



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR QUOTE
RFQ NO. 30-093491

PROJECT TITLE: RENDEZVOUS SORTS

QUOTE DUE DATE: July 27, 2017 12:00 PM

EXPECTED TIME PERIOD FOR CONTRACT: September 8, 2016 to December 12, 2017

CONTRACTOR ELIGIBILITY: This procurement is open to those contractors who have been pre-qualified and are listed in the Department of Natural Resources Contract Harvesting Services Eligible Bidder Pool.

TABLE OF CONTENTS

SECTION 1	INTRODUCTION.....	3
SECTION 2	GENERAL INFORMATION FOR HARVESTERS	6
SECTION 3	PROJECT SCOPE OF WORK.....	8
SECTION 4	QUOTE EVALUATION	10
SECTION 5	RFQ EXHIBITS.....	12

SECTION 1 INTRODUCTION

1.01 Project Summary

The Washington State Department of Natural Resources, (DNR) solicits Quotes from firms interested in participating on a project described below:

Defined in the Harvesting Services Contract. The selected harvester will be expected to access, cut, yard, load and haul logs from the RENDEZVOUS SORTS CH Timber Sale to specified delivery points.

1.02 Purpose and Background

This Request for Quotes seeks responses from harvesters, logging firms, operators of logging equipment or any firms, businesses or individuals who have been pre-qualified for DNR's harvester bidding pool and are interested in contract harvesting approximately 3729 MBF of timber in 2 unit(s) for the Department of Natural Resources in the Northwest Region Office.

1.03 Minimum Qualifications

Candidate Harvesters must be licensed to do business in the State of Washington and must demonstrate that they are capable of performing the work and meet the requirements outlined in the attached Harvesting Services Contract and Road Plan.

Candidate Harvesters must participate in a two-part process to bid on the work defined by the Harvesting Contract (Exhibit B) and Road Plan (Exhibit C). First, a Statement of Qualifications (SOQ) must be submitted to DNR for evaluation. The Candidate Harvester must achieve 'eligible-for-bidding' status placing them in the DNR's eligible bidder pool. Second, Eligible Bidders will be requested to submit a bid for the Harvesting Services Contract along with a 'Statement of Available Resources and Work Plan' and any other materials listed as 'required' in section 2.06 of this RFQ. The State will award the contract to the eligible bidder who submits the lowest bid and has provided a 'Statement of Available Resources and Work Plan' that demonstrates to the State that the Candidate Harvester has the ability to complete the project as required.

Proposals from Candidate Harvesters who do not meet these minimum qualifications shall be rejected.

1.04 Contract Term

The period of performance of the Harvesting Service Contract resulting from this Request for Quotes (RFQ) and subsequent bidding process is tentatively scheduled for September 8, 2016 to December 12, 2017. Any amendments extending the period of performance shall be at DNR's sole discretion.

1.05 Payment for Work

The State shall make payments to the Contractor for services required and approved including log hauling and road work calculated according to the terms in the harvesting services contract. The Contractor is responsible for independently negotiating, procuring and paying for all services provided.

Depending on the project bid structure defined in section 2.06 ‘Contract Harvesting Services Quote Format’ of this RFQ, payment will be calculated using:

- The Contractor’s On Board Truck (OBT) bid rate per mbf for logs harvested and delivered for sort(s) 01, 02, 03, 04, 05 and 06.
- And an OBT rate of \$10.00 per Ton for sorts 07 and 08 harvested and delivered.
- The Contractor’s OBT bid rate per mbf for DF Poles harvested and delivered for sort(s) 09.
- Utility volume scaled in mbf sorts will be determined on an adjusted gross scale basis and paid for at an OBT rate of \$20.00 per mbf.
- Payments to the Contractor for hauling services shall be based upon the tons delivered multiplied by: a base rate, ‘A’ and ‘C mile rates’, a fuel index factor and the Contractor’s hauling bid factor using the following formula:

$$\begin{aligned} &\text{Hauling Services Payment Rate per Ton} \\ &= (\text{Base Rate} + \text{Mileage Rate}) \times (\text{Contractor’s hauling bid factor}) \end{aligned}$$

Base Rate = \$2.35
 (based on multiple truck operation fixed cost/ton within ‘*Report to the Washington State Legislature, The Washington Log Trucking Industry: Costs and Safety Analysis, August 2008*’)

$$\text{Mileage Rate} = ((\$0.16 \times \text{C miles}) + (\$0.11 \times \text{A miles})) \times (\text{Fuel Index Factor})$$

The Fuel Index Factor will be adjusted quarterly by the State based upon the U.S. Energy Information Administration’s Weekly Retail On-Highway Diesel prices for the West Coast region posted at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp> using the following formula;

$$\text{Fuel Index Factor} = 1 + \frac{Q_{(x)} - Q_{(base)}}{Q_{(base)}}$$

Where; $Q_{(base)}$ = Average fuel price for quarter preceding harvesting services contract bid opening.
 $Q_{(x)}$ = Average fuel price for quarter preceding log deliveries.

The fuel index factor will be calculated each;
 January and apply to loads delivered between January 1 and March 31,
 April and apply to loads delivered between April 1 and June 30,
 July and apply to loads delivered between July 1 and September 30,
 October and apply to loads delivered between October 1 and December 31.

Hauling Rate Example:

Base Rate = \$2.35

C miles = 10

A miles = 100

Fuel Index Factor = 1.000

Mileage Rate = $((\$0.16 \times 10) + (\$0.11 \times 100)) \times (1.000) = \12.60

Contractor's hauling bid factor = 1.100

Hauling Services Payment Rate per Ton

= (Base Rate + Mileage Rate) x (Contractor's hauling bid factor)

= $(\$2.35 + \$12.60) \times 1.100$

= \$16.45

For sorts bid on an mbf basis tonnage will be calculated using the State's conversion rate unless actual tonnage is available and approved for use. For tonnage based sorts, actual tonnage shall apply.

- With prior approval by the State and toll/ferry receipt provided, reimbursement of toll/ferry costs incurred for transporting logs.
- Payment amounts for fixed-rate road construction elements are based upon the rates established by the State and listed in the Harvesting Services Contract. When applicable, payment amounts for biddable road construction elements will be in accordance with the rates listed in Contractor's road cost proposal provided as an attachment to the official bid form.

1.06 RFQ Definitions

Definitions of terms used in this Request for Statement of Qualifications.

Contractor - Individual or company selected to harvest and haul logs for the State. Contractor may also be required to perform roadwork or other services as required in the Harvesting Services Contract and Road Plan.

DNR - The State of Washington, Department of Natural Resources.

Eligible Bidder - Candidate Harvester who's Statement of Qualifications has scored a pre-determined minimum point total (as determined by the DNR). Only eligible bidders are requested to submit a bid for the work outlined in the Harvesting Services Contract.

Harvesting Services Contract - the agreement between the State and a Contractor that defines the work to be done by the Contractor. The Contractor and the State sign this contract after the timber sale auction where the Purchaser's of the log sorts has been determined.

Purchaser - Person or Company that has purchased logs to be delivered by the Contractor of a Contract Harvesting Sale. A Contract Harvesting sale usually has numerous Purchasers.

Quote – Official bid form submitted by Eligible Bidders. A complete Quote consists of the bid rate for delivered logs, the bid rates for hauling services, and a completed ‘Statement of Available Resources and Work Plan’.

Request for Quotes (RFQ) - A formal procurement process used to solicit bids from pre-qualified firms for the right to perform the work defined in the RFQ.

Request for Statement of Qualifications (RFSOQ) - A formal procurement process used to pre-qualify firms for inclusion in the DNR’s Contract Harvesting Services Eligible Bidder Pool.

Request for Quotes Coordinator - DNR employee who oversees the Contractor Selection Process and serves as the main point of contact between the DNR and Candidate Harvesters. The Coordinator may delegate some of the duties, but is responsible for ensuring the process is properly followed and documented.

Statement of Qualifications (SOQ) – Document to be filled out by Candidate Harvesters and submitted to the DNR. Lists the Candidate Harvesters experience, qualifications, background information and references. Used by an evaluation team to determine which Candidate Harvesters are qualified to bid for the right to perform the harvesting project.

Subcontractor - Individual or company employed by the Contractor to perform a portion or all of the services required by the Harvesting Services Contract. The Contractor is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

SECTION 2 GENERAL INFORMATION FOR HARVESTERS

2.01 RFQ Coordinator

The RFQ Coordinator is the sole point of contact in the DNR for this eligible bidder selection process. All communication between the Candidate Harvester and the DNR shall be with the RFQ Coordinator.

RFQ Coordinator	Theresa Klepl
Address	919 N. Township St.
City, State, Zip Code	Sedro-Woolley, WA 98223
Phone Number	(360)856-3500
Fax Number	(360)856-2850
E-Mail Address	northewst.region@dnr.wa.gov

2.02 Estimated Project Schedule

As defined in the Project Schedule (**See Exhibit A**)

The DNR reserves the right to revise this schedule.

2.03 Pre-Quote Candidate Harvester Questions

Candidate Harvesters may mail, FAX, or E-mail questions about the RFQ to the RFQ Coordinator. The RFQ Coordinator will accept questions until July 20, 2016 at 12:00 PM. Questions received after this date and time will not be answered unless the RFQ Coordinator decides that it is in the DNR's best interests to answer them. A copy of the question(s) received, along with the DNR's official answer(s), will be mailed or faxed to each Candidate Harvester who received a copy of the RFQ. This copy will become an addendum to the RFQ. The DNR shall be bound only by written answers to questions. Oral responses given on the telephone will be considered unofficial.

2.04 Submitting a Quote

Candidate Harvesters must submit ONE copy of the official Harvesting Services Contract Sealed Bid Form including a 'Statement of Available Resources and Work Plan' with original signatures. The Quote, whether mailed, hand delivered, or faxed must arrive at the DNR no later than 12:00 PM, local time, on July 27, 2017.

The Quote is to be sent to the RFQ Coordinator at the address listed in Item 2.01 above. The envelope should be clearly marked "Attention RFQ Coordinator, Contract Harvesting Services Quote Enclosed, Do Not Open Until July 27, 2017."

Candidate Harvesters who mail Quotes should allow for normal mail delivery time to ensure timely delivery of their Quotes to the RFQ Coordinator. Candidate Harvesters assume the risk for the method of delivery they choose. The DNR assumes no responsibility for delays caused by a delivery service. Quotes may not be transmitted by email.

Late Quotes will not be accepted and will be automatically disqualified from further consideration. All Quotes and any accompanying documentation become the property of the DNR and will not be returned.

2.05 Proprietary Information/Public Disclosure.

Proposals are considered public records as defined in chapter 42.56 RCW. In the event a firm desires to claim portions of its proposal proprietary and exempt from public disclosure, it must clearly identify those portions. Each page of the proposal claimed to be exempt must be clearly identified as "proprietary information." If a public records request is made for the information that the consultant has marked as "proprietary information," the firm may seek to obtain a court order from a court of competent jurisdiction enjoining disclosure pursuant to chapter 42.56 RCW, or other state or federal law that provides for nondisclosure. The successful contractor's proposal generally becomes part of the contract that is subject to public disclosure.

DNR will charge for copying and shipping, as permitted by RCW 42.56.120. No fee shall be charged for inspection of contract files. Twenty-four (24) hours notice to the RFQ Coordinator is required. All requests for information should be directed to the Coordinator.

2.06 Contract Harvesting Services Quote Format

For a responsive bid, the following bid elements are required to be submitted on or attached to an official DNR Harvesting Services bid form;

OBT harvesting rate per MBF	Required
OBT harvesting rate per MBF for DF Poles	Required
Hauling services bid factor (formatted to 3 decimals i.e. #.###)	Required
Road construction cost proposal	Required
Statement of Available Resources and Work Plan	Required
All attachments incorporated by reference	Required

2.07 Revisions to the RFQ

The DNR reserves the right to revise the RFQ and/or to issue addenda to the RFQ. The published questions and answers from the Pre-proposal meeting/questions shall be an addendum to the RFQ.

The DNR also reserves the right to cancel or to reissue the RFQ in whole or in part, prior to execution of a Harvesting Services contract. If DNR finds it necessary to revise any part of the RFQ, addenda will be provided to all those who received the RFQ.

2.08 Most Favorable Terms

The State reserves the right to determine the Successful Bidder without further discussion of the Quote submitted. Therefore, the Quote should be submitted initially on the most favorable terms, which the Candidate Harvester can propose. There will be no best and final offer procedure. The State reserves the right to contact a Candidate Harvester for clarification of a Quote.

2.09 Costs to Propose

The DNR will not be liable for any costs that the Candidate Harvester incurs in preparing a Quote related to this RFQ or any other activities related to responding to this RFQ.

SECTION 3 PROJECT SCOPE OF WORK

3.01 Project Scope of Work.

As defined in the Harvesting Services Contract, Road Plan and Timber Sale Map (**See Exhibits B, C and D**).

3.02 SPECIAL REQUIREMENTS

*Must demonstrate the ability to have all documentation (performance security, certification of insurance, proof of successful completion of an approved training program per clause G-116, etc.) in place and be ready to begin operations upon approval to commence activity on site as per the

project start date. Road construction must begin as soon as possible upon approval by Contract Administrator.

*Must demonstrate the ability to make a consistent flow of deliveries throughout the delivery period without unnecessary delay. No unauthorized shut downs or gaps in deliveries of logs will be allowed.

* Must begin onsite operations, to include falling of timber, as soon as approval is granted in writing by the State, subsequent to the confirmation of sale of log sorts. This date is tentatively scheduled September 8, 2016.

*Provide a production plan and log shipment schedule, with deliveries to commence no later than 2 weeks subsequent to falling.

*Provide an alternative plan or demonstrate the capability to increase production (if needed) in case of weather and/or regulatory related shut down(s) to meet target completion date.

*The harvester is required to complete harvest activities according to the harvesting services contract, including requirements as stated in the H-140.1 and the H-141.1 clauses of the Harvesting Services Contract and Schedules attached to the contract and requirements outlined in the Road Plan.

* The Candidate Harvester is required to submit a Statement of Available Resources and Work Plan explaining how harvest operations will commence by the Expected Time Period start date through the final deliveries (Harvest activity) date; delivering a minimum of 13 loads per day on average (not including weekend and Federal Holidays). The work plan must be consistent with the requirements listed above.

This plan must include:

- Start date and estimated end date for both road construction and logging
- The number and type of logging sides operating
- Number of road work sides operating
- Start date of load deliveries
- Number of trucks and planned loads to be delivered per day
- Planned harvest sequence to maintain operations during contract period

The successful harvester's Work Plan must be approved in writing and is subject to modification by the State prior to operation commencement to better fit the DNR's objectives, at no additional cost to the DNR. This project will require the harvest and delivery of a large amount of timber in a relatively short operating window. It is imperative that the successful harvester has the ability and resources available to complete this project within the anticipated work schedule as described in section 1.04 of this RFQ.

This project requires the manufacturing and delivery of poles. Candidate harvesters are required to address their pole harvesting experience and their pole harvesting methodology for this project in the work plan.

All poles shall be marked prior to felling of any unit timber.

SECTION 4 QUOTE EVALUATION

4.01 Evaluation Team.

DNR will designate an evaluation team to evaluate Quotes. The evaluation team will evaluate quotes according to the requirements outlined in this RFQ and any addenda, which are issued.

4.02 Administrative Requirements.

The RFQ Coordinator will review all Quotes to determine compliance with administrative requirements and instructions specified in the RFQ. Only Quotes meeting the minimum requirements will be forwarded to the evaluation team for further review.

4.03 Responsibleness.

When evaluating Quotes, the evaluation team will consider candidate Harvester's responsibleness. A Candidate Harvester is responsible if it:

- Has adequate financial resources to perform the contract, or the ability to obtain them;
- Is able to comply with the required delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments;
- Has a satisfactory performance record. A Candidate Harvester shall not be determined responsible or non-responsible solely on the basis of a lack of relevant performance history, unless the DNR determines special standards are appropriate. A Candidate Harvester that is or recently has been seriously deficient in contract performance shall be presumed to be non-responsible, unless the DNR determines that the circumstances were properly beyond the Candidate Harvester's control, or that the Candidate Harvester has taken appropriate corrective action. Past failure to apply sufficient tenacity and perseverance to perform acceptably is strong evidence of non-responsibility. Failure to meet the quality requirements of the contract is a significant factor to consider in determining satisfactory performance. The DNR shall consider the number of contracts involved and the extent of deficient performance in each contract when making this determination.
- Any special standards will be properly identified in this solicitation and will apply to all Candidate Harvesters and their subcontractors.

4.04 Information Used for Evaluation.

Evaluators will use the information in the Candidate Harvester's Quote or bid form, their references, their previous Washington DNR performance evaluations, ability to meet special standards, and their Quote or 'Harvesting Services Contract Sealed Bid Form' including their 'Statement of Available Resources and Work Plan'.

4.05 Signatures

Quotes must be signed and dated by a person authorized to bind the Candidate Harvester to a contractual arrangement, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship.

4.06 Failure to Comply

If the Candidate Harvester fails to comply with any requirement of the RFQ, DNR will reject the Quote.

4.07 Rejecting Quotes

The DNR reserves the right at its sole discretion to reject any and all Quotes received without penalty and not to issue a contract from this RFQ. The DNR also reserves the right at its sole discretion to waive minor administrative irregularities contained in any Quote.

4.08 Lowest Responsible Bidder

Award of this Contract shall be to the lowest responsible bidder as determined by the DNR. In determining the lowest responsible bidder, in addition to price, the following may be considered:

- a. the ability, capacity, and skill of the bidder to perform the contract;
- b. the character, integrity, reputation, judgment, experience, and efficiency of the bidder;
- c. whether the bidder can perform the contract within the time specified;
- d. the quality of performance of previous contracts; and
- e. the previous and existing compliance by the bidder with laws relating to the contract or services. The DNR's determination that a bidder is not qualified shall result in rejection of the bid submitted.

4.09 Challenges to the Apparent Successful Bidder

- a. An unsuccessful bidder may appeal the bid award if they believe the process used to award the contract was not conducted properly. Please include the reasons why you believe the contract should not be awarded to the successful bidder.
- b. The DNR Region Manager must receive the appeal; in writing no later than 5 days from the date the letter was sent by fax or mail to the bidder notifying them that they were unsuccessful.

The Region Manager shall issue a written decision within 10 days of receipt of the appeal and cite the reasons for approving or disapproving the appeal.

- c. If the appellate is not satisfied with the decision of the Region Manager, the appellant may further appeal to the Deputy Supervisor-Uplands within 5 business days from the issuance of the Region Manger's written decision. The Deputy Supervisor-Uplands shall consider all information provided and issue a final decision in writing, citing reasons to approve or disapprove the appellant's appeal.

SECTION 5 RFQ EXHIBITS

- Exhibit A Estimated Harvest Project Schedule
- Exhibit B Draft Harvesting Services Contract
- Exhibit C Road Plan
- Exhibit D Timber Sale Map
- Exhibit E Harvesting Services Contract Sealed Bid Form



TIMBER NOTICE OF SALE

**SALE NAME: RENDEZVOUS
SORTS**

AGREEMENT NO: 30-94161 - 30-94169

**AUCTION: August 24, 2016 starting at 10:00
a.m.**

COUNTY: Skagit

Northwest Region Office, Sedro Woolley, WA

SALE LOCATION: Sale located approximately 25 miles east of Sedro-Woolley, WA.

PRODUCTS SOLD

AND SALE AREA: All delivered forest products, except trees marked with blue paint on the bole and root collar and forest products tagged out by yellow leave tree area tags, from an area bounded by white timber sale boundary tags, adjacent young stands and the DP-ML Road meeting the specifications described below meeting the specifications described below; on parts of Sections 33, and 34 all in Township 36 North, Range 7 East W.M., containing 70 acres, more or less.

MINIMUM BID AND ESTIMATED LOG VOLUMES:

Agreement #	Sort #	Species and Sort Specifications	Average Log Length	Estimated Volume		Tons Per MBF	Minimum Bid Delivered Prices		Total Appraised Value	Bid Deposit
				Mbf	Tons		\$/mbf	\$/Ton		
30-094161	01	DF HQ 12" + SED	32	537	3276	6.1	\$650.00		\$349,050.00	\$34,905.00
30-094162	02	DF Sawlog 20" + SED	32	552	2815	5.1	\$540.00		\$298,080.00	\$29,808.00
30-094163	03	DF 12" to 19" SED	28	1464	9223	6.3	\$540.00		\$790,560.00	\$79,056.00
30-094164	04	DF 6" to 11" SED	26	484	3436	7.1	\$500.00		\$242,000.00	\$24,200.00
30-094165	05	White Wood Sawlog 5"+ SED	26	355	2378	6.7	\$450.00		\$159,750.00	\$15,975.00
30-094166	06	RC Sawlog 5" + SED	28	155	976	6.3	\$1,050.00		\$162,750.00	\$16,275.00
30-094167	07	Conifer Utility		73	657	9		\$25.00	\$16,425.00	\$1,642.50
30-094168	08	Hardwood Utility		27	243	9		\$20.00	\$4,860.00	\$486.00
30-094169	09	DF Poles 40'+		82	508	6.2	\$700.00		\$57,400.00	\$5,740.00

Totals: **3729 23512** **\$2,080,875.00**

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BV-SFIS-US09000572)

BID METHOD: Sealed Bids **UNIT OF MEASURE:** MBF Scale/Tonnage Scale

EXPIRATION DATE: March 16, 2017 **ALLOCATION:** Export Restricted



TIMBER NOTICE OF SALE

**PAYMENT
SECURITY:**

To be determined by the State as described in Clause P-045.2 of the Purchaser's Contract.

**BIDDING
PROCEDURES:**

A separate sealed bid and envelope must be submitted for each log sort. Prospective Purchasers may bid on any or all log sorts. On the day of sale the Purchaser must bring their bid deposit up to 10% of their total bid price. Complete bidding procedures and auction information may be obtained from the Northwest Region Office in Sedro Woolley WA. Phone number (360)856-3500.

**TIMBER EXCISE
TAX:**

Purchaser must pay the forest excise taxes associated with the log sorts delivered to them. The tax rate for this sale is 4.2 %. Taxable Stumpage = Total Delivered Value – (Harvest Cost + Estimated Haul Cost + ARRF). For more information contact the Department of Revenue, Forest Tax Section at 1-800-548-8829.

