TYPE AND TURNAROUND LOCATION ARE SUBJECT TO THE APPROVAL OF THE CONTRACT ADMINISTRATOR.

ROCK SHALL BE APPLIED THROUGHOUT THE TURNAROUND TO THE SAME DEPTH AND SPECIFICATIONS AS LISTED IN THE TYPICAL SECTION.

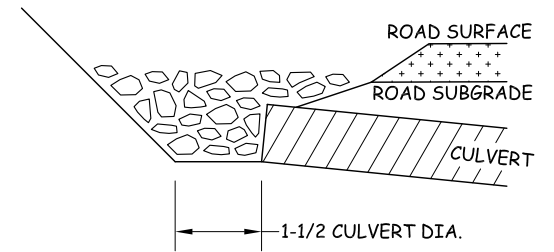
CONTRACT # 30-104520	PROJECT RED TRUCK	SHEET 37 OF 38
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CULVERT AND DRAINAGE SPECIFICATIONS

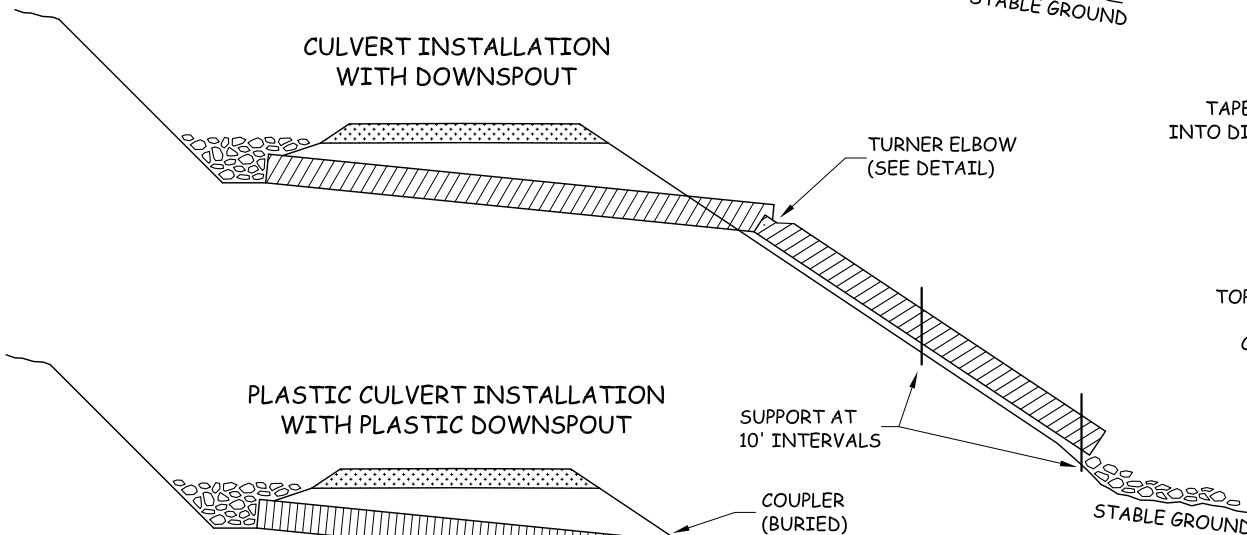
CULVERT INSTALLATION (TYPICAL)