Use the following rates for estimating taxable stumpage:

Harvest Cost = \$0.00 per MBF for sort 09, \$0.00 per MBF for sorts 01, 02, 03, 04, 05 and 06 and \$10.00 per Ton for sorts 07 and 08.

Hauling Services Payment Rate per Ton
= (Base Rate + Mileage Rate) x (Contractor's hauling bid factor)

Base Rate = \$2.35 per ton

Mileage Rate = ((\$0.16 x C miles) + (\$0.11 x A miles)) x Fuel Index Factor

ARRF = \$0.00 per MBF for sorts 07 and 08 and \$26.75 per MBF for sorts 01, 02, 03, 04, 05, 06 and 09.

Note: To calculate AARF rates per ton use the tons\mbf conversion factor in the table above.

CONFIRMATION:

Each sort is subject to confirmation following auction. Sorts will not be confirmed until at least 10 days after auction. Final contract award is contingent upon the State's haul cost analysis. Actual haul route may vary and is subject to change at the State's discretion.

SPECIAL REMARKS:

The successful Purchaser(s) will be required to purchase logs from the sale area upon delivery to their location specified in the bid submitted. Logs will be delivered to the Purchaser's delivery location by the State's contract harvester. Purchaser is responsible for weighing and scaling costs. All tonnage loads will be weighed and all mbf loads will be scaled at State approved locations. The State reserves the right to determine where logs are authorized to be scaled and weighed.

*Note: Harvesting services bid opening is tentatively scheduled for 07/27/16, which will establish the Contractor's harvest rate and the Contractor's hauling bid factor. Fuel Index Factor is indexed quarterly by the State. Log deliveries are anticipated to be from October 2016 through February 9, 2017.



TIMBER NOTICE OF SALE

For more information regarding this log sort sale visit our web site:
<http://www.dnr.wa.gov/programs-and-services/product-sales-and-leasing/timber-sales/timber-auction-packets>. If you have questions call Theresa Klepl at the Northwest Region Office at (360)856-3500 or Dave Richards at the Product Sales and Leasing Division Office in Olympia at (360)902-1365.

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

HARVESTING SERVICES CONTRACT

AGREEMENT NO. 30-093491

SALE NAME: RENDEZVOUS SORTS

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

Section G: General Terms

G-001.1 Definitions

The following definitions apply throughout this contract;

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

Contractor: State-selected harvester responsible to perform all duties as required by the Harvesting Services Contract, including but not limited to timber harvesting, road construction, debris removal and piling, hauling and delivery of forest products for weighing and/or scaling, to the Purchasers of the timber sales Sorts.

Delivery: Occurs when logs or forest products meeting the sorting specifications arrive at the Purchaser's destination, as described in the contract.

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

Harvesting: A general term, referring to the Contractor's various obligations under the Harvesting Services Contract.

Harvesting Services Contract: Contract between the Contractor and the State, which sets forth the procedures and obligations of the Contractor for completing the harvesting of timber, and the delivery of various log sorts to the State's purchasers, and the payment obligations of the State, The Harvesting Services Contract will include a Road Plan for any road construction or reconstruction, where applicable.

Log Sale and Purchase Contract: Purchase Agreement between the State and Purchaser(s) of particular log sorts from the timber sale.

Purchaser: The company or individual that has entered a Log Sale Contract with the State for individual log sorts from the timber sale area. The Contractor must deliver the designated log sorts to this company or individual. Contractor will likely be delivering different log sorts to different purchasers under the Harvesting Services Contract.

Road Construction Services: 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 logs 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 Contractor to perform a portion or all of the services required by the Harvesting Services Contract. The Contractor is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-015.1 Harvest Area and Location

Contractor shall harvest and deliver, All delivered forest products, except trees marked with blue paint on the bole and root collar and forest products tagged out by yellow leave tree area tags, from an area bounded by white timber sale boundary tags, adjacent young stands and the DP-ML Road meeting the specifications described below located on approximately 70 acres on part(s) of Sections 33, and 34 all in Township 36 North, Range 7 East W.M. of Skagit County as shown on the attached timber sale map.

G-020.1 Inspection by Contractor

Contractor hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products to be harvested. Contractor further warrants to the State that they enter this contract based solely upon their own judgment of the harvest and road work, and condition of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products to be harvested. Contractor 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.

G-022.1 Sorting Specifications

Contractor is responsible for sorting logs to the specifications listed below and hauling to the appropriate designated locations. Contractor is responsible for determining the highest value of each tree felled and the highest value destination of each log manufactured. The Contract Administrator will provide direction and guidance to Contractor with respect to highest value.

Logs produced under this contract will be manufactured by Contractor meeting the individual sort specifications and Purchaser's preferred log lengths, with a minimum length of 12 feet, unless otherwise directed by the Contract Administrator.

Contractor shall deliver log sorts to the Purchaser(s) location that meet the following specifications:

Agreement No.	Sort #	Species Diameter	Scaling Rule	Preferred Log Lengths	Destination	A Miles	C Miles
94161	1	DF HQ 12" + SED	WS				4
94162	2	DF Sawlog 20" + SED	WS				4
94163	3	DF 12" to 19" SED	WS				4
94164	4	DF 6" to 11" SED	WS				4
94165	5	White Wood Sawlog 5"+ SED	WS				4
94166	6	RC Sawlog 5" + SED	WS				4
94167	7	Conifer Utility	WS				4
94168	8	Hardwood Utility	WS				4
94169	9	DF Poles 40'+	WS				4

Unless otherwise specified, no blue stain is allowed in Ponderosa pine.

“WS” indicates that west side scaling rules apply. Minimum trim is 10 inches per scaling segment for west side scaling rules. “ES” indicates that east side scaling rules apply. Minimum trim is 6 inches per scaling segment for east side scaling rules.

Logs delivered by Contractor that do not meet the receiving Purchaser’s log sort requirements as described above that have been pre-approved for delivery by the Contract Administrator shall not be considered mis-sorts.

G-024.1 Manufacturing Standards

For sorts designated as non-utility, Contractor will manufacture and deliver logs with the following minimum specifications:

- a. Sweep will be limited to within the bole of the log as measured using a tape stretched between the centers of each end of the log.
- b. Limbs and knots shall be cut flush, with no more than 15 percent of a log having limbs or knots over 2 inches in diameter extending more than 2 inches above the surface of the log.
- c. Logs in peeler sorts shall be chuckable with no more than a 2 inch diameter area of rot within a 5 inch diameter circle located at the center of either end of the log.
- d. If poles are to be produced under this contract, they shall meet the specifications outlined in Schedule P, Pole Specifications.
- e.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	NW Ground-Based Equip Specifications (Rev 2/11/16)
B	Harvest Prescription
M	EQUIPMENT RATE (Hourly Rate including Operator)
P	POLE SPECIFICATIONS

G-027.1 Log Delivery Schedule and Conditions

- a. Contractor shall deliver logs to Purchaser’s designated delivery location per G-022.1 clause. If a log delivery location is changed during this contract, the Contract Administrator shall notify the Contractor. Once notified, the Contractor shall deliver logs to the new location.
- b. The Contractor may deliver logs to the Purchaser’s delivery location during the Purchaser’s working hours, or at least between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except, scheduled closures and legal holidays for the contract term as described in clause G-030.1, unless permission to do otherwise is agreed upon by the State.
- c. The Contractor agrees to deliver said logs on conventional or self-loading logging trucks, properly and legally loaded, bound, branded, and ticketed. Logs in loads shall not be double-ended unless approved in writing by the Contract Administrator. It is understood and agreed that the Purchaser incurs no obligation to accept improperly or illegally loaded trucks in its facility.

Any truck so loaded may be directed to vacate the yard and shall remain the responsibility of the Contractor to make the load conform to legal requirements for hauling.

- d. If a receiving Purchaser plans a scheduled closure, the Contract Administrator shall notify the Contractor at least 48 hours before the scheduled closure. Depending on the length of the scheduled closure or delays in log delivery, the Contract Administrator will decide in the best interest of the State on the disposition of the affected log sort(s) or any alternate delivery schedule or location.
- e. Contractor’s daily log delivery to a Purchaser’s location may be limited according to the table below, provided the Contract Administrator notifies the Contractor at least 48 hours prior to the time this truck delivery limit is established.

Sort(s)	Maximum No. Loads/day
01,02,03,04,05,06,07,08,09	10

- f. A truck delivery is all the wood hauled including sorts on super trucks, mule trains and pups brought to the delivery point by a single truck. Contractor shall notify the State’s Contract Administrator if for any reason a Purchaser refuses truck deliveries.

G-030.1 Contract Term and Expiration Dates

To ensure the timely completion of activities under this contract, the State shall determine the project starting date. The State shall notify the Contractor no later than fourteen (14) days prior to the anticipated starting date.

All activities required under this contract are to be completed between the starting date of September 8, 2016 and the expiration date of December 12, 2017. All forest product deliveries are to be completed prior to February 14, 2017.

Contractor shall not have any right to enter the sale area to perform harvesting services after contract expiration.

G-033.1 Curtailment of Operations

Contractor shall provide the State with five days advance written notice to the Contract Administrator of its intent to commence or cease any and all operations under this contact. The commencement or cessation of operations must be approved by the Contract Administrator. Failure to comply will be considered a breach.

G-040.1 Contract Term Adjustment

A Contract Term Adjustment may be considered based on actual time lost through unforeseeable causes beyond the control and without fault or negligence of the Contractor, including, but not restricted to, acts of the State, closures by government regulatory agencies, mill closures, fires, vandals, and unusually severe weather conditions, provided that the Contractor shall, within seven (7) calendar days of the initiation of such delay, notify the State, in writing, of the cause of delay, upon which notification the State shall ascertain the facts and extent of the delay and notify the Contractor in writing of its decision regarding contract adjustment.

G-054.1 Early Contract Termination

The State may terminate this contract prior to the expiration date listed in G-030.1 in whole or in part by giving fifteen (15) days written notice to the Contractor when it is in the best interests of the State. If this contract is so terminated, the State shall be liable to make payments to the Contractor for the sum of the estimated expenditures for road construction, felling, bucking, yarding and decking of products processed but not removed from the sale area due to termination action. Contractor may not seek any other damages from the State for early termination of this harvesting agreement.

G-060.1 Exclusion of Warranties

The following specific matters ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The **CONDITION** of the site or forest products. Any descriptions of the site or forest products in the notice of sale, other pre-contractual documents, or the Harvesting Services Contract are provided solely for administrative and identification purposes.
- b. The **ACREAGE** contained within any sale area. Any acreage descriptions appearing in the notice of sale, other pre-contractual documents, or the Harvesting Services Contract are estimates only, provided solely for administrative and identification purposes.
- c. The **VOLUME, WEIGHT, QUALITY, or GRADE** of the forest products to be harvested. The descriptions of the forest products to be harvested are estimates only, made solely for administrative and identification purposes.
- d. 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 informational purposes, but the information contained therein is not warranted. Contractors must make their own assessments of the site.

- e. 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.
- f. 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.
- g. Items contained in any other documents prepared for or by the State.

G-062.1 Habitat Conservation Plan

The Department 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 Department's HCP area and are subject to the terms and conditions of the HCP and the Services' Incidental Take Permit PRT- 812521 and ITP 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 Department's Region Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Contractor agrees to comply with the terms and conditions of the ITP and the HCP, which shall become terms of this contract. The Department agrees to authorize the lawful activities of the Contractor carried out pursuant to this contract, PROVIDED the Contractor 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 the Contractor to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by the Contractor, 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-063.1 Incidental Take Permit Notification Requirements

- a. Contractor shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITPs) 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. Contractor 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 ITPs, Contractor shall immediately notify the Contract Administrator. Contractor shall notify the Contract Administrator, if there is any doubt as to the identification of a discovered permit species. Contractor 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 Contract Administrator can determine the proper disposition of such specimens. The Contract Administrator will explain any such requirements to Contractor during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.
- c. Contractor shall refer to a specific ITP number, PRT-812521 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 ITPs shall be clearly presented and explained to Contractor by Contract Administrator during the Pre-Work Conference as per contract clause G-330.1. All applicable provisions of the ITPs and this schedule must be presented and clearly explained by Contractor to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Contractor may have about the ITPs should be directed to the Contract Administrator.

G-064.1 Permits

Contractor is responsible for obtaining any permits not already obtained by the State that relate to Contractor's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Contractor. Contractor 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-066.1 Governmental Regulatory Actions

- a. Regulatory Risk

Except as provided in this clause, Contractor assumes all risks associated with governmental regulatory actions, including actions taken pursuant to the Forest Practices Act, Ch. 76.09 RCW, the Endangered Species Act, 16 U.S.C 1531-1544 and any Habitat Conservation Plan between the Department of Natural Resources and the U.S. Fish and Wildlife Service or any other agency now in place and as may be amended, or hereafter created, that may affect the operability of the timber sale.

b. Increased Costs

Contractor 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 Contractor's failure to comply with this contract or from Contractor's acts or omissions, Contractor shall remain responsible for fulfilling contract obligations notwithstanding the impracticability or frustration.

G-070.1 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to the Contractor will be limited to a return of the Performance Security, and payment for improvements and other services rendered by the Contractor, which were required by the Harvesting Services Contract. The State shall not be liable for any damages, whether direct, incidental, or consequential.

G-092.1 Harvest Area Boundary Adjustment

The State may make adjustments in the harvest area boundaries, or may mark timber outside such boundaries. The cumulative changes to the sale area during the term of the contract shall not exceed more than five (5) percent of the original sale area. Such adjustments or marking will be accomplished by the Contract Administrator. The Contractor must remove and deliver all material so designated, prior to the expiration date of the contract. All contract services within such boundary adjustments or so marked shall be paid for at contract rates.

G-112.1 Title

All rights, title, and interest in and to any timber shall belong to the State until delivered, at which time the appropriate Purchaser assumes title.

G-116.1 Sustainable Forestry Initiative® (SFI) Certification

Forest products harvested and delivered under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number BV-SFIS-US09000572.

Contractor shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI® program Standard. Contractor 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-120.1 Responsibility for Work

All work, equipment, personnel, and materials necessary to perform the Harvesting Services Contract shall be the responsibility of the Contractor.

G-121.1 Exceptions

Exceptions to Contractor's responsibility in clause G-120.1 shall be limited exclusively to the circumstances described in this clause. These exceptions shall not apply where damages occur due to Contractor's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

The State shall bear the cost to repair any existing roadway or section of required road completed to the point that an authorization to haul has been issued where such damage was not caused by Contractor, its employees, agents, or invitees, including independent contractors. Contractor shall accomplish repairs promptly as required by the State at the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State may elect to accomplish repairs by means of State provided resources.

Nothing contained in clauses G-120.1 (Responsibility for Work) and G-121.1(Exceptions) shall be construed as relieving Contractor of responsibility for, or damage resulting from, Contractor's operations or negligence, nor shall Contractor be relieved from full responsibility for making good any defective work or materials.

G-123.1 Operating Authority

The State has arranged for the Contractor to have full and free license and authority to enter upon said lands with his agents and employees and do all things necessary, within the limitations herein set forth, in harvesting said timber as described in this contract.

G-124.1 Contractor Not an Employee of State

Contractor and his or her employees or agents performing under this contract are not employees of the State. The Contractor will not hold itself out as nor claim to be an officer or employee of the State by reason hereof, nor will the Contractor make any claim or right, privilege or benefits which would accrue to an employee under chapter 41.06 RCW or Chapter 28B.16 RCW.

G-125.1 Use of Subcontractors

Contractor's use of subcontracted services shall be subject to approval in writing by the Contract Administrator. Approval of subcontracted services may be revoked in accordance with the G-220.1 'State Suspends Operations' clause when the Contract Administrator determines that the Subcontractor's work has been performed in a manner that does not meet contractual requirements, optimize value or otherwise causes damage to the state.

Contractor shall arrange with the Contract Administrator to meet on site at least once a week during active operations to review and inspect subcontractor performance. Contractor shall provide a written plan of operations detailing planned operations for the following week.

G-126.1 Disputes with Subcontractors or Material Providers

Should Contractor and its subcontractors or materials providers develop disputes affecting the completion of obligations under this contract, Contractor shall resolve any such disputes in a timely and efficient manner that does not involve or adversely affect either the State or its Purchasers.

G-130.1 Prevention of Damage and Consequences of Contractor-Caused Damage

The Contractor agrees to exercise due care and caution at all times to avoid damage to all special resources including environmentally sensitive areas, research, demonstration, and cultural objects or areas. Additionally, the Contractor agrees to protect all improvements on State property affected by the work of this contract including, but not limited to, roads, culverts, bridges, ditches, fences, utility lines, and buildings.

If damages occur due to the Contractor's operations, the Contractor shall be responsible for damage or restoration costs, or other compensation measures as described in this contract. State may deduct damage or restoration costs from payments to the Contractor. This clause shall not relieve the Contractor from other applicable civil or criminal remedies provided by law.

G-140.1 Indemnity

To the fullest extent permitted by law, Contractor 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. Contractors' obligations to indemnify, defend, and hold harmless includes any claim by Contractors' agents, employees, representatives, or any subcontractor or its employees. Contractor expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Contractors' or any subcontractors' performance or failure to perform the contract. Contractors' 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. Contractor 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.

In addition to any other remedy authorized by law, the State may retain as much of the performance security, or any money or credits due Contractor necessary to assure indemnification.

G-150.1 Insurance

Contractor 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 also suspend Contractor operations until required insurance has been secured.

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 should issue all insurance and surety bonds. Any exception shall be reviewed and approved by the department's risk manager before the insurance coverage is accepted. 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 Northwest region office 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, Contractor shall furnish State 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. The Contractor shall obtain insurance coverage prior to operations commencing and continually maintain it in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Contractor 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 Contractor'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 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. Contractor

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 Contractor and such coverage and limits shall not limit Contractor'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, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Contractor 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. Contractor 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. Contractor shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Contractor 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, Contractor 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 Contractor, 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,

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

Business Auto Policy (BAP). Contractor 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. Contractor 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-160.1 Agents

The State's rights and duties will be exercised by the Region Manager. The Region Manager will notify Contractor 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-180.1. 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 harvested beyond the terms of this contract.

Contractor is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Contractor 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-170.1 Assignment and Delegation

Contractor shall assign no rights or interest in this contract 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. Contractor may perform any duty through a delegate, but Contractor 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 Contractor.

G-180.1 Modifications

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

G-181.1 Contract Modification for Protection of Resources and Improvements

The Harvesting Services contract may be unilaterally terminated or modified by the State upon determination that the Contractor's operations would cause serious damage to resources or improvements, or would be significantly inconsistent with State land management plans.

In the event of contract modification under this section and through no fault of Contractor operations, the Contractor shall be reimbursed for any additional operations required, provided that any work or extra protection shall be subject to prior approval of 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-200.1 Notice

Notices required to be given by the State under the following clauses shall be in writing and shall be delivered to the Contractor's authorized agent or sent by certified mail to the Contractor's post office address, so that their receipt may be acknowledged by Contractor.

G-030.1 Commencement Date

G-092.1 Harvest Area Boundary Adjustment

G-181.1 Contract Modification for Protection of Resources and Improvements

G-210.1 Violation of Contract

G-220.1 State Suspends Operation

D-015.1 Delivered Mis-sorted Logs and Penalties

D-016.1 Damages for Delivered Mis-manufactured Logs

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. Contractor agrees to notify the State of any change of address.

G-210.1 Violation of Contract

- a. If Contractor 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, the Contractor has fifteen (15) days after receipt of suspension notice to remedy the violation. If the violation cannot be remedied or Contractor fails to remedy the violation within fifteen (15) days after receipt of a suspension notice, the State may terminate the rights of the Contractor and collect liquidated damages under this contract associated with the breach. In the event of such a contract termination, the State may demand all or part of the Contractor's surety in order to satisfy the State's damages.
- b. The State has the right to remedy a breach if Contractor is unable, as determined by the State, to remedy the breach, or if the Contractor has not remedied the breach within 15 days of a suspension notice. Any expense incurred by the State in remedying Contractor's breach may be charged to Contractor, or State may deduct such expenses from payments to the Contractor.

- c. If the contract expires without the Contractor having performed all their duties under this contract, Contractor's rights and obligations to harvest, deliver forest products, and perform any additional contract-related requirements are terminated. Thus, Contractor cannot remedy any breach once this contract expires. This provision shall not relieve Contractor of any financial obligations and unresolved contractual agreements, including payment to sub-contractors for work performed under this contract.

G-220.1 State Suspends Operations

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

Contractor shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes prior to approval and notice from the Contract Administrator.

Contractor may request a modification of suspension within seven (7) calendar days of the start of suspension through the dispute resolution process. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Contractor may request a contract term adjustment based on the number of excess days of suspension.

G-230.1 Unauthorized Activity

Any cutting, removal, or damage of forest products by Contractor, 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 Contractor 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-240.1 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, Contractor 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 Contractor's request within five business days.
- c. Within five business days of receipt of the Region Manager's decision, the contractor may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.

- d. Unless otherwise agreed, the Deputy Supervisor - Uplands will hold a conference within 15 calendar days of the receipt of Contractor's request for review of the Region Manager's written decision. Contractor 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-250.1 Compliance with All Laws

Contractor 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. Contractor shall provide documentation from Washington State Departments of Labor and Industries and Revenue that all obligations concerning worker compensation and safety will be met. 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-270.1 Equipment Left on State Land

All equipment owned or in the possession of Contractor, 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 30 days after the expiration of the contract period is subject to disposition as provided by law. Contractor 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-280.1 Operating Release

An operating release is a written document, signed by the State and the Contractor, indicating that the Contractor has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Contractor 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, Contractor's right to cut and remove forest products on the released area will terminate.

G-310.1 Road Use Authorization

The Contractor is authorized to use the following State roads, and roads for which the State has acquired easements and road use permits; DP-ML, DP-15, DP-32, DP-37, DP-3702, DP-42, BI-ML, and BI-14. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330.1 Pre-work Conference

Contractor 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 Contractor 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 Contractor's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Contractor's purposes or complies with applicable laws.

Contractor shall arrange with the Contract Administrator to review this contract and work requirements with any and all subcontractors prior to receiving authorization for any subcontractor to begin operations.

G-340.1 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Contractor shall, at the Contractor'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-430.1 Open Fires

The Contractor its employees or its subcontractors shall not set or allow to be set any open fire at any time of the year without first obtaining permission in writing from the Contract Administrator.

G-450.1 Encumbrances

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

DATA MISSING

Section P: Payments and Securities**P-030.1 Payment for Harvesting and Hauling Services**

The State shall pay Contractor for harvesting and hauling services at the following rates:

Payment for Harvesting Stump to Truck ('On Board Truck' or OBT): The State's payment to the Contractor for harvesting services will be in accordance with the following table;

Sort Number(s)	Unit of Measure	OBT Rate	OBT Utility Rate
01,02,03,04,05,06,09	MBF	\$0.00	\$20.00
07,08	Ton	\$10.00	N/A

Utility volume for mbf sorts determined on an adjusted gross scale basis.

Payment for Hauling: The State's payment to the Contractor for hauling services upon the tons delivered multiplied by: a base rate, 'A' and 'C' mile rates, the 'haul miles' listed in clause G-022.1, a fuel index factor and the Contractor's hauling bid factor using the following formula:

Hauling Services Payment Rate per Ton
 = (Base Rate + Mileage Rate) x (DATA MISSING)

Base Rate = \$2.35
 (based on the multiple truck operation fixed cost/ton within 'Report to the Washington State Legislature, The Washington Log Trucking Industry: Costs and Safety Analysis, August 2008'.)

Mileage Rate = ((\$.16 x C miles) + (\$.11 x A miles)) x Fuel Index Factor

The Fuel Index Factor will be adjusted quarterly by the State based upon the U.S. Energy Information Administration's Weekly Retail On-Highway Diesel prices for the West Coast region posted at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp> using the following formula;

Fuel Index Factor = $1 + ((Q(x) - Q(\text{base})) / Q(\text{base}))$

Where;

Q(base) = Average fuel price for quarter preceding harvesting services contract bid opening.

Q(x) = Average fuel price for quarter preceding log deliveries.

The fuel index factor will be calculated each;
 January and apply to loads delivered between January 1 and March 31,
 April and apply to loads delivered between April 1 and June 30,
 July and apply to loads delivered between July 1 and September 30,
 October and apply to loads delivered between October 1 and December 31.

Travel distances to each log sort destination will be determined by the State and represents the one-way travel distance from the sale area to the purchaser's delivery point.

The state must approve all haul routes and will determine travel distances prior to contractor delivery of logs to each specified destination. The State may determine alternate haul routes and delivery destinations during the course of this contract. Upon notification by the State, the Contractor is required to deliver logs: using the alternative

route, or to State approved alternative delivery locations. Payment rates for approved alternate routes and delivery destinations shall be set forth by amending this clause in accordance with clause G-180.1.

For sorts bid on an mbf basis tonnage will be calculated using the State’s conversion rates in the table below unless actual tonnage is available and approved for use. For tonnage sorts, actual tonnage shall apply.

MBF Sort(s)	MBF/Tons Conversion Factor
01	6.1
02	5.1
03,06	6.3
04	7.1
05	6.7
09	6.2

Contractor is responsible for billing the State for harvesting and hauling services performed using load data collected by State approved third party scaling organizations and reported by the State designated Log and Load Reporting Service. The billing statement shall include itemized accounts and summaries of harvesting tonnage and hauling mileage charges in a format approved by the State.

The billing schedule shall be the 1st and the 16th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 15th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-031.1 Payment for Hauling Across Ferries and Other Miscellaneous Tolls

Prior approval is required for payment of any additional transportation charges incurred by Contractor, including ferries, toll bridges, and other miscellaneous tolls.

If the Contract Administrator authorizes hauling across ferries, toll bridges, or other miscellaneous tolls, the Contractor’s billing statement must include an itemized list of loads by ticket number and date of crossing(s) with receipts for each ferry crossing and/or number of toll bridge crossings attached. ‘Good to Go’ regulated bridge tolls will be reimbursed at a fixed rate of per toll crossing. Miscellaneous tolls controlled by the Washington State Transportation Commission (WSTC), or other government agencies, will be reimbursed at their posted rates or the actual cost with receipts, whichever is less.

Requests for payment of additional transportation charges must be received by the State prior to contract termination. Contractor shall only be reimbursed for the amount of toll approved by the Contract Administrator.

Payment for tolls incurred for backhauling loaded trucks shall be the responsibility of the Contractor and will not be reimbursed by the State.

Convenience tolling will not be reimbursed.

P-032.1 Payment for Road Construction

The Contractor is responsible for independently negotiating, procuring and paying for road construction services provided.

The State shall pay Contractor for roadwork completed at the following rates:

Roads or Structures	Number of Stations	Dollars per Station
Pre-Haul Maintenance - Required		
DP-ML (0+00 to 29+21)	29.21	
DP-ML (29+21 to 64+63)	35.42	
DP-ML (64+63 to 237+88)	173.25	
DP-15 (0+00 to 62+67)	62.67	
DP-32 (0+00 to 55+60)	55.6	
BI-14 (0+00 to 129+79)	129.79	
Pre-Haul Maintenance - Optional		
DP-37 (0+00 to 12+38)	12.38	
Construction - Optional		
DP-3702 (0+00 to 8+73)	8.73	
DP-42 (0+00 to 5+83)	5.83	
DP-42 (5+83 to 10+25)	4.42	
Post-Haul Maintenance - Required		
DP-ML (0+00 to 29+21)	29.21	
DP-ML (29+21 to 64+63)	35.42	
DP-ML (64+63 to 237+88)	173.25	
DP-15 (0+00 to 62+67)	62.67	
DP-32 (0+00 to 55+60)	55.6	
BI-ML (0+00 to 102+57)	102.57	
BI-14 (0+00 to 129+79)	129.79	
Post-Haul Maintenance – Required if used		
DP-37 (0+00 to 12+38)	12.38	

Abandonment – Required if segment built		
DP-3702 (0+00 to 8+73)	8.73	
DP-42 (0+00 to 10+25)	10.25	
Additional Work or Materials	Quantity or Hourly	Dollars per Quantity or Hour
Curve widening of haul route (multiple sites) (See H-141)		
Rock: delivered and spread	Cubic Yard	\$15.50
Excavator	Hourly	\$250.00
Dump Truck: (only to be used for end haul)	Hourly	\$106.00
Dump Truck w/ tilt: (for ecology block delivery)	Hourly	\$118.00

One station of road construction is 100 feet. All materials, equipment time, labor, and equipment mobilization costs are included in the total price.

Upon completion of road construction, the Contractor shall submit a report identifying the road(s), and the number of stations that have been completed to the Contract Administrator. Once the Contract Administrator has approved the roadwork in writing, the Contractor is responsible for billing the State for road construction services performed. The billing statement shall include an itemized account of the road(s), the number of stations and which stations have been completed. The Contract Administrator will verify that road construction described on the billing statement is complete prior to State making payment to Contractor.

The billing schedule shall be the 1st and the 15th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 14th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-033.1 Payment for Additional Road Maintenance Work

The Contractor is responsible for independently negotiating, procuring and paying for additional road maintenance services provided.

During the course of operations, the State may identify and require additional road maintenance work to be completed by the Contractor. The amount of payment for this additional road maintenance work deemed necessary by the State will be calculated and paid for using the equipment rates in Schedule M 'Additional Road Maintenance Payment Rates'.

Upon completion of any additional road maintenance work, the Contractor shall submit a report identifying the road(s), and the number of stations that have been completed to the Contract Administrator. Once the Contract Administrator has approved the additional road maintenance work in writing, the Contractor is responsible for billing the State for additional road maintenance services performed. The billing statement shall include an itemized account of the road(s), the number of stations and which stations have been completed. The Contractor Administrator will verify that road maintenance described on the billing statement is complete prior to State making payment to Contractor. The billing schedule shall be the 1st and the 15th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 14th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-034.1 Payment for Additional Miscellaneous Work

During the course of operations, the State may identify and require additional miscellaneous work to be completed by the Contractor.

A plan for the additional work deemed necessary by the State shall be provided by the Contractor and must be approved in writing by the State prior to commencement of work by the Contractor. After the Contract Administrator has inspected and approved the work in writing, the Contractor is responsible for billing the State for work performed. The billing statement shall include an itemized account of the equipment, labor and materials necessary for the additional work that has been completed and approved.

The State shall reimburse the Contractor for approved costs within thirty (30) days of State's approval of the statement.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-090.1 Performance Security

Prior to start of any operations Contractor agrees to provide one or more of the following State approved performance securities; cash, savings account assignment, certificate of deposit assignment, irrevocable standby letter of credit, or a Miller Act

bond, for the amount of \$50,000.00. At least 50% must be in a form other than a bond, unless otherwise agreed to by the State.

Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by Contractor's operations, failure to perform, or noncompliance with any rule or law. In addition, said security may be used by the State to satisfy any claims or liens made by Contractor's subcontractors, material providers, or other individuals against the State or its Purchasers, which arise from this Harvesting Services Contract.

If at any time the State decides that this security has become unsatisfactory, the Contractor agrees to suspend operations and, within fifteen (15) days of notification, replace the security with one acceptable to the State. The State may also require increases to the existing performance security at any time.

Unapplied performance security will be returned to Contractor after the State issues an operating release and completes the financial closeout.

P-100.1 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 Contractor. Prior to any reduction of the performance security amount, the Contractor must submit a written reduction request. No reduction will be allowed by the State unless such reduction can be made while fully protecting the State's interests.

P-120.1 Contractor Responsibility for Subcontractor Services

Contractor is responsible for negotiating, procuring, and paying for all services rendered by any subcontractor. Subcontractor services may include, but are not limited to, harvesting logs, hauling logs, and building roads.

Section L: Log Definitions and Accountability

L-010.1 Forest Products Conveyed

Forest products conveyed are logs or parts of logs delivered meeting the sorting criteria defined by clauses G-022.1 and G-024.1 of this contract.

L-013.1 Log Sorts Delivered to Incorrect Destination

Purchasers have agreed to purchase the log sort (s) as described in the G-022.1 clause. In the event a load of logs from an incorrect sort is delivered to a Purchaser, the Purchaser may reject the load. If Purchaser receives an incorrectly delivered load, Contractor shall notify the State within 24 hours. The Contractor will maintain responsibility for proper disposition and delivery of incorrectly delivered loads.

L-060.1 Load Tickets

Contractor shall complete and use load tickets as directed by the Contract Administrator and, if required, use other identification as directed by the State to ensure accounting of forest products removed from the sale area. A load ticket must be fixed,

as designated by the Contract Administrator, to each truck and trailer load prior to leaving the landing.

Contractor shall account for all load tickets issued by the Contract Administrator. The State may treat load tickets not accounted for as lost forest products. All costs associated with computing the billings for lost loads shall be borne by Contractor.

L-080 Scaling Rules

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

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

L-110 State Approval of Log Scaling and Weighing Locations

Forest Product measurement and weighing facilities required by this contract must be approved by the State. Forest products sold under the contract which require log scaling shall be scaled, measured, or counted by a State approved third party log scaling organization. Forest products sold under the contract which require weighing shall be weighed at a location that meets Washington State Department of Agriculture approval.

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

L-114.1 State Approval of Haul Route

Contractor shall file with the Contract Administrator and Contract Administrator shall approve a map showing the haul route, which unscaled and unweighed logs will travel from the harvest area to the weighing/scaling location and approved destinations. The Contractor must notify Contract Administrator within 24 hours of any deviation from the haul route. The route of haul may be changed by prior agreement of the State and the Contractor. The Contract administrator must be notified by the Contractor of any overnight stays of an unscaled or unweighed load of logs.

L-130.1 Conversion Factors

Forest products harvested and delivered from the sale area that are not measured in units specified in the P-030.1 'Payment for Harvesting and Hauling Services' clause of this contract shall be converted to the contract specified payment units using

Department of Natural Resources conversion factors unless a plan to do otherwise has been pre-approved by the State.

Section H: Harvesting Operations

H-001 Operations Outside the Sale Boundaries

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

H-010.1 Cutting and Yarding Schedule

Ground Based Yarding will not be permitted from November 1 to March 31 (without an approved protection/mitigation plan) unless authorized in writing by the Contract Administrator.

H-012.1 Leave Tree Damage Definition

Leave trees are trees required for retention within the sale boundary. Contractor 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 Contractor's operation, as determined by the Contract Administrator:

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 100 square inches.
- b. A leave tree's 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 Contractor may be required to pay liquidated damages for Excessive Leave Tree Damage as detailed in clause D-040.1.

H-013.1 Reserve Tree Damage Definition

Reserve trees are trees required and designated for retention within the sale boundary. Contractor 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 Contractor'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 200 square inches.
- b. A reserve tree's 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 Contractor shall provide a replacement reserve tree of like condition, size, and species within the sale area, as approved by the Contract Administrator. Contractor may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.1.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230.1 'Trespass and Unauthorized Activity' clause. Contractor is required to leave all cut or damaged reserve trees on site.

H-015.1 Skid Trail Requirements

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

- a. Skid trail 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 each unit.
- c. Skid trails will be pre-approved by the Contract Administrator.
- d. Except for rub trees, skid trails shall be felled and yarded prior to falling 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.

Violation of any part of this clause will be cause to revoke the Contractor's rights to harvest and to enter the sale area.

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 4 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-030.1 Timber Falling

Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization and value of forest products.

H-035 Fall Trees Into Sale Area

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

H-052.1 Branding and Painting

The State shall provide a State of Washington registered log brand. Contractor must brand and paint all logs removed from the harvest area in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All logs removed from the harvest area 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, Contractor shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

H-060.1 Skid Trail Locations

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

H-080 Snags Not to be Felled

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

H-120.1 Harvesting Equipment

Forest products harvested under this contract shall be removed using felled by chainsaw and yarded by cable; felled by chainsaw or feller-buncher and yarded by forwarder or tracked skidder or cable on sustained slopes 35% or less in VDT units; felled by chainsaw or feller-buncher and yarded by cable or shovel or forwarder or tracked skidder (except tracked skidder locations must be pre-authorized by the Contract Administrator) on sustained slopes 35% or less in VRH units,, unless authority to use other methods or equipment is granted in writing by the State.

H-130.1 Hauling Schedule

The hauling of forest products will not be permitted (without an approved protection/mitigation plan) from November 1 to March 31 unless authorized in writing by the Contract Administrator .

H-140.1 Special Harvest Requirements

Contractor shall accomplish the following during the harvest operations:

- A. An on-site pre-work meeting shall be scheduled with the Contract Administrator, which shall include the Contractor and authorized onsite representative(s), prior to commencement of any activities on site.

- B. A copy of the timber sale map and contract shall be present on site during active operations.
- C. Down woody debris shall be left where it lies, where operationally feasible.
- D. Harvesting will be restricted to periods of drier weather conditions to minimize impacts to soil.
- E. Shovel yarding is limited to approximately 400-600 feet from roads. Otherwise logs must be shovel yarded to skid trails designated by the Contract Administrator and forwarded to roads with a tracked skidder or forwarder. The existing grade in Unit 1 shall be a designated skid trail.
- F. If ground disturbance is causing excessive damage, as determined by the Contract Administrator, skidders will no longer be authorized.
- G. Streambeds and banks shall be protected by log puncheon or other approved structures at crossing points and removed upon the completion of yarding activities. Temporary log crossings that protect stream bank integrity are required for Type 5 water crossings and must be approved in writing by the Contract Administrator. Structures shall be limited to crossing points approved in writing by the Contract Administrator.
- H. Fall and yard away from all typed waters where possible. Type 5 streams will have a 30-foot equipment limitation zone measured from each bank. Limited, pre-approved crossings shall be as close to perpendicular as possible.
- I. The Purchaser's authorized site representative(s) shall be present on site every day in which operations occur.
- J. All poles shall be marked prior to felling of any unit timber.

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

H-141.1 Additional Harvest Requirements

Contractor shall accomplish the following during the harvest operations:

- A. Individually marked leave trees (Single blue-ring painted leave trees only) in the VRH portion of the sale area may be exchanged for unmarked trees of similar size, species and wildlife characteristics for operational purposes with prior written approval from the Contract Administrator.
- B. Make a consistent flow of deliveries throughout the delivery period without unnecessary delay. No unauthorized shut downs or gaps in deliveries of logs will be allowed.

- C. Must have all documentation (performance security, certification of insurance, proof of successful completion of an approved training program per clause G-116.1, etc.) in place and be ready to begin operations upon approval to commence activity on site as per the project start date. Road reconstruction must begin as soon as possible upon approval by Contract Administrator.
- D. Must begin onsite operations, to include falling of timber, as soon as approval is granted in writing by the State, subsequent to the confirmation of sale of log sorts. This date is tentatively scheduled September 8, 2016.
- E. Provide a production plan and log shipment schedule, with deliveries to commence no later than 2 weeks subsequent to falling.
- F. Provide an alternative plan or demonstrate the capability to increase production (if needed) in case of weather and/or regulatory related shut down(s) to meet target completion date.
- G. Contactor to perform curve widening on the haul route (existing roads: DP-ML, BI-14 and DP-32) for delivery of Sort 9, pole sort, per the directions of the Contract Administrator. Work may only be executed with the DNR District Engineer on site. Payment as per clause P-32.1.

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

H-150.1 Required Removal of Forest Products

Contractor shall remove from the sale area, present for scaling and deliver to the designated purchaser locations specified in the G-022.1 clause all forest products conveyed that meet the following minimum dimensions unless directed otherwise by the Contract Administrator:

Species	Net Bd Ft	Log Length (ft)	Log dib (in)
Conifer	10	12	5
Hardwood	20	16	5

The State may treat failure to remove forest products left in the sale area that meet the above specifications as a breach of this contract. The Contractor shall be responsible for forest products not removed. At the State's option, the State or a third party scaling organization may scale forest products, for volume, that meet the above specifications and are left in the sale area. State may deduct the value of forest products not removed from payments to the Contractor for harvesting services rendered. All costs associated with scaling and computing the billing for forest products left in the sale area will be borne by Contractor.

If Contractor's failure to remove all the forest products specified under the contract is due to circumstances beyond the control and without fault or negligence of the Contractor including, but not restricted to, acts of the State, closures by government regulatory agencies, mill closures, fires, vandals, and unusually severe weather conditions, the State may elect to modify the required removal requirements. Contractor is required to request contract removal requirement modifications in writing. The State shall consider such requests and may grant them in part or entirety only when Contractor has demonstrated that they have been endeavoring to complete the project and are otherwise performing with due diligence.

H-161.1 Excessive Timber Breakage

The Contractor shall be responsible for felling and yarding timber in a manner that shall minimize breakage and maintain stump heights within contract specifications, unless permission to do otherwise is agreed to by the Contract Administrator.

The State may treat excessive timber breakage, as determined by the Contract Administrator as a breach of this contract. At the State's option, the State or a third party scaling organization may scale forest products, for volume. State may deduct the value of forest products damaged through excessive breakage from payments to the Contractor for harvesting services rendered. All costs associated with scaling and computing the billing for forest products damaged through excessive breakage will be borne by Contractor.

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.

Section C: Construction and Maintenance

C-040.1 Road Plan

Road construction and associated work provisions of the Road Plan for this project, dated February 11, 2016 are hereby made a part of this contract.

The State may make modifications to the Road Plan made necessary by unforeseen conditions. Any modifications that create additional work for the Contractor shall be paid in accordance with the payment terms set forth in this contract.

C-050.1 Contractor Road Maintenance and Repair

Contractor shall perform work at their own expense on DP-ML, DP-15, DP-32, DP-37, DP-3702, DP-42, BI-ML, and BI-14 roads road(s). All work shall be completed to the specifications detailed in the Road Plan.

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-010.1 Fire Hazardous Conditions

Contractor acknowledges that operations under this Contract may increase the risk of fire. Contractor 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, Contractor agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

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

S-050 Cessation of Operations for Low Humidity

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

S-060.1 Pump Truck or Pump Trailer

Contractor 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-100 Stream Cleanout

Slash or debris which enters type 5 streams as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-120 Stream Protection

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

S-130.1 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Contractor 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. Contractor shall be responsible for restoring the site in the event of a spill.

b. Hazardous Materials Spill Prevention

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

c. Hazardous Material Spill Containment, Control and Cleanup

If safe to do so, Contractor shall take immediate action to contain and control all hazardous material spills. Contractor shall ensure that enough quick response spill kits capable of absorbing 4 to 6 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Contractor 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 Contractor to have all emergency contact information readily available and a means of remote communication for purposes of quick notification. In the event of a spill, the Contractor is responsible for notifying the following:

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

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000

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

ECY - Southwest Region:

1-360-407-6300

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

ECY - Central Region:

1-509-575-2490

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

ECY - Eastern Region:

1-509-329-3400

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

S-131.1 Refuse Disposal

As required by RCW 70.93, All Contractor 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-010.1 Liquidated Damages

The clauses in the DAMAGES section of this contract provide for the State's payments to the Contractor to be reduced for certain breaches of the terms of this contract. These offsets are agreed to as liquidated damages for the Contractor's breach, and are not penalties. They are reasonable estimates of anticipated harm to the State caused by the Contractor's breach. The State and Contractor agree to these liquidated damages provisions 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 Contractor by allowing the Contractor to better assess its responsibilities under the contract.

D-015.1 Damages for Delivered Mis-sorted Logs

Logs delivered by Contractor that do not meet the receiving Purchaser's log sort specifications as described in clause G-022.1, where species are mixed, or are over 1" out of tolerance of scaling diameter, and logs not meeting the minimum length requirements as designated for this contract, and unless otherwise indicated, logs containing blue stain are considered mis-sorts.

Mis-sorted log volume will be considered on a per load basis. When mis-sorts amount to more than 5% of a load's total volume, as determined by a third party scaling organization, the State is harmed and an adjustment to the Contractor's harvesting payment may be made. For the improper delivery of mis-sorted logs, the State may reduce the harvesting payment by \$100.00 for each load delivered which contained mis-sorted volume in excess of 5%, as documented by third party scaling ticket.

D-016.1 Damages for Delivered Mis-manufactured Logs or Poles

Logs or Poles delivered by Contractor that do not meet the receiving Purchaser's preferred log length specifications as described in clause G-022.1, and logs not meeting minimum log quality specifications for sweep, peeler sorts, untrimmed limbs and knots as described in the G-024.1 clause are considered mis-manufactured logs or poles.

Mis-manufactured log or pole volume will be considered on a per load basis. When mis-manufactured logs or poles amount to more than 5% of a loads total volume, as determined by a third party scaling organization, the State is harmed and an adjustment to the harvesting payment may be made. For the delivery of mis-manufactured logs or poles, the State may reduce the harvesting payment due to the Contractor by an amount of \$100.00 for each load of logs or \$300 for each load of poles delivered which has been determined to contain mis-manufactured volume in excess of 5% as documented by third party scaling ticket.