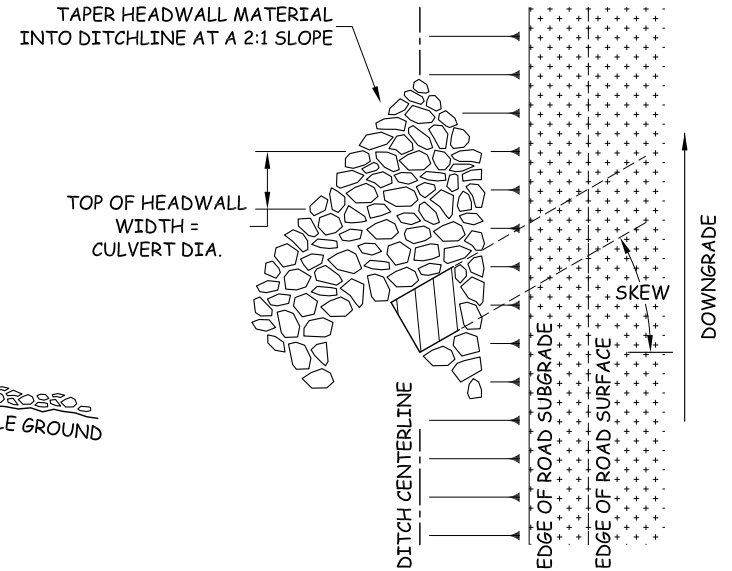
CULVERT HEADWALL - SECTION VIEW



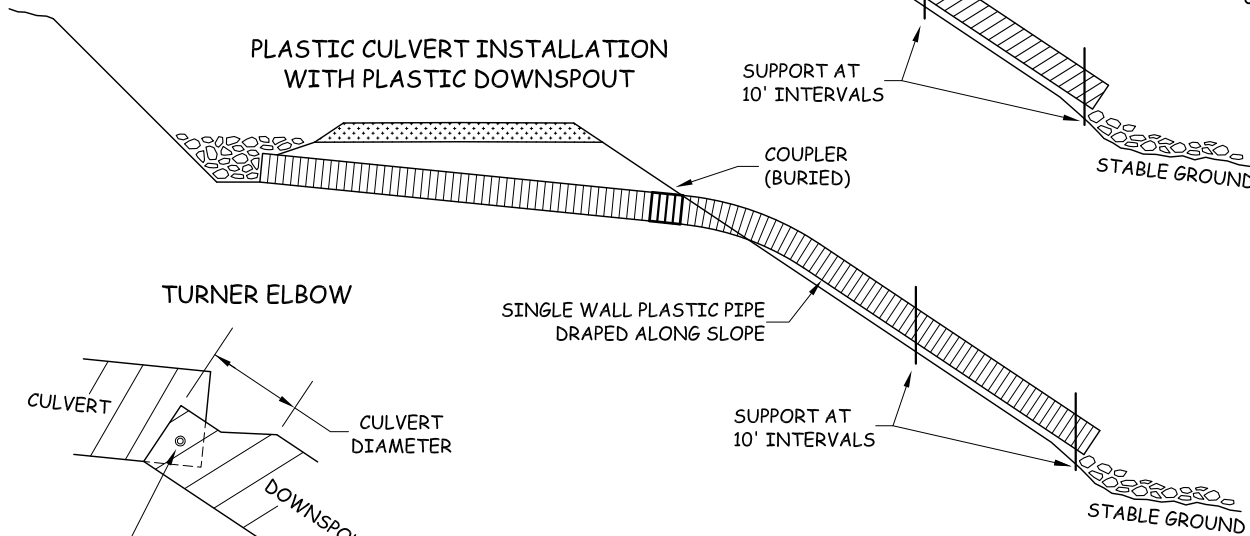
CULVERT INSTALLATION WITH DOWNSPOUT



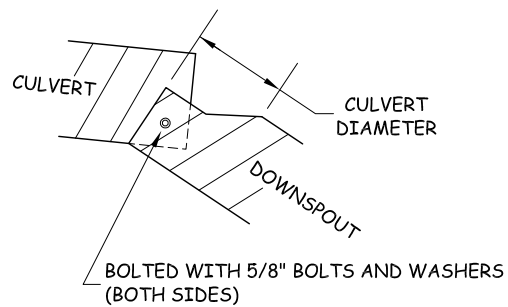
CULVERT HEADWALL - PLAN VIEW



PLASTIC CULVERT INSTALLATION WITH PLASTIC DOWNSPOUT



TURNER ELBOW



HEADWALL NOTE:
 HEADWALL TO BE CONSTRUCTED OF IMPERVIOUS MATERIAL THAT WILL RESIST EROSION AND ARMORED WITH RIPRAP QUANTITY SPECIFIED IN ROAD PLAN.

CONTRACT #	PROJECT	SHEET
30-104520	RED TRUCK	38 OF 38

ROAD COST SUMMARY

RED TRUCK Timber Sale #30-104520

CONSTRUCTION SUMMARY

ROAD #	STATIONING	TOTAL STATIONS	ROCK PRODUCTION COST	ROCK LOADING COST	ROCK HAUL COST	ROCK SPREADING COST	CONSTRUCTION COST	CULVERT COST	OTHER COST	TOTAL COST	COST/STA
RM-46	0+00 to 19+95	19.95	\$11,480	\$6,037	\$6,023	\$7,128	\$11,729	\$2,276	\$798	\$45,470	\$2,279
RM-4602	0+00 to 4+85	4.85	\$2,800	\$1,468	\$1,464	\$1,733	\$2,932	\$455	\$194	\$11,047	\$2,278
RM-48	0+00 to 4+30	4.3	\$2,480	\$868	\$1,733	\$1,025	\$2,639	\$455	\$172	\$9,372	\$2,180
RM-5205	0+00 to 8+35	8.35	\$4,800	\$1,668	\$4,991	\$1,969	\$4,985	\$455	\$1,334	\$20,202	\$2,419
RM-5205-01	0+00 to 2+95	2.95	\$1,680	\$593	\$1,774	\$700	\$1,759	\$455	\$118	\$7,079	\$2,400
CSL-1401	0+00 to 10+50	10.5	\$6,040	\$2,225	\$6,658	\$2,627	\$5,864	\$4,324	\$420	\$28,157	\$2,682
CSL-1414	0+00 to 3+65	3.65	\$2,120	\$1,905	\$2,970	\$879	\$2,346	\$765	\$146	\$11,131	\$3,050
CSL-1414	15+95 to 26+70	10.75	\$6,200	\$2,136	\$4,263	\$2,522	\$7,037	\$0	\$430	\$22,588	\$2,101
Sanfi Stockpile			\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0
									TOTAL	\$165,046	