D-023.1 Damages for Failure to Remove Forest Products

Contractor's failure to remove all of the forest products specified prior to the expiration of the contract operating authority results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. The Contractor's failure to perform disrupts the State's management plans in the project area, the actual cost of which is difficult to assess. A re-offering of the contract involves additional time and expense and is not an adequate remedy. Therefore, the Contractor agrees to accept a reduction of the amount due for harvesting services from the State in the amount calculated according to the following guidelines:

- a. Full stumpage value will be assessed for felled trees, individual or scattered standing trees, or clumps of standing trees less than three acres in size, plus all costs associated with scaling and computing the stumpage value of the forest products left.
- b. 35% of full stumpage value will be assessed for clumps of standing trees greater than three acres in size, plus all costs associated with scaling and computing the stumpage value of the forest products left.

The stumpage value of forest products left shall be determined by the State or a third party scaling organization utilizing whatever method(s) best suited for accurate volume and acreage measurement as determined by the State.

D-024.1 Damages for Excessive Timber Breakage

Excessive breakage of timber results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. Therefore, the Contractor agrees to accept a reduction of the amount due for harvesting services from the State at an amount calculated according to the following:

The value for excessive timber breakage will be determined at a rate, which reflects the log sort price that the Purchasers would have paid for unbroken logs minus the cost of delivery, plus all costs associated with scaling and computing the stumpage value of the forest products excessively broken.

The stumpage value of forest products excessively broken shall be determined by the State or a third party scaling organization utilizing whatever method(s) best suited for accurate volume measurement as determined by the State.

D-030.1 Inadequate Log Accountability

Removal of forest products from the sale area without adequate branding and/or valid load tickets attached to the load, weighing or scaling forest products in a location other than the facilities authorized for use for this sale, and failing to deliver load ticket to the weighing/scaling official all result in substantial injury to the State. The potential loss from not having proper branding, ticketing, weighing locations and accountability is not readily ascertainable. These contractual breaches result in a loss of load and weighing/scaling data the potential for the removal of forest products for which the State receives no payment, and cause increases in the State's administration costs associated with this contract. The actual costs of these breaches are difficult to assess.

For these reasons, Contractor's payments for harvesting under this contract will be reduced in the following amounts, as liquidated damages, to compensate the State for these breaches: a sum of \$100.00 each time a load of logs does not have branding as required in the contract, \$250.00 each time a load of logs does not have a load ticket as required by the contract, \$250.00 each time a load ticket has not been filled out as required by the plan of operations, \$250.00 each time a load is weighed or scaled at a facility not approved as required by the contract, and \$250.00 each time load and weight scale data is not presented to the weighing/scaling official.

D-040.1 Leave Tree Excessive Damage

When Contractor's operations exceed the damage limits set forth in clause H-012.1, 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, Contractor agrees to pay the State as liquidated damages at the rate of \$50.00 per tree for all damaged trees in the Variable Density Thinning areas.

D-041.1 Reserve Tree Excessive Damage

When Contractor's operations exceed the damage limits set forth in clause H-013.1, 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 Contractor 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.

DRAFT

DRAFT

DRAFT

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Jean Fike
Northwest Region Manager

Date: _____
Address: _____

Date: _____

CORPORATE ACKNOWLEDGEMENT

STATE OF _____)

COUNTY OF _____)

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

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

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

Notary Public in and for the State of

My appointment expires _____

Schedule A
NW Ground-Based Equip Specifications (Rev 2/11/16)

The following types of equipment are considered ground-based equipment: feller-buncher, processor, forwarder, skidder and shovel.

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.

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

FOR ALL YARDING:

Equipment will 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.

Logging debris created by the operation will be removed from water courses concurrently with yarding.

WHEN SHOVEL YARDING IS AUTHORIZED:

S1. When yarding and loading operations are occurring simultaneously, an additional shovel will be required for loading to avoid extra trips to the landing.

S2. Shovel yarding will not be allowed to create ruts or soil puddling. Shovel routes should be dispersed to prevent creation of definable trails.

S3. Within shovel logged areas, to facilitate proper reforestation, logging debris will be dispersed as necessary to create clear, plantable spots at approximately a 11 foot x 11 foot spacing. Planting spots will be created concurrently with yarding.

LOG PROCESSORS will be allowed within the sale area only under one of the following conditions:

1. No tops or limbs will be allowed to accumulate on any landings, and all tops and limbs will be re-distributed into the unit, to the satisfaction of the Contract Administrator, and will provide for plantable spots every 11 feet by 11 feet.
2. Harvester must provide a written slash treatment plan, acceptable to the Contract Administrator, to address the additional slash accumulation. The Slash Treatment Plan will be a part of the Plan of Operations.

Schedule B
Harvest Prescription

VARIABLE RETENTION HARVEST AREAS (UNITS 1 AND 2)

All timber within the unit except trees marked with blue paint on the bole and root collar, forest products tagged out by blue special management area tags, forest products tagged out by yellow leave tree area tags, and cedar snags, preexisting dead and down cedar trees and cedar logs in Unit.

DAYLIGHTING ALONG ROADS:

All trees marked with orange paint along the DP-3702 Road are take trees.,

VARIABLE DENSITY THINNING (VDT) WITHIN RMZ/WMZ AREAS:

Purpose:

The VDT harvest activities within the special management areas are occurring exclusively in Wetland Management Zones (WMZ) and Riparian Management Zones (RMZ). These activities are being conducted under the direction of the Riparian Forest Restoration Strategy as part of the State Lands HCP.

Description:

These special management areas begin at blue special management unit boundary tags with pink ribbon up to the white timber sale boundary tags with pink ribbon and DP-ML Road within Units 1 and 2.

Thinning Prescription:

Douglas-fir stems 18" to 28" at dbh, western hemlock stems 16"-28" and all red alder stems are eligible for harvest. Only those trees that can be felled and yarded without inflicting damage (as defined in the H-012 clause) to non-take trees may be harvested.

- Any part of a take tree inadvertently felled beyond the timber sale boundary tags must be bucked off at the tag line and that portion of the tree extending beyond the tag line must be left.

- Any tree designated for take as described above with a blue special management boundary tag on it may be harvested.

Other requirements:

Within the special management areas associated with RMZs, five of the largest designated take trees per acre must be felled towards the buffered creek to serve as downed woody debris recruitment. These trees shall be selected in the area within 25 feet of the white “timber sale boundary” tags (25 to 50 feet from the stream channel). These selected DWD recruitment trees must be evenly distributed throughout that portion of the RMZ. WMZ are exempt from this DWD recruitment requirement.

Schedule M
EQUIPMENT RATE
(Hourly Rate including Operator)

Revised 07/01/2016

Motor Grader

To 140 HP	CAT 120H, 120M	138.00
To 175 HP	John Deere 670D, 670G, 672D, G; CAT 12M; CAT 140G; CAT143H; Volvo G930; Komatsu GD-655-3	150.00
To 200 HP	John Deere 772; CAT 140M; Volvo G940; Komatsu GD675-3	165.00
Over 200 HP	CAT 160M, 14M, 16H; Komatsu GD-825A-2	209.00

Ripper/Scarifier Use

To 140 HP	4.00
To 175 HP	6.00
Over 175 HP	10.00

Front End Loader; Loader/Backhoe

To 75 HP	CAT 416D, CAT 416E; Komatsu WB142-2	96.00
To 110 HP	CAT 420E; Case 580, 590; CAT 908H, 914G; John Deere 344J	106.00
To 160 HP	CAT 450E, CAT 924H, 930H; Hyundai HL730-9; John Deere 524K	122.00
Over 160 HP	John Deere 624K; Case 621E; CAT 938H, 950H, 966K	142.00
Addition for special attachment use: compactor, clam, Extend-a-boom, etc.		6.50

Gravel Trucks

On-Highway Rear Dump	97.00
On-Highway Rear Dump Transfer Trailer (2 axles, 10 CY)	13.00
On-Highway Bottom Dump Trailer (3 axles, 12 CY)	11.00

Dozers

To 75 HP	Case 650 K; CAT D3K XL	101.00
To 105 HP	CAT D4K, D5K; Case 750K, 850K; John Deere 450J, 550J, 650J; Komatsu D37EX-22	111.00
To 135 HP	CAT D6K; Case 1150K, John Deere 700J; Komatsu D51EX-22	130.00
To 185 HP	John Deere 750J; Case 1650, 1850; CAT D6N; Komatsu D61EX -15	150.00
To 240 HP	CAT D6T, D7E; John Deere 850J; Komatsu D65EX-15	184.00
Over 240 HP	CAT D8T; John Deere 950J	252.00

Ripper Use

To 180 HP	8.00
To 235 HP	13.00
Over 235 HP	20.00

DRAFT

DRAFT

DRAFT

Tractor Brush Cutters

To 67 PTO HP		65.00	
To 80 PTO HP		80.00	
Over 80 PTO HP	JD 6200, 6300, 6400		95.00

Excavators

To 60 HP	Kubota U45, U55; John Deere 50D; Hitachi 50U; CAT 307D		92.00
----------	--	--	-------

To 95 HP	CAT 312D, 314D; Doosan 140LCV; Hitachi 120-3, 135US-3; Link-Belt 135; Komatsu PC 120-6; Komatsu PC130-8; John Deere 120D, 135D	133.00	
----------	--	--------	--

To 120 HP	CAT 315D; John Deere 160LC; Doosan 175LCV; Komatsu PC160LC-8; Link-Belt 160 LX;		
Volvo EC160C L		146.00	

To 140 HP	CAT 319D L, 320C; Hitachi 160LC-3; Link-Belt 210LX	161.00	
-----------	--	--------	--

To 170 HP	CAT 320D; Hitachi 200LC-3, 225LCV; Link-Belt 240 LX; Komatsu PC200-8, PC220LC-8; John Deere 225D LC; Volvo EC240C	172.00	
-----------	---	--------	--

To 230 HP	CAT 324D, 324E, 328D, 329D; John Deere 240D, 270D, 290G; Hitachi 240LC-3 270LC-3; Link-Belt 290 LX RBI; Volvo EC 290C; Komatsu PC270LC-8	200.00	
-----------	--	--------	--

Over 230 HP	CAT 330D, 336D; Volvo EC330C, John Deere 330C, 330D; Komatsu PC300LC-8, PC350LC-8; Link-Belt 330 LX, 350 X2; Hitachi 330LC, 350LC-3	230.00	
-------------	---	--------	--

Add Attachment Rate to Excavator			30.00
----------------------------------	--	--	-------

Self-Propelled Vibratory Compactors

To 80 HP	Bomag BW145DH-40, BW177D-40; Dynapac CA150D; Sakai SV 201D; Ing-Rand SD45F TF	100.00	
----------	---	--------	--

To 125 HP	Bomag BW177PDBH-40; CAT CP-433E; Sakai SV400D-II; Dynapac CA152D	110.00	
-----------	--	--------	--

Over 125 HP	Bomag BW211PD-40; Dynapac CA262D; Ing-Rand SD105DA TF; Sakai SV505D-	120.00	
-------------	--	--------	--

Track Mounted Rock Drills (with one operator)

To 4.5 inch diameter hole		210.00	
Over 4.5 inch diameter hole		246.75	

Heavy Equipment Hauling

On-Highway Rear Dump		97.00	
Tilt Deck Utility Trailer (2 axle, up to 40,000 lbs.)			9.00
Tilt Deck Utility Trailer (3 axle, up to 50,000 lbs.)			12.00

DRAFT

DRAFT

DRAFT

On-Highway Truck Tractor (GVW up to 50,000 lbs.)		104.00
Lowbed Trailer (2-axle, up to 50,000 lbs.)		15.00
Lowbed Trailer (3-axle, up to 80,000 lbs.)		21.00
Water Trucks		
On-Highway Water Tanker (3,000 gallon capacity)		92.00
On-Highway Water Tanker (4,000 gallon capacity)		114.00
Off-Highway Water Tanker (5,000 gallon capacity)		135.00
Power Saws; Pumps	10.00	
Laborer Wages (Fully Burdened Hourly Rates including profit and overhead)		
Laborer- Journey Level	40.00	
Laborer- Apprentice Level	32.00	

Notations:

1. HP taken at the Flywheel unless stated otherwise.
2. WA Sales Tax - Add sales tax only if an activity is not directly tied to a state timber sale. Sales tax on purchased material will be reimbursed.
3. Hourly rates include operator, owning, and operating costs, profit, and overhead, and includes costs for all service and support vehicles.
4. Specification data such as weight and flywheel HP can be determined upon request by providing equipment make and model information.
5. Rates for equipment not included in this schedule can be determined upon request.

Schedule P
POLE SPECIFICATIONS

Poles produced under this contract shall meet the following specifications:

MINIMUM SAPWOOD: Required both butt and top; 1-inch on Douglas-fir and none on western redcedar.

BUTTS: Shall be cut above the swell and hook.

SWEEP: Poles shall be line straight. That is, a straight line from the center of the butt to the center of the top will not pass outside the body of the pole.

KNOTS: Maximum diameter of a single knot shall not exceed 3 inches. The sum of the diameters of all knots (1/2 inch and larger) in any 1-foot section shall not exceed 8 inches on 45-foot and shorter and 10 inches on 50-foot and longer poles.

TRIM: Poles shall have a minimum of 12 inches of trim.

MAXIMUM DIAMETER AT GROUND LINE: Shall not be more than 7 inches or 20% larger than the specified minimum, whichever is greater.

CLASSIFICATION: The diameter (D.O.B.) at ground line (6 feet up from the butt) will determine the true class of the pole, provided that its top is large enough. Otherwise, the diameter (D.I.B.) at the top will determine the true class.

PROHIBITED DEFECTS: Poles shall be free of sucker knots, knot clusters, rotten knots, short crooks, splits, shake, scars or catfaces, deadwood streaks, snowbreak, cross break, decay, and worm or insect damage.

REFERENCE: American National
STANDARDS INSTITUTE: A.N.S.I. 05.1-2008 or later

Cruise Narrative

Sale Name: Rendezvous	Region: Northwes
Agree. #: 30-093491	District : Baker
Lead cruiser: Matt Llobet	Completion date: 6/15/16
Other cruisers on sale: PK, JM	

Unit acreage specifications:

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
1	11.8	Yes	
2	39.8	Yes	
3	19.6	No	Combined RMZ and WMZ thinning
Total	71.2	Yes	

Unit cruisespecifications:

Unit #	Sample type (VP, FP, ITS,100%)	Expansion factor (BAF, full/half)	Sighting height (4.5 ft, 16 ft.)	Grid size (Plot spacing or % of area)	Plot ratio (cruise:count)	Total number of plots
1	V.P.	62.5 BAF 40.0 BAF	4.5'	225' x 225'	Cruise All	12
2	V.P.	62.5 BAF 40.0 BAF	4.5'	225' x 225'	Cruise All	38
3	V.P.	20.0 BAF	4.5'	200' x 200'	Cruise All	19

69

Sale/Cruise Description:

Minor species cruise intensity:	40 Basal Area Factor was used in units 1 and 2 to capture RC volume
Minimum cruisespec:	Minimum DBH 8 inches, 10 Net Board feet, Minimum Top Diameter 5 inches or 40% of 16-foot formpoint

Avg ring count by sp:	DF = 10	WH = N/A	SS = N/A
Leave/take treedescription:	Variable Retention Harvest- Dispersed single leave trees marked with blue paint on bole and root collar. Leave tree clumps marked with yellow "Leave Tree Area" tags.		
Other conditions			

Field observations:

All timber was graded in variable log lengths with the Scaling Bureaus Westside/Northwest log rules. The utility wood was given a board ft. volume. Rendezvous Timber sale was cruised using the variable plot and fix plot sample method. A 1/10th acre fixed plot was used on each plot, both in units 1 and 2 for DF pole volume.

Rendezvous timber sale is 71.2 acres, with good road access. Plot locations were created using a computer generated grid and found using hand held GPS units.

General Location-

- Off Baker Lake Road

Elevation-

- 917' – 1292'

Harvest Method-

- 100% ground base equipment

Timber Quality-

- Observed HQ DF in the first log consistently throughout sale
- Observed a RC component scattered throughout sale
- DF transmission and distribution poles were observed throughout sale

Points Dropped-

- Sample points were dropped due to leave tree clumps and unit boundary

Prepared By: Matt Llobet

Title: Forest Check Cruiser 1

Pole Sort Summary Page

Sale Name: Rendezvous Sorts Date: 6/15/16 Region:
 Northwest _____ District: Baker Sec. 34 Twp. 36N Rng. 07E
 Grant: 01 County: Skagit Region Contact: M. Grund

Sale Description

	Acres	D.F. Poles	Vol	R.C. Poles	Vol	R.W. Vol	Prep. Method	Expansion Factor	Sample D.O.B.
Unit# <u>1</u>	<u>11.8</u>	<u>79</u>	<u>28</u>		<u>1/10th</u>	<u>9.8</u>		<u>18.0"</u>	Unit# <u>2</u>
<u>39.8</u>	<u>140</u>	<u>54</u>			<u>1/10th</u>	<u>10.4</u>	<u>17.9"</u>		Unit# _____
Unit# _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Unit# _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Sub Total:	<u>51.6</u>	<u>219</u>	<u>82</u>					<u>17.9"</u>	

	POLES	VOLUME
TOTAL:	<u>219</u>	<u>82 mbf</u>

1. Haul cost appraised to: Oeser Company At: Bellingham
2. Recommended Logging Method: Ground Based
3. Apparent Logging Season: All weather subject to delivery in winter.

4. Recommended Contract Term: 4 to 6 months

5. Recommended Method of Sale: Contract Harvest

6. Notes: Poles in this sale range from 40 feet to 105 feet with an average length of 76 Feet. Harvesting of the poles should be fairly easy as the units are flat with short skids.

7. Prepared By: P. Kirner Title: Forest Check Cruiser 1

TC PSPCSTGR **Species, Sort Grade - Board Foot Volumes (Project)**

T36N R07E S34 TyTHIN	19.60	Project: RENDEZV	Page 1
T36N R07E S34 TyU1	11.80		
T36N R07E S34 TyU2	39.80		
Acres 71.20		Date 6/15/2016	Time 10:36:23AM

Spp	S	So Gr	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
WH	D	2S	51	4.4	2,786	2,664	190			78	22			3	97	40	14	284	1.65	9.4
WH	D	3S	39	2.8	2,045	1,988	142		100				1	10	89	39	8	99	0.69	20.2
WH	D	4S	6	4.3	360	345	25	88	12			13	33	15	39	27	5	29	0.31	12.1
WH	D	UT	4	44.2	281	157	11	59	41			50	45		5	22	6	16	0.33	10.0
WH	Totals		10	5.8	5,472	5,153	367	8	41	41	11	2	4	6	88	33	8	100	0.78	51.6
DF	D	2S	65	2.8	29,160	28,348	2,018			45	55			2	98	40	16	396	2.06	71.6
DF	D	3S	15	2.9	6,646	6,450	459		100			0	1	7	92	39	9	110	0.73	58.9
DF	D	4S	1	13.5	901	779	55	56	44			20	33	21	27	26	6	29	0.34	27.0
DF	D	UT	1	32.3	474	321	23	11	76	7	6	40	6		55	24	8	42	0.60	7.7
DF	HA	3P	1	2.3	417	407	29				100			31	69	37	25	1070	5.53	.4
DF	HA	SM	9	1.8	3,907	3,835	273			3	97				100	40	19	632	3.39	6.1
DF	HA	2S	8	1.5	3,367	3,318	236			80	20			6	94	39	15	323	1.81	10.3
DF	Totals		85	3.1	44,871	43,458	3,094	1	16	36	47	1	1	3	95	37	12	239	1.42	181.9
BM	D	2S	64	26.9	77	56	4				100					30	20	380	3.08	.1
BM	D	UT	36		31	31	2	1		99		1		99		28	13	179	1.51	.2
BM	Totals		0	19.1	108	88	6	0		35	64	0		100		29	16	271	2.26	.3
RC	D	3S	79	14.5	2,016	1,723	123		42	43	15		0	1	98	36	11	142	1.56	12.1
RC	D	4S	21	34.1	679	447	32	80	20			16	27	15	41	29	5	23	0.47	19.8
RC	Totals		4	19.4	2,695	2,171	155	16	37	34	12	3	6	4	87	31	7	68	0.94	31.9
RA	D	2S	47	21.3	94	74	5			100			35		65	37	14	197	1.62	.4
RA	D	3S	29	25.3	60	45	3		100				100			30	10	89	0.87	.5
RA	D	4S		33.3	0	0	0	100					100			26	5	20	0.34	.0
RA	D	UT	24	6.6	39	36	3	28	72				34	38	28	32	6	41	0.48	.9
RA	Totals		0	19.6	193	155	11	7	45	48			53	9	38	33	9	88	0.86	1.8
CW	D	1S	76	20.0	137	110	8			100					100	40	26	1000	6.20	.1
CW	D	2S	24	50.0	66	33	2			100					100	40	19	300	2.82	.1
CW	Totals		0	29.7	203	142	10			100					100	40	23	650	4.51	.2
Totals				4.4	53,542	51,167	3,643	2	20	36	42	1	2	4	94	35	11	191	1.26	267.8

Pole Volume 82
 Total Volume 3,725

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT RENDEZV							DATE	6/15/2016	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	THIN		71.20	69	396	S	W	
36N	07E	34	RENDEZV	U1							
36N	07E	34	RENDEZV	U2							
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			69	396	5.7						
CRUISE			69	396	5.7	7,869	5.0				
DBH COUNT											
REFOREST											
COUNT											
BLANKS											
100 %											
STAND SUMMARY											
		SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR		278	60.8	23.6	116	38.1	185.5	44,871	43,458	9,481	9,482
WHEMLOCK		54	26.1	15.1	73	8.4	32.6	5,472	5,153	1,326	1,327
WR CEDAR		55	22.4	16.1	54	7.9	31.8	2,695	2,171	947	946
R ALDER		5	.9	17.2	71	0.3	1.4	193	155	49	49
COTWOOD		1	.1	38.0	110	0.1	.9	203	142	40	40
BL MAPLE		3	.2	24.9	71	0.1	.6	108	88	21	21
TOTAL		396	110.5	20.5	93	55.8	252.7	53,542	51,167	11,863	11,864
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF		SAMPLE TREES - BF			# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		61.0	3.7	827	858	890					
WHEMLOCK		73.5	10.0	327	364	400					
WR CEDAR		102.9	13.9	174	202	230					
R ALDER		61.2	30.4	107	154	201					
COTWOOD											
BL MAPLE		160.7	111.1		207	436					
TOTAL		77.4	3.9	660	687	714	239	122	60		
CL	68.1	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		91.7	11.0	54	61	68					
WHEMLOCK		165.3	19.9	21	26	31					
WR CEDAR		149.4	18.0	18	22	26					
R ALDER		623.9	75.0	0	1	2					
COTWOOD		830.7	99.9	0	0	0					
BL MAPLE		708.7	85.2	0	0	0					
TOTAL		69.1	8.3	101	111	120	191	97	48		
CL	68.1	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		76.0	9.1	168	185	202					
WHEMLOCK		128.0	15.4	28	33	38					
WR CEDAR		149.3	18.0	26	32	37					
R ALDER		594.5	71.5	0	1	2					
COTWOOD		830.7	99.9	0	1	2					
BL MAPLE		818.5	98.5	0	1	1					
TOTAL		57.6	6.9	235	253	270	133	68	33		
CL	68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR		79.5	9.6	39,301	43,458	47,615					

TC PSTATS		PROJECT STATISTICS							PAGE	2
		PROJECT			RENDEZV		DATE		6/15/2016	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	THIN	71.20	69	396	S	W	
36N	07E	34	RENDEZV	U1						
36N	07E	34	RENDEZV	U2						
CL	68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	.00	VAR.	S.E.%	LOW	AVG	HIGH	5	7	10	
WHEMLOCK		141.3	17.0	4,278	5,153	6,029				
WR CEDAR		159.4	19.2	1,754	2,171	2,587				
R ALDER		604.9	72.8	42	155	268				
COTWOOD		830.7	99.9	0	142	285				
BL MAPLE		826.6	99.4	1	88	175				
TOTAL		67.5	8.1	47,012	51,167	55,322	182	93	46	
CL	68.1	COEFF		V BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR		68.5	8.2	212	234	257				
WHEMLOCK		134.3	16.1	131	158	185				
WR CEDAR		159.4	19.2	55	68	81				
R ALDER		622.4	74.9	30	108	187				
COTWOOD		830.7	99.9	0	165	330				
BL MAPLE		600.5	72.2	1	147	293				
TOTAL		53.3	6.4	186	202	219	113	58	28	

T36N R07E S34 TU1 T36N R07E S34 TU1
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 36N 07E 34 RENDEZV U1 11.80 12 79 S W

S Spp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre		
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln	Dia Ft	Bd Ft		CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99						
DF	DM	2S	62	3.1	38,056	36,886	435		37	63					100	40	16	429	2.23	86.0	
DF	DM	3S	11	3.2	6,622	6,408	76	100						3	97	39	9	121	0.79	52.9	
DF	DM	4S	1	16.7	483	402	5	100				31	54		15	23	7	29	0.43	13.9	
DF	DM	UT	1	48.9	1,394	713	8	98		2		27			73	25	10	58	1.07	12.3	
DF	HA	SM	19	1.8	11,232	11,027	130			100					100	40	20	650	3.48	17.0	
DF	HA	2S	6		3,244	3,244	38		100						19	81	38	14	284	1.68	11.4
DF	Totals		78	3.9	61,031	58,680	692		13	29	58	1	0	1	98	38	13	303	1.77	193.5	
WH	DM	2S	56	2.2	6,202	6,066	72		60	40					100	40	15	342	1.89	17.7	
WH	DM	3S	33	.9	3,486	3,453	41	100						2	6	91	39	8	93	0.66	37.1
WH	DM	4S	10		1,127	1,127	13	96	4			11	28	15	47	27	5	30	0.29	37.7	
WH	DM	UT	1		22	22	0	100				100				8	6	10	0.27	2.2	
WH	Totals		14	1.6	10,837	10,668	126	10	33	34	23	1	4	4	91	34	8	113	0.81	94.7	
RC	DM	3S	91	16.6	4,920	4,105	48		38	46	16			1	1	98	36	12	172	1.75	23.9
RC	DM	4S	9	61.7	1,055	404	5	40	60			19	30	14	38	30	6	16	0.50	25.0	
RC	Totals		6	24.5	5,975	4,509	53	4	40	42	14	2	3	3	93	33	9	92	1.17	48.8	
CW	DM	1S	76	20.0	827	661	8			100					100	40	26	1000	6.20	.7	
CW	DM	2S	24	50.0	397	198	2			100					100	40	19	300	2.82	.7	
CW	Totals		1	29.7	1,223	860	10			100					100	40	23	650	4.51	1.3	
RA	DM	2S	86	20.8	367	290	3			100					100	40	13	190	1.55	1.5	
RA	DM	UT	14	25.0	61	46	1		100						100	31	6	30	0.55	1.5	
RA	Totals		0	21.4	428	336	4		14	86					14	86	36	10	110	1.11	3.1
Type Totals				5.6	79,494	75,053	886	2	17	30	51	1	1	2	96	36	11	220	1.45	341.3	

T36N R07E S34 TU2 T36N R07E S34 TU2
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 36N 07E 34 RENDEZV U2 39.80 38 204 S W

S So Gr T rt ad	%	Bd. Ft. per Acre					Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre		
								Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft		CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99						
DF	DM	2S	64	2.6	33,360	32,495	1,293		45	55			3	97	39	16	399	2.06	81.5		
DF	DM	3S	15	2.7	8,291	8,070	321	100					0	1	9	90	39	9	108	0.71	74.8
DF	DM	4S	3	12.4	1,272	1,113	44	67	33				19	30	20	31	27	6	29	0.32	38.4
DF	DM	UT		18.9	378	306	12	21	75	4			37	10		52	24	7	32	0.39	9.7
DF	HA	3P	2	2.3	745	728	29			100					31	69	37	25	1070	5.53	.7
DF	HA	SM	6	1.9	3,509	3,442	137		6	94					100		40	19	623	3.35	5.5
DF	HA	2S	10	1.3	4,662	4,601	183		77	23			3	97			40	15	332	1.83	13.9
DF	Totals		89	2.8	52,217	50,756	2,020	2	17	36	45		1	1	5	94	36	11	226	1.35	224.5
RC	DM	3S	73	13.1	2,147	1,866	74		44	42	14			1	99		36	10	127	1.47	14.7
RC	DM	4S	27	24.5	902	681	27	87	13				16	27	16	41	28	5	24	0.46	28.0
RC	Totals		4	16.5	3,049	2,546	101	23	36	30	10		4	7	5	83	31	7	60	0.86	42.6
WH	DM	2S	37	5.2	1,489	1,413	56			100				9	91		39	13	232	1.36	6.1
WH	DM	3S	50	2.0	1,907	1,868	74		100					14	86		39	8	99	0.68	18.9
WH	DM	4S	6	9.3	213	193	8	88	12				16	42	14	28	27	5	26	0.30	7.5
WH	DM	UT	7	46.1	483	261	10	64	36				52	48			22	6	15	0.33	17.1
WH	Totals		7	8.7	4,092	3,735	149	9	53	38			4	6	11	79	31	7	75	0.65	49.5
BM	DM	2S	64	26.9	138	101	4			100				100			30	20	380	3.08	.3
BM	DM	UT	36		56	56	2	1	99				1	99			28	13	179	1.51	.3
BM	Totals		0	19.1	194	157	6	0	35	64			0	100			29	16	271	2.26	.6
RA	DM	4S	100	33.3	1	1	0	100						100			26	5	20	0.34	.0
RA	Totals		0	33.3	1	1	0	100						100			26	5	20	0.34	.0
Type Totals				4.0	59,553	57,194	2,276	3	20	36	41		1	2	5	92	35	10	180	1.19	317.3

T36N R07E S34 TTHIN										T36N R07E S34 TTHIN											
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt												
36N	07E	34	RENDEZV	THIN	19.60	19	113	S	W												
S So Gr T rt ad	%	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre				
						Log Scale Dia.				Log Length				Ln	Dia	Bd		CF/ Lf			
Spp	Net BdFt	Def%	Gross	Net	4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf					
DF	DM	2S	75	3.2	15,278	14,787			57	43		0	100	40	15	345	1.86	42.8			
DF	DM	3S	17	4.1	3,319	3,184			100			1	2	39	9	105	0.72	30.3			
DF	DM	4S	1	17.6	398	328		6	25	75		16	35	25	6	28	0.39	11.6			
DF	DM	UT	1		114	114		2		47	53	100		12	16	133	1.97	.9			
DF	HA	SM	2		304	304		6		100				40	18	496	2.54	.6			
DF	HA	2S	4	6.8	812	757		15		62	38			40	15	334	1.99	2.3			
DF	Totals		79	3.7	20,225	19,474		382	0	18	46	36	1	1	1	97	37	12	220	1.34	88.4
WH	DM	2S	66	6.1	3,362	3,157		62		80	20			40	14	286	1.73	11.0			
WH	DM	3S	29	7.5	1,458	1,349		26		100			2	1	39	9	107	0.77	12.6		
WH	DM	4S	4	8.2	198	181		4	54	46		17	35	27	6	30	0.41	6.0			
WH	DM	UT	1		27	27		1		100				40	7	70	0.67	.4			
WH	Totals		19	6.5	5,045	4,715		92	2	31	53	13	1	2	1	96	37	10	157	1.10	29.9
RA	DM	2S	26	22.2	120	94		2		100				30	15	210	1.82	.4			
RA	DM	3S	45	25.3	217	162		3		100				30	10	89	0.87	1.8			
RA	DM	UT	29		104	104		2	36	64			43	22	33	6	46	0.46	2.3		
RA	Totals		1	18.5	441	359		7	10	64	26		83	6	10		31	9	80	0.74	4.5
Type Totals				4.5	25,711	24,548		481	1	21	47	31	1	2	1	96	37	11	200	1.26	122.9

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT RENDEZV				DATE	6/15/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	U1	11.80	12	79	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL	12	79	6.6							
CRUISE	12	79	6.6	1,703		4.6				
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	48	64.1	26.7	122	48.3	250.0	61,031	58,680	12,870	12,871
WHEMLOCK	12	47.9	15.5	76	15.9	62.5	10,837	10,668	2,593	2,594
WR CEDAR	17	30.1	18.6	63	13.1	56.7	5,975	4,509	1,866	1,863
COTWOOD	1	.7	38.0	110	0.8	5.2	1,223	860	239	239
R ALDER	1	1.5	20.0	74	0.7	3.3	428	336	121	121
TOTAL	79	144.3	21.9	94	80.7	377.7	79,494	75,053	17,690	17,688
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	40.6	5.9	1,014	1,077	1,140					
WHEMLOCK	89.1	26.8	308	421	534					
WR CEDAR	87.3	21.8	230	294	358					
COTWOOD										
R ALDER										
TOTAL	66.2	7.4	741	801	860	175	89	44		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	76.1	22.9	49	64	79					
WHEMLOCK	104.5	31.5	33	48	63					
WR CEDAR	143.8	43.3	17	30	43					
COTWOOD	346.4	104.3		1	1					
R ALDER	346.4	104.3		2	3					
TOTAL	54.4	16.4	121	144	168	129	66	32		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	63.1	19.0	203	250	297					
WHEMLOCK	73.9	22.2	49	63	76					
WR CEDAR	110.4	33.2	38	57	76					
COTWOOD	346.4	104.3		5	11					
R ALDER	346.4	104.3		3	7					
TOTAL	38.2	11.5	334	378	421	64	32	16		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	66.1	19.9	47,006	58,680	70,355					
WHEMLOCK	81.7	24.6	8,044	10,668	13,292					
WR CEDAR	104.3	31.4	3,092	4,509	5,925					
COTWOOD	346.4	104.3		860	1,756					
R ALDER	346.4	104.3		336	687					
TOTAL	48.0	14.5	64,201	75,053	85,904	100	51	25		
CL: 68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	66.1	19.9	188	235	281					

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT RENDEZV				DATE	6/15/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	U1	11.80	12	79	S	W	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E. %	LOW	AVG	HIGH	5	7	10	
WHEMLOCK		81.7	24.6	129	171	213				
WR CEDAR		104.3	31.4	55	80	105				
COTWOOD		346.4	104.3		165	337				
R ALDER		346.4	104.3		101	206				
TOTAL		44.3	13.4	170	199	227	86	44	21	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	RENDEZV			DATE	6/15/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	U2	39.80	38	204	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL				38	204	5.4				
CRUISE				38	204	5.4	5,286	3.9		
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	146	75.0	22.9	115	44.8	214.1	52,217	50,756	10,980	10,982
WR CEDAR	38	31.2	15.3	52	10.2	40.0	3,049	2,546	1,140	1,140
WHEMLOCK	16	26.2	13.6	67	7.1	26.3	4,092	3,735	1,004	1,004
BL MAPLE	3	.3	24.9	71	0.2	1.1	194	157	38	38
R ALDER	1	.0	10.0	35	0.0	.0	1	1	0	0
TOTAL	204	132.8	19.7	91	63.4	281.5	59,553	57,194	13,161	13,163
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	72.5	6.0		816	868	920				
WR CEDAR	105.6	17.1		133	161	188				
WHEMLOCK	78.5	20.2		172	216	260				
BL MAPLE	160.7	111.1			207	436				
R ALDER										
TOTAL	93.0	6.5		627	671	715	345	176	86	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	84.3	13.7		65	75	85				
WR CEDAR	109.4	17.7		26	31	37				
WHEMLOCK	186.5	30.2		18	26	34				
BL MAPLE	524.7	85.0		0	0	1				
R ALDER	616.4	99.9		0	0	0				
TOTAL	56.1	9.1		121	133	145	126	64	31	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	66.9	10.8		191	214	237				
WR CEDAR	118.5	19.2		32	40	48				
WHEMLOCK	171.4	27.8		19	26	34				
BL MAPLE	607.3	98.4		0	1	2				
R ALDER	616.4	99.9		0	0	0				
TOTAL	46.5	7.5		260	282	303	86	44	22	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	69.3	11.2		45,057	50,756	56,454				
WR CEDAR	133.9	21.7		1,994	2,546	3,099				
WHEMLOCK	200.9	32.6		2,518	3,735	4,951				
BL MAPLE	613.4	99.4		1	157	313				
R ALDER	616.4	99.9		0	1	1				
TOTAL	59.9	9.7		51,644	57,194	62,744	143	73	36	
CL:	68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10	
DOUG FIR	66.3	10.7		210	237	264				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT RENDEZV				DATE	6/15/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	U2	39.80	38	204	S	W	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E. %	LOW	AVG	HIGH	5	7	10	
WR CEDAR		133.9	21.7	50	64	77				
WHEMLOCK		200.9	32.6	96	142	188				
BL MAPLE		443.1	71.8	1	147	293				
R ALDER		616.4	99.9	0	37	73				
TOTAL		54.3	8.8	183	203	223	118	60	29	

TC TSTATS				STATISTICS				PAGE 1		
				PROJECT RENDEZV				DATE 6/15/2016		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
36N	07E	34	RENDEZV	THIN	19.60	19	113	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL	19	113	5.9							
CRUISE	19	113	5.9		880		12.8			
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	84	30.0	23.2	116	18.3	88.4	20,225	19,474	4,396	4,396
WHEMLOCK	26	12.6	19.9	94	6.1	27.4	5,045	4,715	1,219	1,219
R ALDER	3	2.3	16.0	71	0.8	3.2	441	359	106	106
TOTAL	<i>113</i>	<i>44.9</i>	<i>22.0</i>	<i>107</i>	<i>25.3</i>	<i>118.9</i>	<i>25,711</i>	<i>24,548</i>	<i>5,720</i>	<i>5,720</i>
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	36.5	4.0	689	718	746					
WHEMLOCK	53.7	10.7	382	428	474					
R ALDER	43.2	29.9	124	177	230					
TOTAL	<i>45.4</i>	<i>4.3</i>	<i>609</i>	<i>637</i>	<i>664</i>		82	42	21	
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	71.6	16.9	25	30	35					
WHEMLOCK	83.3	19.6	10	13	15					
R ALDER	435.9	102.7		2	5					
TOTAL	<i>52.4</i>	<i>12.3</i>	<i>39</i>	<i>45</i>	<i>50</i>		116	59	29	
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	71.3	16.8	74	88	103					
WHEMLOCK	81.6	19.2	22	27	33					
R ALDER	435.9	102.7		3	6					
TOTAL	<i>49.0</i>	<i>11.5</i>	<i>105</i>	<i>119</i>	<i>133</i>		101	52	25	
CL: 68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	74.8	17.6	16,043	19,474	22,905					
WHEMLOCK	90.2	21.3	3,712	4,715	5,717					
R ALDER	435.9	102.7		359	728					
TOTAL	<i>54.8</i>	<i>12.9</i>	<i>21,379</i>	<i>24,548</i>	<i>27,718</i>		127	65	32	
CL: 68.1 %	COEFF	V-BAR/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
DOUG FIR	74.8	17.6	181	220	259					
WHEMLOCK	90.2	21.3	136	172	209					
R ALDER	435.9	102.7		114	231					
TOTAL	<i>54.8</i>	<i>12.9</i>	<i>180</i>	<i>206</i>	<i>233</i>		127	65	32	

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: **RENDEZV**
Acres **71.20**

Page **1**
Date **6/15/2016**
Time **10:36:24AM**

Spp	S T	So Gr Log rt de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
WH		DM 2S 32	5		5	1.3						5						
WH		DM 2S 40	194	4.5	185	50.4						68	60	44	13			
WH		DM 3S 25	0		0	.1				0								
WH		DM 3S 29	1		1	.4			1	0								
WH		DM 3S 32	11		11	2.9				7	4							
WH		DM 3S 33	2	3.5	2	.5			2									
WH		DM 3S 35	1	10.0	1	.3				1								
WH		DM 3S 39	2		2	.5			2									
WH		DM 3S 40	128	3.0	125	34.0			27	42	55							
WH		DM 4S 12	1	11.8	1	.1			1									
WH		DM 4S 13	1		1	.3				1								
WH		DM 4S 14	0	50.0	0	.0			0									
WH		DM 4S 18	0		0	.1			0									
WH		DM 4S 20	1		1	.4				1								
WH		DM 4S 21	0		0	.1			0									
WH		DM 4S 22	1		1	.2				1								
WH		DM 4S 24	1	14.4	0	.1			0	0								
WH		DM 4S 25	3	24.1	2	.7			2	1								
WH		DM 4S 26	2		2	.6			2									
WH		DM 4S 27	0		0	.1				0								
WH		DM 4S 28	1		1	.4				1								
WH		DM 4S 29	0	20.0	0	.1				0								
WH		DM 4S 32	1		1	.3				1								
WH		DM 4S 33	2		2	.5			2									
WH		DM 4S 35	1		1	.2				1								
WH		DM 4S 36	6		6	1.5			6									
WH		DM 4S 37	2		2	.6			2									
WH		DM 4S 40	2		2	.5			2									
WH		DM UT 8	0		0	.1			0									
WH		DM UT 11	1		1	.3				1								
WH		DM UT 14	1		1	.2				1								
WH		DM UT 15	4		4	1.0				4								
WH		DM UT 23	1		1	.4				1								
WH		DM UT 25	4		4	1.0				4								
WH		DM UT 40	9	94.3	1	.1				1								
WH		Totals	390	5.8	367	10.1		28	39	51	59	73	60	44	13			

Log Stock Table - MBF 5" Top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: **RENDEZV**
Acres **71.20**

Page **2**
Date **6/15/2016**
Time **10:36:24AM**

Spp	S T	So Gr Log rt de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		DM 2S 32	46	8.0	42	1.4						27	15					
DF		DM 2S 36	1		1	.0							1					
DF		DM 2S 40	2,029	2.7	1,975	63.8						292	379	750	460	92		
DF		DM 3S 19	1	14.3	1	.0					1							
DF		DM 3S 21	1	28.6	0	.0					0							
DF		DM 3S 24	3	21.6	3	.1					1	1						
DF		DM 3S 25	1		1	.0					1							
DF		DM 3S 27	0		0	.0					0							
DF		DM 3S 29	0		0	.0					0							
DF		DM 3S 30	0		0	.0					0							
DF		DM 3S 31	0		0	.0				0								
DF		DM 3S 32	29	4.7	27	.9				4	12	11						
DF		DM 3S 33	1		1	.0				1								
DF		DM 3S 34	2	14.9	1	.0				0	1							
DF		DM 3S 35	0		0	.0				0								
DF		DM 3S 36	12	6.3	11	.4				2	7	2						
DF		DM 3S 37	11	11.4	10	.3				8	2							
DF		DM 3S 38	2	13.4	2	.1				2	0							
DF		DM 3S 39	4	15.7	3	.1				3								
DF		DM 3S 40	405	2.1	397	12.8				28	159	210						
DF		DM 4S 9	1	11.8	1	.0		0	0		0							
DF		DM 4S 11	2	32.7	1	.0			0	0	1							
DF		DM 4S 12	0	20.4	0	.0			0	0								
DF		DM 4S 13	0	50.0	0	.0			0									
DF		DM 4S 14	0		0	.0					0							
DF		DM 4S 15	1	50.0	1	.0		1	0									
DF		DM 4S 16	3	35.5	2	.1			0	1								
DF		DM 4S 17	1	16.9	1	.0		1		0								
DF		DM 4S 18	1	13.4	1	.0		0	1									
DF		DM 4S 19	3	45.4	1	.0		0		1	0							
DF		DM 4S 20	2	7.6	2	.1		1		0								
DF		DM 4S 21	1	23.8	1	.0		0	0	1								
DF		DM 4S 22	5	16.1	4	.1		1	2	1								
DF		DM 4S 23	0		0	.0		0										
DF		DM 4S 24	2	11.8	2	.1		0	0	2								
DF		DM 4S 26	3		3	.1		0	3									
DF		DM 4S 27	2	2.4	2	.1		1	1	0								

Log Stock Table - MBF 5" Top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: **RENDEZV**
Acres **71.20**