CONSTRUCTION COSTS include, clearing and grubbing, excavation and embankment, drilling and shooting on grade, and endhaul.

OTHER COSTS include erosion control, grass seeding and fertilizer, and miscellaneous other requirements detailed in the road plan.

PRE-HAUL MAINTENANCE SUMMARY

ROAD #	STATIONING	TOTAL STATIONS	ROCK PRODUCTION COST	ROCK LOADING COST	ROCK HAUL COST	ROCK SPREADING COST	CULVERT COST	OTHER COST	PRE-HAUL GRADING AND BRUSHING	TOTAL COST	COST/STA
RM-ML	212+45 to 275+45	63.00	\$160	\$103	\$103	\$122	\$600	\$293	\$2,983	\$4,365	\$69
RM-41	0+00 to 90+85	90.85	\$0	\$0	\$0	\$0	\$0	\$2,346	\$4,302	\$6,647	\$73
RM-52	0+00 to 28+75	28.75	\$0	\$0	\$0	\$0	\$0	\$586	\$1,361	\$1,948	\$68
CSL-14	0+00 to 77+70	77.70	\$0	\$0	\$0	\$0	\$0	\$1,759	\$3,679	\$5,438	\$70
CSL-1414	3+65 to 15+95	12.30	\$5,200	\$2,688	\$2,681	\$3,173	\$0	\$5,184	\$349	\$19,275	\$1,567
CSL-1414-02	0+00 to 7+10	7.10	\$0	\$0	\$0	\$0	\$0	\$586	\$336	\$923	\$130
CSL-19	0+00 to 98+40	98.40	\$0	\$0	\$0	\$0	\$0	\$2,346	\$4,659	\$7,005	\$71
									TOTAL	\$45,601	

OTHER COSTS include cleaning culverts, ditches, headwalls, catch basins, culvert installation, and miscellaneous other requirements detailed in the road plan.

ROAD COST SUMMARY

RED TRUCK Timber Sale #30-104520

POST-HAUL MAINTENANCE SUMMARY

ROAD #	STATIONING	TOTAL STATIONS	POST-HAUL GRADING COST	OTHER COST	TOTAL COST	COST/STA
RM-ML	212+45 to 275+45	63.00	\$955	\$0	\$955	\$15
RM-41	0+00 to 90+85	90.85	\$1,377	\$0	\$1,377	\$15
RM-46	0+00 to 19+95	19.95	\$302	\$0	\$302	\$15
RM-52	0+00 to 28+75	28.75	\$436	\$0	\$436	\$15
RM-5205	0+00 to 8+35	8.35	\$127	\$0	\$127	\$15
CSL-14	0+00 to 77+70	77.70	\$1,177	\$0	\$1,177	\$15
CSL-1414	3+65 to 15+95	12.30	\$186	\$0	\$186	\$15
CSL-1414-02	0+00 to 7+10	7.10	\$108	\$0	\$108	\$15
CSL-19	0+00 to 98+40	98.40	\$1,491	\$0	\$1,491	\$15
				TOTAL	\$6,158	

OTHER COSTS include miscellaneous other requirements detailed in the road plan.

ABANDONMENT SUMMARY

ROAD #	STATIONING	TOTAL STATIONS	ABANDONMENT COST	OTHER COST	TOTAL COST	COST/STA
RM-4602	0+00 to 4+85	4.85	\$606	\$0	\$606	\$125
RM-48	0+00 to 4+30	4.30	\$454	\$0	\$454	\$106
RM-5205-01	0+00 to 2+95	2.95	\$454	\$0	\$454	\$154
CSL-1401	0+00 to 10+50	10.50	\$1,211	\$0	\$1,211	\$115
CSL-1414	0+00 to 3+65	3.65	\$909	\$0	\$909	\$249
CSL-1414	15+95 to 26+70	10.75	\$606	\$0	\$606	\$56
				TOTAL	\$4,240	

OTHER COSTS include miscellaneous other requirements detailed in the road plan.