Page **3**
Date **6/15/2016**
Time **10:36:24AM**

Spp	S T	So Gr Log rt de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		DM 4S 28	2		2	.1		2	0									
DF		DM 4S 29	3	2.6	3	.1		2	1									
DF		DM 4S 30	1	9.7	1	.0		0	0									
DF		DM 4S 31	0	22.8	0	.0		0	0									
DF		DM 4S 32	5	10.1	4	.1		2	2									
DF		DM 4S 33	2	39.0	1	.0		0	1									
DF		DM 4S 34	6	21.1	4	.1		3	1									
DF		DM 4S 35	1		1	.0		1										
DF		DM 4S 36	2		2	.1		2										
DF		DM 4S 37	4	13.2	4	.1		3	1									
DF		DM 4S 38	3		3	.1		3										
DF		DM 4S 40	5		5	.2		5										
DF		DM UT 8	0		0	.0			0									
DF		DM UT 10	1		1	.0			0	0								
DF		DM UT 11	1		1	.0			0	1								
DF		DM UT 12	3		3	.1		0			0	1		1				
DF		DM UT 13	1		1	.0		0		1		0						
DF		DM UT 14	1		1	.0				1	0							
DF		DM UT 15	0		0	.0					0							
DF		DM UT 16	1		1	.0				1								
DF		DM UT 20	1		1	.0		1										
DF		DM UT 21	0		0	.0		0										
DF		DM UT 27	1		1	.0		1										
DF		DM UT 36	3	100.0														
DF		DM UT 40	21	39.0	13	.4			12					0				
DF		HA 3P 32	9		9	.3											9	
DF		HA 3P 40	21	3.3	20	.6											20	
DF		HA SM 40	278	1.8	273	8.8							113	160				
DF		HA 2S 32	14		14	.4						7	6					
DF		HA 2S 40	226	1.6	223	7.2						54	84	63	21			
DF		Totals	3,195	3.1	3,094	84.9		34	65	207	229	381	488	926	643	121		
BM		DM 2S 30	5	26.9	4	64.1										4		
BM		DM UT 14	0		0	.2		0										
BM		DM UT 15	0		0	.3		0										
BM		DM UT 30	2		2	35.4							2					

Log Stock Table - MBF 5" Top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: **RENDEZV**
Acres **71.20**

Page **4**
Date **6/15/2016**
Time **10:36:24AM**

Spp	S T	So Gr rt de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches															
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+				
BM		Totals		8	19.1	6	.2		0					2		4							
RC		DM 3S	30	0	14.3	0	.2				0												
RC		DM 3S	32	1		1	.3			1													
RC		DM 3S	33	0		0	.3			0													
RC		DM 3S	34	1		1	.4					1											
RC		DM 3S	36	140	14.8	120	77.3			6	21	21	24	9	34	2	3						
RC		DM 3S	40	1		1	.7			1													
RC		DM 4S	12	1		1	.5		1														
RC		DM 4S	14	1	38.2	0	.2		0														
RC		DM 4S	15	1		1	.9		1														
RC		DM 4S	17	0		0	.2			0													
RC		DM 4S	18	1		1	.5		0		0												
RC		DM 4S	19	2	40.2	1	.7		1	0													
RC		DM 4S	20	1	16.7	1	.3			0	0												
RC		DM 4S	22	1	50.0	1	.5		1														
RC		DM 4S	25	1	18.9	1	.4			0	0												
RC		DM 4S	27	0		0	.2			0													
RC		DM 4S	30	8	11.0	7	4.6		6	1													
RC		DM 4S	31	1	33.3	1	.6		1														
RC		DM 4S	32	2		2	1.0		2														
RC		DM 4S	33	2	25.0	1	.8		1														
RC		DM 4S	34	2	22.9	1	.8		1	1													
RC		DM 4S	36	25	48.9	13	8.4		10	3													
RC		Totals		192	19.4	155	4.2		25	14	22	22	24	9	34	2	3						
RA		DM 2S	30	2	22.2	2	16.6							2									
RA		DM 2S	40	4	20.8	3	31.1						3										
RA		DM 3S	30	4	25.3	3	28.8					3											
RA		DM 4S	26	0	33.3	0	.2		0														
RA		DM UT	30	1		1	7.8			1													
RA		DM UT	31	1	25.0	1	4.9			1													
RA		DM UT	32	0		0	4.0			0													
RA		DM UT	36	1		1	6.6		1														
RA		Totals		14	19.6	11	.3		1	2		3	3	2									
CW		DM 1S	40	10	20.0	8	76.9										8						

Log Stock Table - MBF 5" Top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: RENDEZV
Acres 71.20

Date 6/15/2016
Time 10:36:24AM

S Spp	T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
CW		DM	2S	40	5	50.0	2	23.1							2					
CW		Totals			14	29.7	10	.3							2		8			
Total		All Species			3,812	4.4	3,643	100.0		88	120	280	312	481	561	1006	662	132		

Log Stock Table - MBF 2 " top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: **RENDEZV**
Acres **71.20**

Page **1**
Date **6/15/2016**
Time **10:39:53AM**

Spp	S T	So Gr Log rt de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
WH		DM 2S 32	5		5	1.3						5						
WH		DM 2S 40	194	4.5	185	52.0						68	60	44	13			
WH		DM 3S 25	0		0	.1					0							
WH		DM 3S 29	1		1	.4				1	0							
WH		DM 3S 32	11		11	3.0					7	4						
WH		DM 3S 33	2	3.5	2	.5				2								
WH		DM 3S 35	1	10.0	1	.3					1							
WH		DM 3S 39	2		2	.5				2								
WH		DM 3S 40	128	3.0	125	35.0				27	42	55						
WH		DM 4S 12	1	11.8	1	.2				1								
WH		DM 4S 14	0	50.0	0	.0				0								
WH		DM 4S 18	0		0	.1				0								
WH		DM 4S 20	0		0	.1				0								
WH		DM 4S 21	0		0	.1				0								
WH		DM 4S 22	1		1	.2				1								
WH		DM 4S 23	2		2	.6				1	1							
WH		DM 4S 24	1	14.4	0	.1				0	0							
WH		DM 4S 25	3	24.1	2	.7				2	1							
WH		DM 4S 27	0		0	.1				0								
WH		DM 4S 28	1		1	.4				1								
WH		DM 4S 29	0	20.0	0	.1				0								
WH		DM 4S 32	1		1	.3				1								
WH		DM 4S 33	1		1	.2				1								
WH		DM 4S 35	1		1	.2				1								
WH		DM 4S 36	7		7	1.8				7								
WH		DM 4S 40	3		3	.9				3								
WH		DM UT 8	0		0	.1				0								
WH		DM UT 17	1		1	.2				1								
WH		DM UT 19	1		1	.3				1								
WH		DM UT 35	1		1	.2				1								
WH		DM UT 40	9	94.3	1	.1				1								
WH		Totals	378	6.0	356	9.8				3	17	36	51	59	73	60	44	13
DF		DM 2S 32	46	8.0	42	1.4						27	15					
DF		DM 2S 36	1		1	.0						1						
DF		DM 2S 40	2,029	2.7	1,975	63.9						292	379	750	460	92		
DF		DM 3S 19	1	14.3	1	.0						1						

Log Stock Table - MBF 2" top

T36N R07E S34 TyTHIN	19.60
T36N R07E S34 TyU1	11.80
T36N R07E S34 TyU2	39.80

Project: RENDEZV
Acres 71.20

Page 4
Date 6/15/2016
Time 10:39:53AM

Spp	S T	So Gr Log rt de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RC		DM 4S 16	1		1	.4		1										
RC		DM 4S 17	1		1	.4		0	0									
RC		DM 4S 18	0		0	.2			0									
RC		DM 4S 19	0		0	.3			0									
RC		DM 4S 20	1	12.2	1	.5		0	0	0								
RC		DM 4S 22	1		1	.4	1											
RC		DM 4S 24	0	100.0														
RC		DM 4S 25	1	9.2	1	.9		1	0	0								
RC		DM 4S 27	0		0	.2			0									
RC		DM 4S 30	1		1	.8		0	1									
RC		DM 4S 32	1		1	.5		1										
RC		DM 4S 33	1		1	.6	0	1										
RC		DM 4S 34	2	17.7	2	1.1	0	1	1									
RC		DM 4S 35	1		1	.8	1											
RC		DM 4S 36	25	48.9	13	8.8		10	3									
RC		DM 4S 37	0		0	.3	0											
RC		DM 4S 39	1		1	.5	1											
RC		Totals	182	18.9	148	4.1	4	15	14	22	22	24	9	34	2	3		
RA		DM 2S 30	2	22.2	2	17.0							2					
RA		DM 2S 40	4	20.8	3	31.6						3						
RA		DM 3S 30	4	25.3	3	29.3					3							
RA		DM UT 30	1		1	8.0			1									
RA		DM UT 31	1	25.0	1	5.0			1									
RA		DM UT 32	0		0	4.0			0									
RA		DM UT 38	1		1	5.1		1										
RA		Totals	14	19.9	11	.3		1	2	3	3	2						
CW		DM 1S 40	10	20.0	8	76.9											8	
CW		DM 2S 40	5	50.0	2	23.1							2					
CW		Totals	14	29.7	10	.3							2				8	
Total		All Species	3,787	4.4	3,621	100.0	7	62	118	280	312	481	561	1006	662	132		

TC PSPCTLTCM		Species Summary - Trees, Logs, Tons, CCF, MBF									
T36N R07E S34 TyTHIN		19.6	Project RENDEZV				Page No		1		
T36N R07E S34 TyU1		11.8	Acres 71.20				Date:		6/15/2016		
T36N R07E S34 TyU2		39.8					Time		10:36:24AM		
Species	S T	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
		Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
DOUG FIR		4,330	12,951	19,238	155.90	52.13	1.41	6,750	6,751	3,195	3,094
WHEMLOCK		1,857	3,676	3,022	50.87	25.70	0.80	944	945	390	367
WR CEDAR		1,598	2,273	1,584	42.15	29.63	0.96	674	674	192	155
R ALDER		63	126	97	55.36	27.90	0.86	35	35	14	11
COTWOOD		8	16	69	361.00	180.50	4.51	28	28	14	10
BL MAPLE		13	23	40	119.13	64.73	2.31	15	15	8	6
Totals		7,869	19,064	24,049	107.35	44.31	1.26	8,447	8,447	3,812	3,643

Wood Type Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
C	7,785	18,900	23,844	107.50	44.28	1.26	8,369	8,369	3,776	3,616
H	84	164	205	93.44	47.57	1.46	78	78	36	27
Totals	7,869	19,064	24,049	107.35	44.31	1.26	8,447	8,447	3,812	3,643

Sale Name:	Rendezvous
Sale Type:	Contract harvest
Agreement Number:	93491
Region:	Nortwest
District:	Baker
County:	Skagit
Grant:	1
Cruise Date:	3/9/2016
Cruised By:	Matt Llobet
Auction Date:	

Unit #	Acres	Total plots	Sample type	Sample ratio	Expansion	Sampled Acres
1	11.8	12	Fixed	0.1	9.83	1.2
2	39.8	38	Fixed	0.1	10.47	3.8
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
					0.00	0
Totals	51.6	50				

Sale Name:	Rendezvous	Grant:	1
Sale Type:	Contract harvest	County:	Skagit
Agreement Number:	93491	Cruise Date:	3/9/2016
Region:	Northwest	Cruised By:	Matt Llobet
District:	Baker	Auction Date:	

Douglas-fir

Unit #	Net Acres	GL DOB	No. Poles	Poles/acre	MBF	\$ Total Del. Poles	\$/MBF
1	11.8	18.0	79	6.7	28	\$ 26,379	\$ 958
2	39.8	17.9	140	3.5	54	\$ 52,105	\$ 963
				-			
				-			
				-			
				-			
				-			
				-			
				-			
				-			
				-			
				-			
Totals	51.6	17.9	219	4.2	82	\$ 78,484	\$ 961

Unit #	Sawlog MBF	Sawlog \$ Total	Sawlog \$/MBF	Total MBF	Total \$ Delivered
1				28	\$ 26,379
2				54	\$ 52,105
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
				-	\$ -
Totals				82	\$ 78,484

Sale Name:	Rendezvous	Grant:	1
Sale Type:	Contract harvest	County:	Skagit
Agreement Number:	93491	Cruise Date:	3/9/2016
Region:	Northwest	Cruised By:	Matt Llobet
District:	Baker	Auction Date:	

Douglas-fir

Unit #	Sample Acres	BF/acre	BF/pole	Length/pole	\$/Ft. length
1	1.2	2,333	350	79	\$ 4.26
2	3.7	1,359	387	74	\$ 5.02
		-	-		
		-	-		
		-	-		
		-	-		
		-	-		
		-	-		
		-	-		
		-	-		
		-	-		
Totals	4.9	1582.2	374	76	\$ 4.74

Unit #	BF/load	Number loads	Del. \$/load	Poles/load	#2 Saw MBF	#3 Saw MBF	#4 Saw MBF
1	4,600	6	\$ 4,407	13	14	14	-
2	4,600	12	\$ 4,430	12	35	19	-
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
	4,600		\$ -	-			
Totals		18	\$ 4,422	12	49	33	-

Poles by species and GL DOB

Unit	(Multiple Items)
-------------	------------------

Sp/GL Class	Number of poles
DF	
12	22
14	22
16	60
18	53
20	31
22	31
Grand Total	219

Washington Dept. of Natural Resources
Pole Cruise and Appraisal Summary

Pole Averages

Unit	(Multiple Items)
-------------	------------------

Sp/GL DOB	Values BF Volume per Pole	\$/MBF per Pole	Average of \$ Pole
DF			
12	80	\$763	\$61
14	145	\$815	\$118
16	240	\$892	\$215
18	398	\$952	\$380
20	567	\$989	\$560
22	750	\$1,023	\$767
Grand Total	373	\$919	\$358

Washington Dept. of Natural Resources
Pole Cruise and Appraisal Summary

Pole Values by Unit

Unit #	Values					
	Avg. GL	DOB	Total # Poles	Delivered Value	Avg Length (ft)	Sum of \$/lin ft
DF	17.9		219	\$78,484	76	\$4.74
1	18.0		79	\$26,379	79	\$4.26
2	17.9		140	\$52,105	74	\$5.02
Grand Total	17.9		219	\$78,484	76	\$4.74

Washington Dept. of Natural Resources
Pole Cruise and Appraisal Summary

Pole volume by grade

Unit/Sp/Lng (ft.)	Values			
	#2 Saw	#3 Saw	#4 Saw	Total MBF
DF				
1	14	14	-	28
2	35	19	-	54
Grand Total	49	33	-	82

Total MBF Unit/Sp/Lng (ft)	Class						Grand Total
	1	2	3	4	5	H1	
1	7.3	4.8	15.4				27.5
DF							
65			4.5				4.5
70			4.5				4.5
80			2.9				2.9
85			3.5				3.5
90		4.8					4.8
105	7.3						7.3
2		19.6	8.0	1.5	1.7	23.3	54.1
DF							
40					0.8		0.8
45					1.0		1.0
50				1.5			1.5
55			1.6				1.6
65			2.5				2.5
75		3.1					3.1
85		10.5	3.9			7.1	21.5
95						8.1	8.1
100		5.9				8.2	14.1
Grand Total	7.3	24.4	23.4	1.5	1.7	23.3	81.6

Unit (Multiple Items)

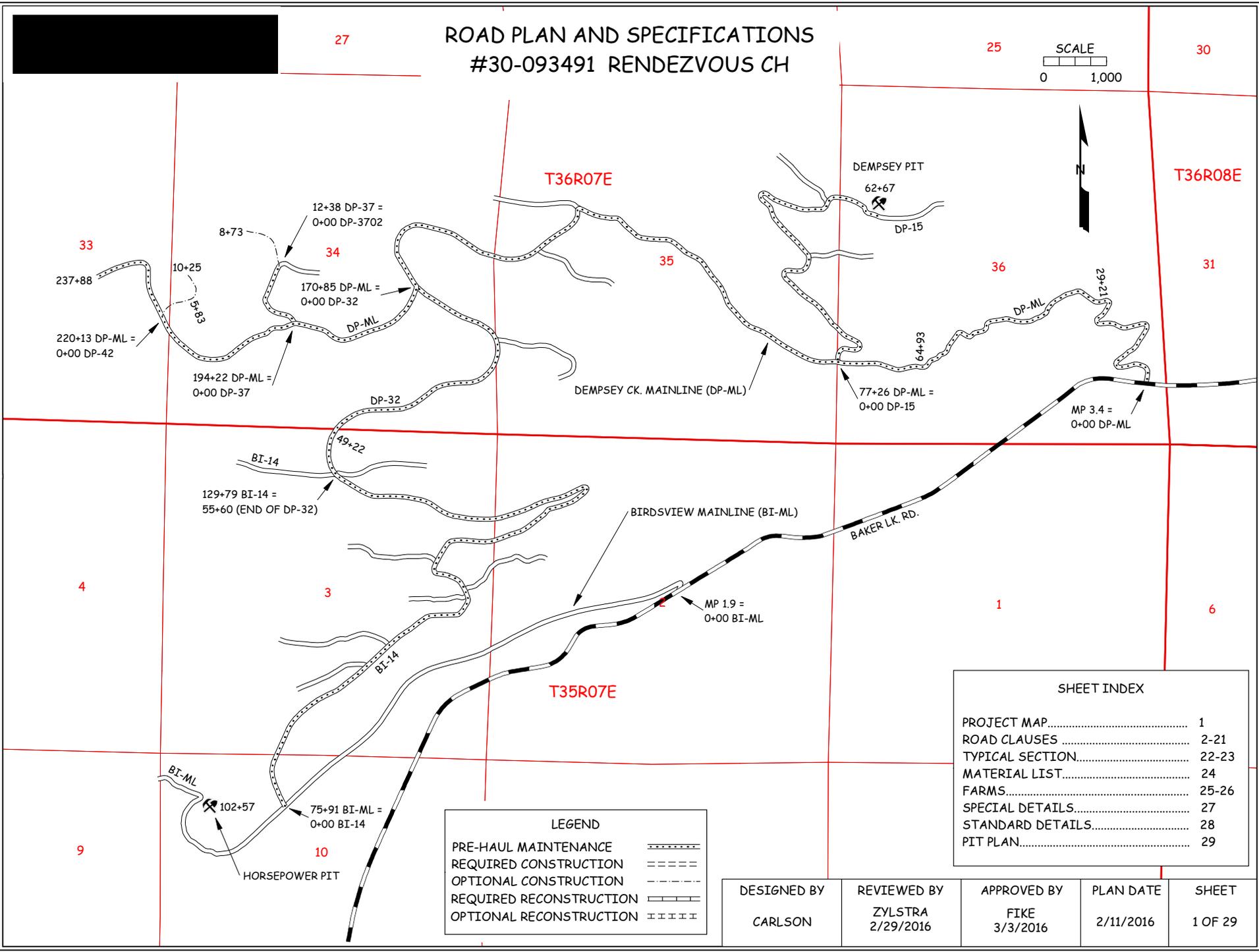
Unit/Sp/Lng(ft)	No. Poles by length
DF	
40	11
45	11
50	11
55	11
65	30
70	20
75	11
80	10
85	53
90	10
95	11
100	22
105	10
Grand Total	219

No. Poles by GL Unit/Sp/GL(in.)	Class				
	1	2	3	4	5
1	10	10	59		
DF					
16.1			10		
16.3			10		
16.8			20		
17.2			10		
18.5			10		
20		10			
22.5	10				
2		43	32	11	22
DF					
12.4					11
13.1					11
14				11	
15.4			11		
16.3			11		
18			11		
18.2		11			
18.8		11			
19.2		11			
20.3		11			
21.6					
22.5					
22.9					
Grand Total	10	53	91	11	22

Unit	(Multiple Items)
Sp/Lng (ft)	Total \$ Delivered
DF	
40	\$566
45	\$750
50	\$1,208
55	\$1,336
65	\$6,114
70	\$4,057
75	\$2,870
80	\$2,676
85	\$24,102
90	\$4,732
95	\$8,110
100	\$14,397
105	\$7,566
Grand Total	\$78,484

Unit		(Multiple Items)	
		Values	
Unit/Sp/Lng	Total \$ Delivered	Sum of Total	No. poles
DF			
12	\$1,316		22
14	\$2,544		22
16	\$12,847		60
18	\$20,114		53
20	\$17,619		31
22	\$24,044		31
Grand Total	\$78,484		219

ROAD PLAN AND SPECIFICATIONS #30-093491 RENDEZVOUS CH



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

SHEET INDEX	
PROJECT MAP.....	1
ROAD CLAUSES	2-21
TYPICAL SECTION.....	22-23
MATERIAL LIST.....	24
FARMS.....	25-26
SPECIAL DETAILS.....	27
STANDARD DETAILS.....	28
PIT PLAN.....	29

DESIGNED BY	REVIEWED BY	APPROVED BY	PLAN DATE	SHEET
CARLSON	ZYLSTRA 2/29/2016	FIKE 3/3/2016	2/11/2016	1 OF 29

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

RENDEZVOUS CH TIMBER SALE ROAD PLAN
SKAGIT COUNTY
HAMILTON UNIT BAKER DISTRICT

AGREEMENT NO.: 30-093491

STAFF ENGINEER: CARLSON

DATE: FEBRUARY 11, 2016

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>
DP-ML	0+00 to 237+88	Pre-Haul Maintenance
DP-15	0+00 to 62+67	Pre-Haul Maintenance
DP-32	0+00 to 55+60	Pre-Haul Maintenance
BI-14	0+00 to 129+79	Pre-Haul Maintenance

0-3 OPTIONAL ROADS

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
DP-37	0+00 to 12+38	Pre-Haul Maintenance
DP-3702	0+00 to 8+73	Construction
DP-42*	0+00 to 10+25	Construction

* Construction from 0+00 to 5+83 is on an abandoned grade.

0-4 CONSTRUCTION

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

0-6 PRE-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
DP-ML	0+00 to 237+88	Grading, culvert installation, and application of 3-inch minus ballast rock
DP-15	0+00 to 62+67	Grading and culvert installation
DP-32	0+00 to 55+60	Grading
DP-37	0+00 to 12+38	Grading
BI-14	0+00 to 129+79	Grading, brushing, and application of gravel pit run

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

Contractor shall develop existing rock sources. Rock source development will involve clearing, stripping, drilling, shooting, and processing rock to generate riprap, 3-inch-minus ballast rock, and 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 Contractor 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, Contractor shall obtain approval from the State for any submitted plan that changes the scope of work or environmental condition from the original road plan.

1-2 NON-COMPLIANCE WITH STATE ROAD PLAN

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to non-compliance or the Contractor's choice of construction techniques will be at the Contractor's expense.

1-3 ROAD DIMENSIONS

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

1-4 ROAD TOLERANCES

Contractor 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

Contractor 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.

1-9 DAMAGED METALLIC COATING

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

1-18 REFERENCE POINT DAMAGE

Contractor 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 Contractor resets all moved or damaged RPs.

1-21 HAUL APPROVAL

Contractor shall not use roads under this road plan for any hauling without written approval from the Contract Administrator.

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, Contractor shall provide a maintenance plan to include further protection of state resources. Contractor 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. Contractor 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

Contractor 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:

- 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, Contractor shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Contractor 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

Contractor 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 Contractor’s expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Contractor 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 – CONTRACTOR MAINTENANCE

Contractor shall perform maintenance on roads listed in Contract Clause C-050.1 CONTRACTOR ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Contractor may be required to perform maintenance on roads listed in Contract Clause C-060.1 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Contractor shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following roads, Contractor shall use a grader to shape the existing surface before any hauling.

<u>Road</u>	<u>Stations</u>
DP-ML	0+00 to 237+88
DP-15	0+00 to 62+67
DP-32	0+00 to 55+60
DP-37	0+00 to 12+38
BI-14	0+00 to 129+79

2-6 CLEANING CULVERTS

On the following roads, Contractor shall 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>
DP-ML	0+00 to 237+88
DP-15	0+00 to 62+67
DP-32	0+00 to 55+60
DP-37	0+00 to 12+38
BI-14	0+00 to 129+79

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following roads, Contractor shall clean ditches, headwalls, and catchbasins. Work must be completed before any hauling and must be done in accordance with the CULVERT AND DRAINAGE SPECIFICATIONS DETAIL. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
DP-ML	0+00 to 237+88
DP-15	0+00 to 62+67
DP-32	0+00 to 55+60
DP-37	0+00 to 12+38
BI-14	0+00 to 129+79

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following roads, Purchaser shall cut vegetative material up to 3 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>
BI-14	0+00 to 129+79

3-5 CLEARING

Contractor 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

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

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 40%.
- Against standing trees unless approved by the Contract Administrator.

3-10 GRUBBING

Contractor shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Contractor 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 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, and stumps that are larger than one cubic foot in volume within the grubbing and clearing limits as shown on the TYPICAL SECTION SHEET.

3-21 DISPOSAL COMPLETION

Contractor shall remove organic debris from the road surface, ditchlines, and culvert inlets and outlets. Contractor shall complete all disposal of organic debris before any hauling.

3-23 PROHIBITED DISPOSAL AREAS

Contractor 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 40%.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

Contractor shall scatter organic debris outside of the clearing limits in natural openings unless otherwise detailed in this road plan.

SECTION 4 – EXCAVATION

4-2 PIONEERING

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

Contractor shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 percent adverse.
- Minimum curve radius is 50 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-5 CUT SLOPE RATIO

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

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

4-6 EMBANKMENT SLOPE RATIO

Contractor 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

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

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

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

Curve widening is modified as follows:

<u>Road</u>	<u>Stations</u>	<u>Curve Widening</u>
DP-3702	3+05 to 6+74	8 ft. at midpoint of curve tapering to 0 ft. at beginning and end of curve.
DP-42	6+00 to 8+28	14 ft. at midpoint of curve tapering to 0 ft. at beginning and end of curve.

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.

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

4-21 TURNOUTS

Contractor 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.

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-35 WASTE MATERIAL DEFINITION

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

4-38 PROHIBITED WASTE DISPOSAL AREAS

Contractor 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.
- Within a riparian management zone.
- 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

Contractor 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

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

4-61 SUBGRADE COMPACTION

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

SECTION 5 – DRAINAGE

5-5 CULVERTS

Contractor 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 and must meet the specifications in Clauses 10-15 through 10-23. Purchaser shall obtain approval from the Contract Administrator for the quality of used culverts before installation.

5-6 USED CULVERT MATERIAL

Contractor may install used culverts on the following roads. All other roads must have new culverts installed.

<u>Road</u>
DP-3702
DP-42

5-11 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. Contractor 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" and the Corrugated Polyethylene Pipe Association’s “Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings”.

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Contractor shall obtain written approval from the Contract Administrator for the installation of culverts 36 inches in diameter and over before backfilling.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 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.

5-25 CATCH BASINS

Contractor 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

Contractor 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 the following culverts, Contractor shall place heavy loose riprap in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets 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. Heavy loose riprap must meet the specifications in Clause 6-51 HEAVY LOOSE RIP RAP.

<u>Road</u>	<u>Station</u>
DP-ML	84+47
DP-15	29+25
DP-42	9+04

SECTION 6 – ROCK AND SURFACING

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 Contractor. Contractor 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>
Dempsey Pit	Sta. 62+67 of the DP-15 road	Riprap and 3-inch minus ballast
Horsepower Pit	Sta. 102+57 of the BI-ML road	Gravel pit run

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 Contractor's expense. Rock sources are subject to written approval by the Contract Administrator before their use.

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Contractor shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator.

<u>Source</u>
Dempsey Pit

6-11 ROCK SOURCE DEVELOPMENT PLAN BY CONTRACTOR

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

<u>Source</u>
Horsepower Pit

Rock source development plans prepared by the Contractor 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 specifications :

- 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.

6-20 ROCK GRADATION TYPES

Contractor 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.

6-41 PIT RUN ROCK

No more than 20 percent of the rock may be larger than 4 inches in any dimension and no rock may be larger than 8 inches in any dimension. Gravel pit run rock may not contain more than 5 percent by weight of organic debris, dirt, and trash. Rock may require processing to meet this specification.

6-50 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. Contractor shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements, and are not subject to reduction.

6-70 APPROVAL BEFORE ROCK APPLICATION

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

6-71 ROCK APPLICATION

Contractor 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. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the TYPICAL SECTION by routing equipment over the entire width.

6-73 ROCK FOR WIDENED PORTIONS

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

SECTION 8 – EROSION CONTROL

8-15 REVEGETATION

Contractor 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 Contractor shall provide the required grass seed and fertilizer.

8-17 REVEGETATION TIMING

Contractor 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

Contractor 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 Contractor 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

Contractor shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Contractor 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

Contractor 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

Contractor 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 Contractor and must be removed from state land.

9-5 POST-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
BI-ML	0+00 to 102+57	Post-haul grading

9-10 LANDING DRAINAGE

Contractor shall provide for drainage of the landing surface.

9-12 LANDING EMBANKMENT REMOVAL

Contractor 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

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

<u>Road</u>	<u>Stations</u>
DP-3702	Sta. 0+00 to 8+73
DP-42	Sta. 0+00 to 10+25

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 Contractor.
- 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

10-15 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).

10-16 CORRUGATED ALUMINUM CULVERT

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

10-17 CORRUGATED PLASTIC CULVERT

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

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.

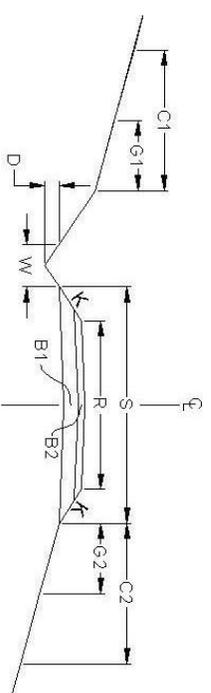
10-24 GAGE AND CORRUGATION

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

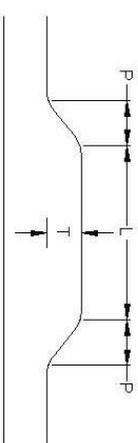
<u>Diameter</u>	<u>Gage</u>	<u>Corrugation</u>
18"	16 (0.064")	2 ² / ₃ " X 1/2"
24" to 48"	14 (0.079")	2 ² / ₃ " X 1/2"
54" to 96"	14 (0.079")	3" X 1"

ROAD #	DP-ML	DP-ML	DP-ML	DP-15
REQUIRED / OPTIONAL	REQUIRED	REQUIRED	REQUIRED	REQUIRED
CONSTRUCT / RECONSTRUCT	PRE-HAUL	PRE-HAUL	PRE-HAUL	PRE-HAUL
TOLERANCE CLASS (A/B/C)	C	C	C	C
STATION / MP TO	0+00	29+21	64+63	0+00
STATION / MP	29+21	64+63	237+88	62+67
ROAD WIDTH	R	14	12	12
CROWN (INCHES @ C/L)		3	3	3
DITCH WIDTH	W	3	3	3
DITCH DEPTH	D	1	1	1
TURNOUT LENGTH	L	50	50	--
TURNOUT WIDTH	T	10	10	--
TURNOUT TAPER	P	25	25	--
GRUBBING	G1	--	--	--
	G2	--	--	--
CLEARING	C1	--	--	--
	C2	--	--	--
ROCK FILLSLOPE	K:1	1½	1½	--
❖ BALLAST DEPTH	B1	6	6	--
CUBIC YARDS / STATION		42	34	--
➤ TOTAL CY BALLAST		1225	1205	60*
❖ SURFACING DEPTH	B2	--	--	--
CUBIC YARDS / STATION		--	--	--
➤ TOTAL CY SURFACING		--	--	--
➤ TOTAL CUBIC YARDS		1225	1205	60*
SUBGRADE WIDTH	S	15.5	13.5	--
BRUSHCUT (Y/N)		N	N	N
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	Y

TYPICAL SECTION



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.

* 20 CY over each culvert installation.
 ** Construction is on an abandoned grade.
 TOTAL BALLAST = 3950 cy
 TOTAL RIPRAP = 90 cy

ROAD #		DP-32	DP-37	DP-3702	DP-42**	DP-42	BI-14	
REQUIRED / OPTIONAL		REQUIRED	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	REQUIRED	
CONSTRUCT / RECONSTRUCT		PRE-HAUL	PRE-HAUL	CONSTRUCT	CONSTRUCT	CONSTRUCT	PRE-HAUL	
TOLERANCE CLASS (A/B/C)		C	C	C	C	C	C	
STATION / MP TO		0+00	0+00	0+00	0+00	5+83	0+00	
STATION / MP		55+60	12+38	8+73	5+83	10+25	129+79	
ROAD WIDTH	R	12	12	12	12	12	12	
CROWN (INCHES @ C/L)		3	3	3	3	3	3	
DITCH WIDTH	W	3	3	2	2	2	3	
DITCH DEPTH	D	1	1	1	1	1	1	
TURNOUT LENGTH	L	--	--	25	25	25	25	
TURNOUT WIDTH	T	--	--	10	10	10	10	
TURNOUT TAPER	P	--	--	25	25	25	25	
GRUBBING	G1	--	--	5	5	5	--	
	G2	--	--	5	5	5	--	
CLEARING	C1	--	--	10	10	10	--	
	C2	--	--	10	10	10	--	
ROCK FILL SLOPE	K:1	--	--	1½	1½	1½	1½	
❖ BALLAST DEPTH	B1	--	--	15	6	15	6	
CUBIC YARDS / STATION		--	--	93	34	93	37	
➤ TOTAL CY BALLAST		--	--	810	200	410	4800	
❖ SURFACING DEPTH	B2	--	--	--	--	--	--	
CUBIC YARDS / STATION		--	--	--	--	--	--	
➤ TOTAL CY SURFACING		--	--	--	--	--	--	
➤ TOTAL CUBIC YARDS		--	--	810	200	410	4800	
SUBGRADE WIDTH	S	--	--	15.75	13.5	15.75	13.5	
BRUSH CUT (Y/N)		N	N	N	N	N	Y	
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	N	N	N	Y	

MATERIALS LIST

ROAD #	STATION	CULVERT			DWNSPT		RIPRAP			FILL TYPE	TOLERANCE	REMARKS
		DIAMETER	LENGTH	TYPE	LENGTH	TYPE	INLET	OUTLET	TYPE			
DP-ML	10+43	24	40	PD			3	5	H/L	NT	C	Replace existing culvert. Ensure road ditch from sta. 10+00 drains to culvert installation.
DP-ML	12+61	18	40	PD			2	3	L	NT	C	
DP-ML	18+80	18	36	PD			2	3	L	NT	C	
DP-ML	36+25	18	36	PD			2	3	L	NT	C	
DP-ML	84+47	24	36	PD			3	5	H/L	NT	C	T5 stream. Replace existing culvert.
DP-ML	199+19	24	40	PD			3	5	H/L	NT	C	
DP-ML	222+68	18	30	PD			2	3	L	NT	C	Ensure road ditch from sta. 221+18 drains to culvert installation.
DP-15	23+37	18	36	PD			2	3	L	NT	C	
DP-15	29+25	24	36	PD			3	5	H/L	NT	C	T5 stream.
DP-3702	0+20	18	40	XX			2	3	L	NT	C	
DP-3702	1+98	18	40	XX			2	3	L	NT	C	
DP-42	0+25	18	40	XX			2	3	L	NT	C	
DP-42	1+75	18	30	XX			2	3	L	NT	C	
DP-42	5+33	18	30	XX			2	3	L	NT	C	
DP-42	9+04	24	30	XX			3	5	H/L	NT	C	T5 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

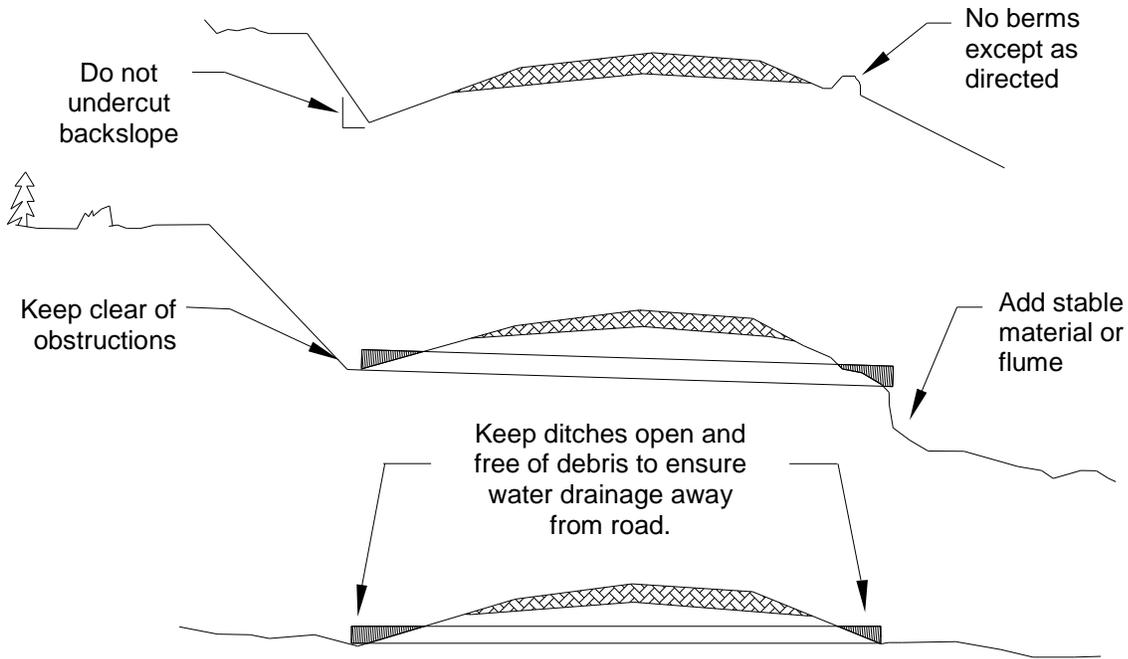
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

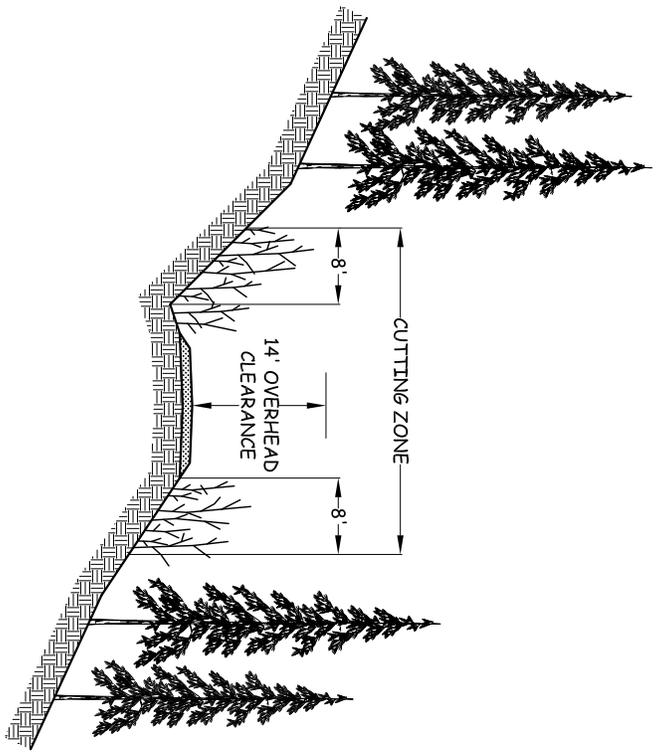
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

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



ROAD BRUSHING DETAILS



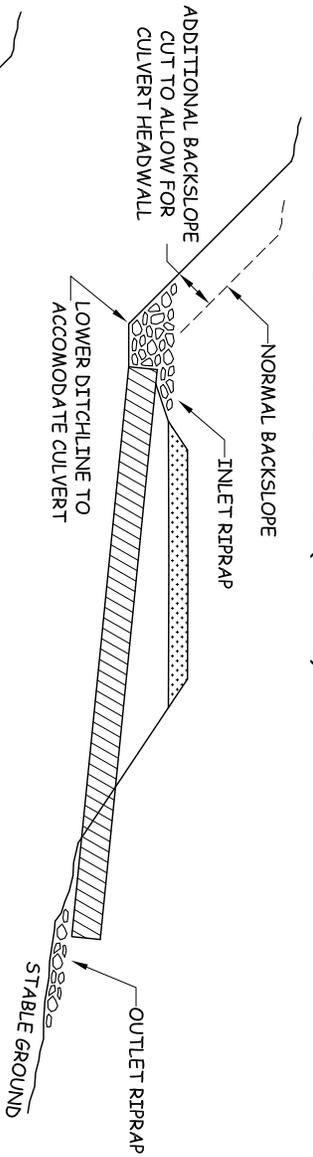
SPECIFICATIONS

- 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.

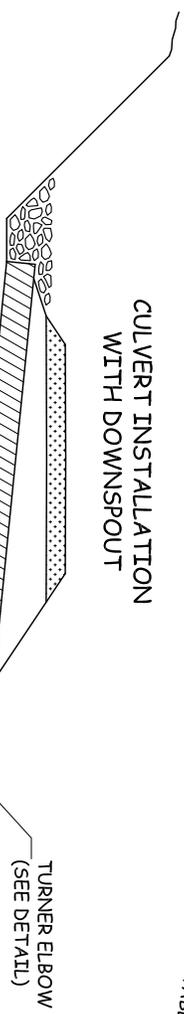
CONTRACT #	PROJECT	SHEET
30-093491	RENDEZVOUS CH	27 OF 29

CULVERT AND DRAINAGE SPECIFICATIONS

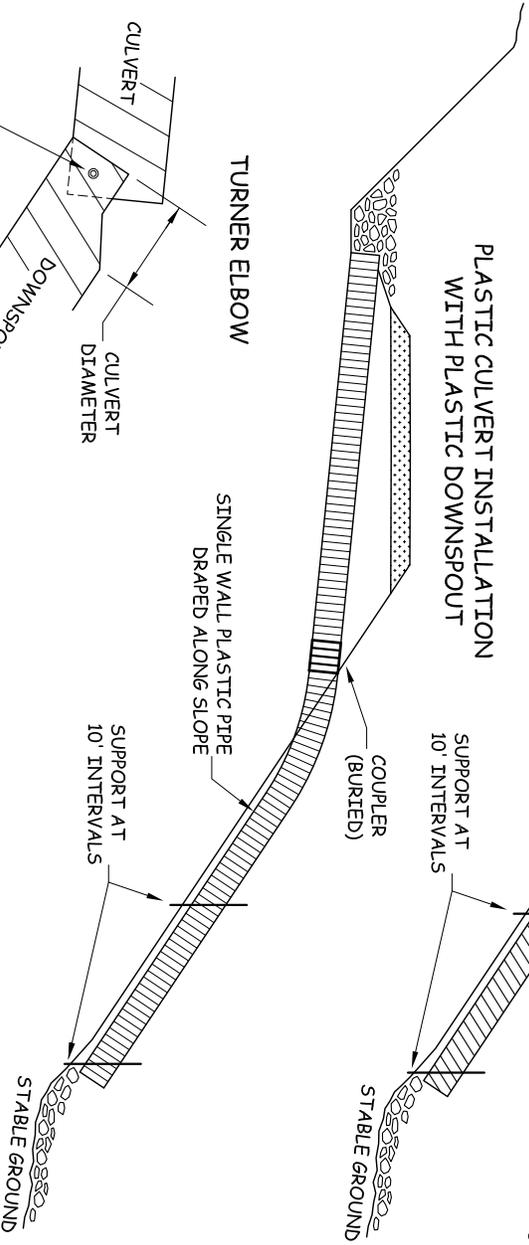
CULVERT INSTALLATION (TYPICAL)



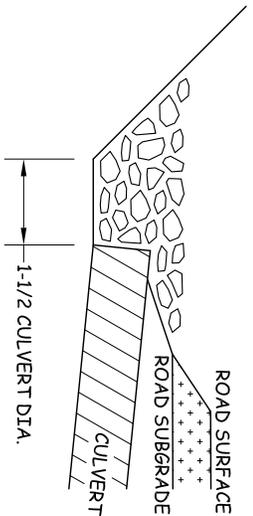
CULVERT INSTALLATION WITH DOWNSPOUT



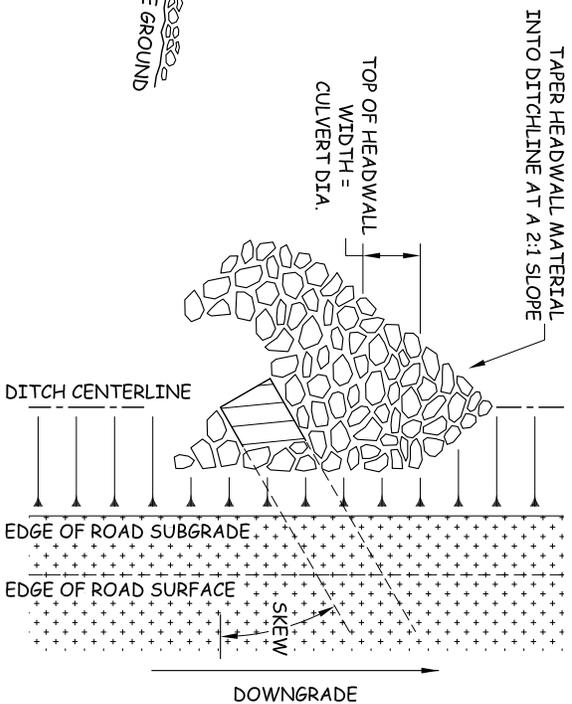
PLASTIC CULVERT INSTALLATION WITH PLASTIC DOWNSPOUT