NOTE: ALL MOBILIZATION COSTS HAVE BEEN AMORTIZED IN WITH OTHER COSTS.

TOTAL ROAD COST	\$221,044	
SALE VOLUME (MBF)	4284	PRE-CRUISE ESTIMATED VOLUME
ROAD COST/MBF	\$52	

HCP CHECKLIST

(Used to identify which HCP strategies are actually applied to this proposed management activity, i.e. those that affect the activity.)

Name of Proposed Activity: Red Truck Agreement # 30-104520 FPA# _____ Planning Unit: North Puget

Location (provide for activities other than timber sales) T _____ N R _____ (E/W; W.M.) Sec _____

HCP strategy or component	Criteria for strategy application	Applicable planning units	Yes	No
Riparian conservation				
Potentially unstable slopes	Area of proposed activity includes potentially unstable landforms or proposal is modified to avoid potentially unstable landforms	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rain-on-snow	Proposed activity is in the rain-on-snow zone of a subbasin where greater than 2/3 of DNR managed land must remain hydrologically mature	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Roads – General	Road construction or maintenance activities are proposed	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roads – In RMZ	Proposed road or recreation trail construction in an RMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roads – In WMZ	Proposed road or recreation trail construction in a WMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RMZ – Managed	Proposed activity includes riparian forest restoration (RMZ thinning, riparian hardwood conversion, or riparian individual conifer release)	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RMZ – Unmanaged	Proposed activity is adjacent to an unmanaged RMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WMZ – Managed	Proposed activity includes WMZ thinning	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WMZ – Unmanaged	Proposed activity is adjacent to an unmanaged WMZ	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Northern spotted owl conservation				
Northern spotted owl	Proposed activity is in a NRF or dispersal/DFC management area or a timing restriction area; or adjacent to a 300-acre nest patch core area or a 200-acre buffer area	W O E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marbled murrelet conservation				
Marbled murrelet	Different thresholds and strategies apply depending on Planning Unit	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Uncommon Habitats, Federally listed species and unlisted species conservation				
Large, structurally unique trees	Proposed final harvest activity retains 2 upland large structurally unique trees, 3 additional upland green trees, and 3 snags, if available (if snags are unavailable, replace with upland green trees), for each acre of final harvest	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Balds	Proposed activity is on or adjacent to a bald	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Caves	Proposed activity is adjacent to a cave buffer	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cliffs	Proposed activity is on or adjacent to cliffs greater than 25 feet tall at an elevation of less than 5000 feet or cliffs greater than 150 feet tall	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mineral springs	Proposed activity is within 200 feet of a mineral spring	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oak woodlands	Proposed activity is in or adjacent to oak woodlands	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Talus	Proposed activity area is within or adjacent to non-forested or forested talus fields or a buffer or requires road construction or rock mining through forested or non-forested talus	W O	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bats	Area of proposed activity includes myotis bats communal roosts or maternity colonies	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
California wolverine	Proposed activity is within 0.5 miles of an active California wolverine den site located in a spotted owl NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Common loon	Proposed activity is within 500 feet of a common loon nest	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gray wolf	Proposed activity is within 8 miles of a class 1 gray wolf observation that occurred in the past 5 years	W O E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Harlequin duck	Proposed activity is within 165 feet of a harlequin duck nest	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Northern goshawk	Proposed activity is within 0.55 miles of a northern goshawk nest site located in a NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oregon silverspot butterfly	Proposed activity is within 0.25 miles of an Oregon silverspot butterfly occurrence	W O	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pacific fisher	Proposed activity is within 0.5 miles of an active Pacific fisher den site located in a northern spotted owl NRF management area	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pileated woodpecker	Area of proposed activity includes known pileated woodpecker nesting sites	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vaux's swift	Area of proposed activity includes Vaux's swift night roosts	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>

W=Westside HCP Planning Units

O=OESF

E=Eastside HCP Planning Units

SIGNATURES

Proponent: Kyle Galloway Title: Deming Unit Forester Date: 06/07/2023

Approved by: _____ Title: _____ Date: _____

This checklist is required for the following activities: 1) Timber harvest activities 2) Construction or expansion of footprint of a road, rock pit, recreation site, communication site, leasing site (for example: antenna, wind turbine, etc.), or right-of-way.

Checklist must be filed with the timber sale packet or sent to implementation.monitoring@dnr.wa.gov

Revised 12/2013