CULVERT HEADWALL - SECTION VIEW

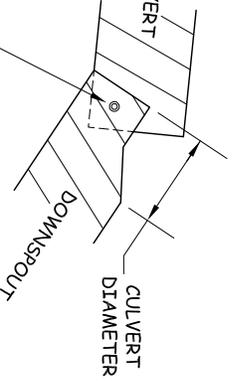


CULVERT HEADWALL - PLAN VIEW



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

BOLTED WITH 5/8" BOLTS AND WASHERS (BOTH SIDES)

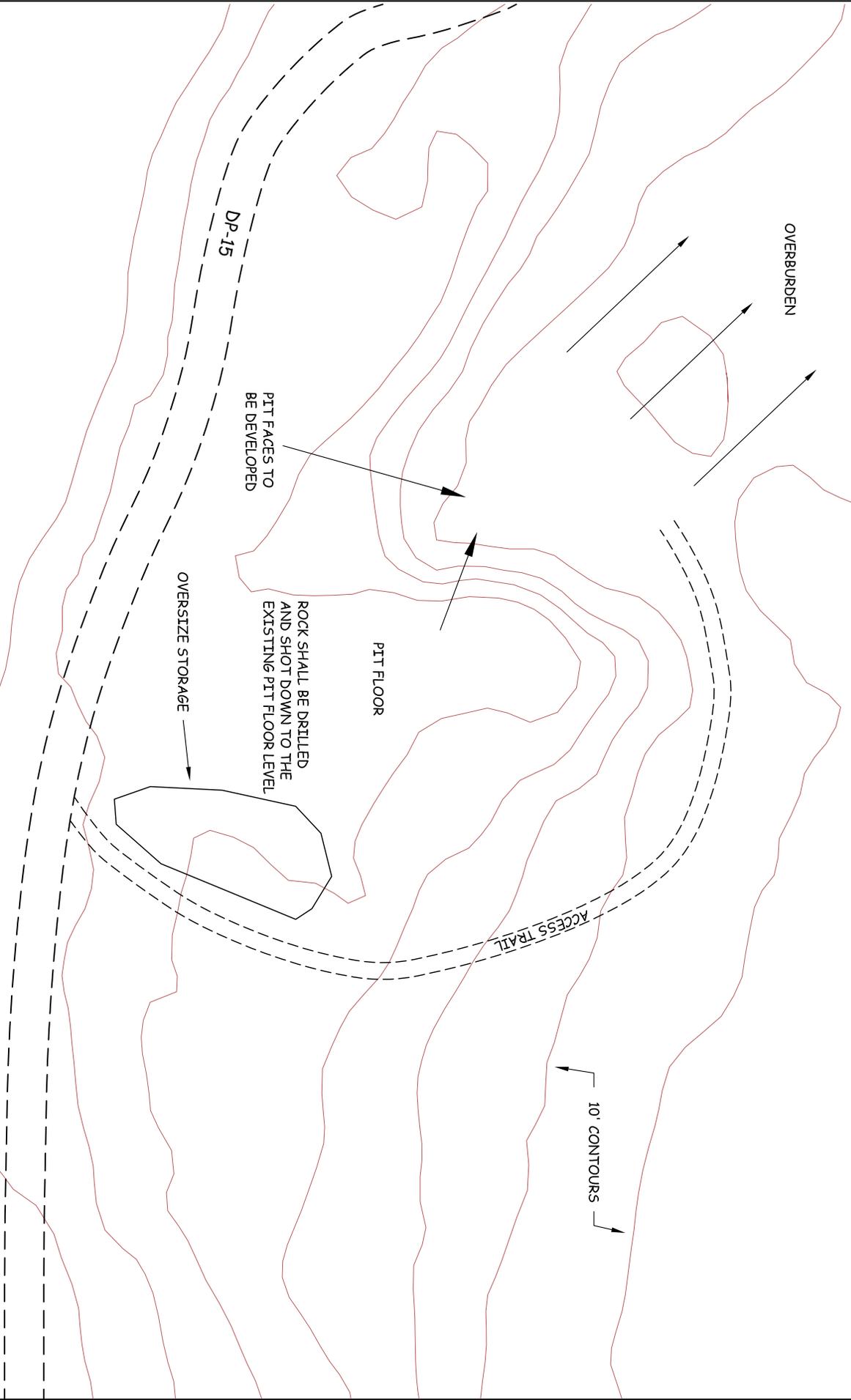


CONTRACT #
30-093491

PROJECT
RENDEZVOUS CH

SHEET
28 OF 29

PIT DEVELOPMENT PLAN
DEMPSEY HARDROCK PIT
SW¹/₄ NW¹/₄ S36 - T36N - R07E



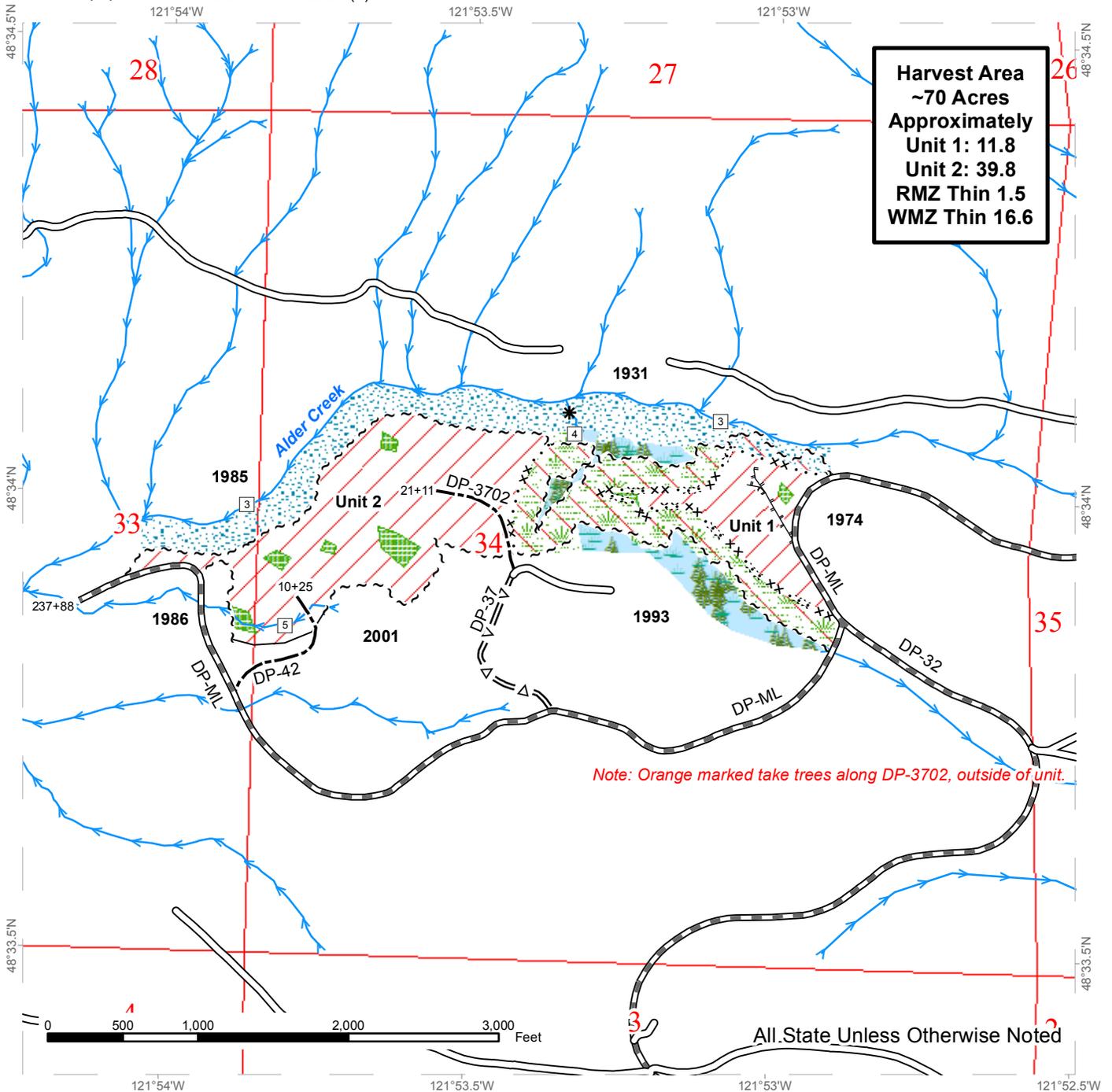
FOR PIT DEVELOPMENT REQUIREMENTS SEE
CLAUSE 6-12 ROCK SOURCE SPECIFICATIONS.

CONTRACT # 30-093491	PROJECT RENDEZVOUS CH	SHEET 29 OF 29
-------------------------	--------------------------	-------------------

TIMBER SALE MAP

SALE NAME: RENDEZVOUS CH
AGREEMENT #: 93491
TOWNSHIP(S): T36R07E
TRUST(S): State Forest Transfer(1)

REGION: Northwest Region
COUNTY(S): SKAGIT
ELEVATION RGE: 917-1292



Harvest Area
 ~70 Acres
 Approximately
 Unit 1: 11.8
 Unit 2: 39.8
 RMZ Thin 1.5
 WMZ Thin 16.6

Note: Orange marked take trees along DP-3702, outside of unit.

All State Unless Otherwise Noted

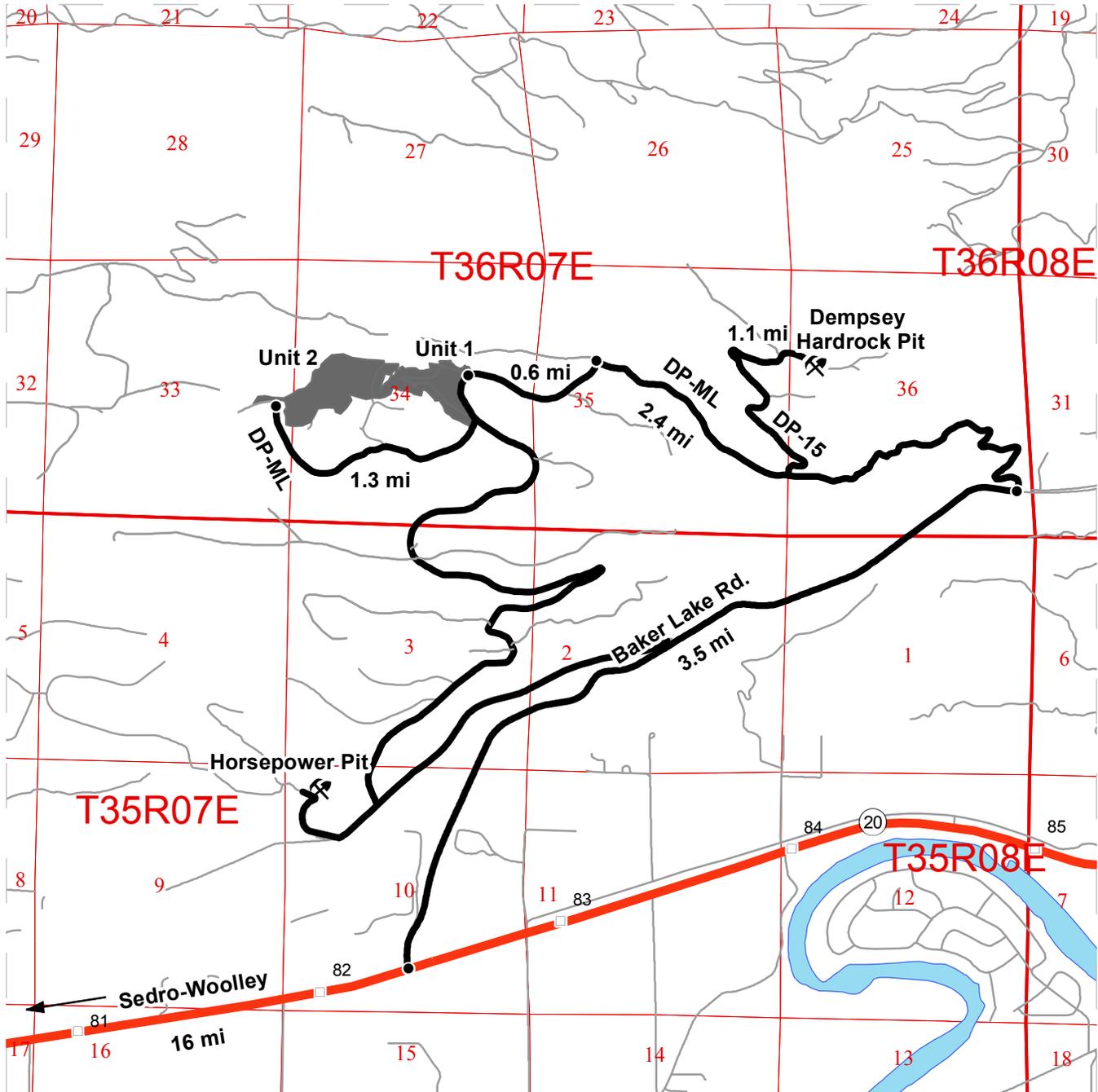
	Sale Area (VRH)		Streams		Existing Roads
	Variable Density Thinning		Stream Type		Required Pre-Haul Maintenance
	Sale Boundary Tags		Stream Type Break		Optional Pre-Haul Maintenance
	Special Mgmt Area		Leave Tree Area		Optional Construction
	Timber Type Break (No Tags)		Riparian Mgt Zone		Designated Skid Trail
	DNR Managed Lands		Forested Wetland		
			Wetland Mgt Zone		



DRIVING MAP

SALE NAME: RENDEZVOUS CH
AGREEMENT#: 93491
TOWNSHIP(S): T36R07E
TRUST(S): State Forest Transfer(1)

REGION: Northwest Region
COUNTY(S): SKAGIT
ELEVATION RGE: 917'-1292'



- Timber Sale Unit
- Highways
- Haul Route
- Other Route
- Milepost Markers
- Distance Indicator

DRIVING DIRECTIONS:

Head east on Highway 20 from Sedro-Woolley for 16 miles and take a left (north) onto Baker Lake Road. Drive for 3.5 miles and turn left onto the Dempsey Mainline (DP-ML). Travel on DP-ML for 2.4 miles to the junction with DP-24. Stay left at the junction to stay on DP-ML and drive 0.6 miles to Unit 1, which will be on the right (west). Continue on DP-ML for 1.3 miles to reach Unit 2.



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PETER GOLDMARK
COMMISSIONER OF PUBLIC LANDS

**HARVESTING SERVICES CONTRACT
SEALED BID FORM**

_____ Rendezvous CH Sorts _____
(Print Project Name)

_____ 93491 _____
(Agreement No.)

(Print Company Name)

(Street Address)

(Business Telephone Number)

(City, State and Zip Code)

(email address)

To meet Harvesting obligations, I bid the following On Board Truck (OBT) rate:

(check box for appropriate project payment method. RFQ section 2.06)
 \$/Ton of timber harvested and delivered.
 \$/mbf of timber harvested and delivered.

And to meet pole sort Harvesting obligations, I bid the following OBT rate:

(check box for appropriate project payment method. RFQ section 2.06)
 \$/Ton of poles harvested and delivered.
 \$/mbf of poles harvested and delivered.

“Does Not Apply” to projects with no pole sorts identified. Refer to RFQ section 2.06.

To meet Hauling obligations, I bid:

Hauling Bid Factor
(format to 3 decimal places ie 0.000)

Hauling Services Payment calculation explained in RFQ section 1.05.
Actual “live-load” weights used to determine payment for hauling sorts designated as “tonnage”. Sorts designated as “MBF” will use calculated tonnage based on the DNR’s advertised “tons/mbf conversion factor specific for each sort unless actual tonnage is available and approved for use.

If awarded this contract, I am responsible for independently negotiating, procuring and paying for any and all subcontracted services provided.

Attached is my completed 'Statement of Available Resources and Work Plan' which I understand will be evaluated by the Department of Natural Resources in conjunction with my bid to determine my ability to complete the project.

BY SUBMISSION OF THIS BID THE BIDDER WARRANTS AND AGREES TO THE FOLLOWING:

1. The bid price has been determined independently, without consultation, communication, or agreement with others for the purpose of restricting competition.
2. The bid is a firm offer for a period of 90 days from the bid submission deadline, and it may be accepted by the State without further negotiation at any time within the 90-day period.
3. In preparing this proposal or bid, the Bidder was not assisted by any current or former employee of the DNR whose duties relate (or did relate) to this prospective contract and who was assisting in other than his or her official, public capacity. Neither does such a person or any member of his or her immediate family have any financial interest in the outcome of this proposal.
4. Acceptance of the Harvesting Services Contract general terms and conditions.
5. Acceptance of the Harvesting Services Contract estimated road payment values as shown fixed by terms in contract clause P-027.
6. The Bidder has had an opportunity to fully inspect the sale area and the timber to be harvested.
7. The Bidder enters this bid based solely upon their own judgment of the costs associated with harvesting, hauling, and any additional required work formed after their own examination and inspection of both the timber sale area and the forest products to be harvested.
8. The Bidder enters this bid without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representation by the State Department of Natural Resources.
9. The Bidder, if successful, will furnish the necessary labor, equipment, and services needed to complete the work as specified by the harvesting contract including commencing and completing the operations in the times specified.

10. The Bidder agrees to execute the harvesting contract for the said project and agrees to furnish surety and insurance as required in the specifications.
11. The Bidder assumes the risk of liabilities related to any regulatory actions by any government agency that may affect the operability of these harvesting contracts. Such regulatory actions include, but are not limited to, actions taken pursuant to the Forest Practices Act, chapter 76.09 RCW, and the Endangered Species Act, 16 U.S.C. §§ 1531-1544. Please see the Harvesting Services Contract for further information.
12. The DNR cannot verify the presence or absence of northern spotted owls, marbled murrelets or any other threatened or endangered species that may affect the operability of the timber sale. The Bidder relies solely on his/her own assessments.
13. Acreage estimates and volume estimates contained within the harvesting services contract are made only for administrative and identification purposes. Except as expressly provided by the harvesting contract, the Apparent Successful Contractor shall be responsible to harvest the sale, even if the actual acreage or timber volume varies from the estimated quantity or volume shown.
14. The DNR will not reimburse the Bidder for any costs incurred in the preparation of this proposal. All proposals become the property of the DNR and I/we claim no proprietary rights to the ideas or writings contained in them.
15. The Bidder will be required to comply with the Department's Nondiscrimination Plan and federal and state laws on which it is based. If requested by the DNR, the Bidder/Harvester will submit additional information about the nondiscrimination and affirmative action policies and plans of their organization in advance of or after the contract award.

By signing and submitting this bid the Bidder agrees to all of the preceding requirements. The Bidder further warrants to the State that they enter this bid based upon their own judgments of the value of the harvesting services to be provided through the Harvesting Services Contract, formed after their own examination and inspection of both the timber sale area and the forest products to be harvested.

 (Signature of authorized representative submitting this bid)

 (Date)

 (Print name and title of authorized representative signing bid)

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PETER GOLDMARK
COMMISSIONER OF PUBLIC LANDS
HARVESTING SERVICES CONTRACT
ROAD PROPOSAL COST PROPOSAL FORM

(Print Company Name)

(Street Address)

(Business Telephone Number)

(City, State and Zip Code)

(email address)

(Per RFQ section 2.06)

Road/Structure	Description	Req./Opt.	Stations/ Qty.	Min \$/Sta	Number of Stations to perform	Bid \$/Unit (Sta.)	Total
DP-ML (0+00 to 29+21)	Pre-Haul Maint.	Required	29.21	\$606.01	29.21		
DP-ML (29+21 to 64+63)	Pre-Haul Maint.	Required	35.42	\$455.97	35.42		
DP-ML (64+63 to 237+88)	Pre-Haul Maint.	Required	173.25	\$48.88	173.25		
DP-15 (0+00 to 62+67)	Pre-Haul Maint.	Required	62.67	\$63.81	62.67		
DP-32 (0+00 to 55+60)	Pre-Haul Maint.	Required	55.6	\$27.92	55.6		
BI-14 (0+00 to 129+79)	Pre-Haul Maint.	Required	129.79	\$335.17	129.79		
DP-ML (0+00 to 29+21)	Post-Haul Main	Required	29.21	\$5.68	29.21		
DP-ML (29+21 to 64+63)	Post-Haul Main	Required	35.42	\$5.68	35.42		
DP-ML (64+63 to 237+88)	Post-Haul Main	Required	173.25	\$5.68	173.25		
DP-15 (0+00 to 62+67)	Post-Haul Main	Required	62.67	\$5.68	62.67		
DP-32 (0+00 to 55+60)	Post-Haul Main	Required	55.6	\$5.68	55.6		
BI-ML (0+00 to 102+57)	Post-Haul Main	Required	102.57	\$5.68	102.57		
BI-14 (0+00 to 129+79)	Post-Haul Main	Required	129.79	\$5.68	129.79		
DP-37 (0+00 to 12+38)	Pre-Haul Maint.	Optional	12.38	\$23.95			
DP-37 (0+00 to 12+38)	Post-Haul Maint.	Required, if used	12.38	\$5.68			
DP-3702 (0+00 to 8+73)	Construction	Optional	8.73	\$2,068.05			
DP-42 (0+00 to 5+83)	Construction	Optional	5.83	\$1,030.27			
DP-42 (5+83 to 10+25)	Construction	Optional	4.42	\$2,145.41			
DP-3702 (0+00 to 8+73)	Abandonment	Required, if built	8.73	\$57.19			
DP-42 (0+00 to 10+25)	Abandonment	Required, if built	10.25	\$77.93			
Total							

Road Work is paid on a per station basis.