

STATE OF MONTANA

GOOD NEIGHBOR AUTHORITY - TIMBER SALE CONTRACT FOR STUMPAGE SOLD BY THE TON

VERSION 18 – DECEMBER 2024

DEPARTMENT OF NATURAL RESOURCES & CONSERVATION 2705 Spurgin Road Missoula, MT 59804	NAME, ADDRESS AND PHONE NUMBER OF PURCHASER:	
	Tax I.D. Number	
LAND OFFICE Northwestern	SALE NAME GNA Baird-Harper	SALE NUMBER GNA1064
UNIT OFFICE Libby	AWARD DATE June 17, 2026	TERMINATION DATE October 31, 2033

THIS TIMBER SALE CONTRACT (hereinafter called Contract or agreement) IS MADE AND ENTERED INTO by and between the State of Montana, acting through its Department of Natural Resources & Conservation, Forestry Division (hereinafter called the State) and (, a sole proprietorship; or , a partnership; or , Inc. a corporation) (hereinafter called Purchaser) having an office and principal place of business at the address shown above. Purchaser's bid for all timber and timber products described in this Contract has been accepted by the State after having been estimated, appraised and advertised for sale as required by law. Therefore, in consideration of the mutual promises contained in this agreement, the State agrees to sell and the Purchaser agrees to purchase the designated timber located on the areas described in this Contract at the specified rates of payment and in strict conformity with the requirements, standards, specifications and conditions set forth in this Contract.

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-ATTACHMENTS-			
The following attachments are hereby made a part of this contract:			
ATTACHMENT A: Timber Sale Maps			5 Pages
ATTACHMENT B: Road Construction, Improvements and Maintenance Specifications			42 Pages
ATTACHMENT C: Forest Fire Regulations			2 Pages
ATTACHMENT D: Working in Bear Habitat Brochure			1 Page
ATTACHMENT E: Forest Resources Conservation and Shortage Relief Act			5 Pages
ATTACHMENT F: Food Storage Order R1-2023-02			7 Pages
ATTACHMENT G: Downed Woody Debris Computation Form			2 Pages
ATTACHMENT H: Temporary Road Use Permit			12 Pages
ATTACHMENT I: 124 Permit Application			13 Pages

TIMBER SALE CONTRACT

TABLE 1 - LEGAL DESCRIPTION OF THE GROSS SALE AREA			
The timber designated for sale under this Contract is within the following sale area			
Subdivisions	Section	TwN	Rge
All or portions of	19-22, 26-35	32N	28W
All or portion of	25 and 36	32N	29W
Total approximate acres in gross sale area:	5,491 Acres		
Number of harvest units (Including Right-of-Way):	27 Units		
Total acres in harvest units (Including Right-of-Way & optional harvest units):	1,329 Acres		

TABLE 1 (continued) - ESTIMATED SALE VOLUME	
The state does not guarantee the product weight, by species or in total, to equal the estimated advertised weight in quantity or product designation.	
Product	Estimated Quantity (Tons)
Sawlogs	75,307
Other Material (pulp)	Not Estimated
Total Estimated Volume	75,307

TABLE 1 (continued) - PAYMENT RATES			
Payment	Amount		Requirements
Performance Bond Amount:	20% of bid value		See Section II.A.1-3.
	Product	Amount	
	Sawlogs	\$ _/ton	
Stumpage Rate per ton:	Ponderosa Pine Sawlogs	\$ _/ton	See Section II.B.1-3.
	Other Material	\$0.50/ton	
Required Deposits (slash, etc.)	N/A	N/A	

I. GENERAL TERMS

A. DEFINITION OF CONTRACT LANGUAGE: The following definitions apply to terms used in this Contract:

1. Administrator – The Good Neighbor Authority Bureau Chief, Forestry Division, Department of Natural Resources & Conservation
2. Draw – A swale or drainageway that may not have perceptible or definite beds or banks.
3. Environmental Law – Includes, but is not limited to, the following laws and any regulations promulgated under these laws: the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) (42 U.S.C. § 9601 *et seq.*), as amended; the Resource Conservation and Recovery Act (“RCRA”) (42 U.S.C. §§ 6901 – 6987), as amended; the Clean Air Act (42 U.S.C. § 7401, *et seq.*), as amended; the Safe Drinking Water Act (42 U.S.C. § 300f *et seq.*), as amended; the Clean Water Act (33 U.S.C. § 1401 *et seq.*), as amended; the Clean Air Act of Montana (Mont. Code Ann. § 75-2-101 *et seq.*), as amended; the Montana Water Quality Act (Mont. Code Ann. § 75-5-101 *et seq.*), as amended; the Montana Solid Waste Management Act (Mont. Code Ann. § 75-10-201 *et seq.*), as amended; the Montana Hazardous Waste Act (Mont. Code Ann. § 75-10-401 *et seq.*), as amended; the Montana Comprehensive Environmental Cleanup and Responsibility Act (Mont. Code Ann. § 75-10-701 *et seq.*) as amended; and the Montana Underground Storage Tank Act (Mont. Code Ann. § 75-11-501 *et seq.*) as amended.
4. Forest Officer – The State field representative assigned the job of contract administration for this timber sale Contract. Except as otherwise expressly stated in the Contract, the Forest Officer is not authorized to modify the contract on behalf of the State.
5. Hazardous or deleterious substance – Means a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose an imminent and substantial threat to public health, safety, or welfare or the environment, and is:
 - a. A substance that is defined as a hazardous substance by section 101(14) of CERCLA, 42 U.S.C. § 9601(14), as amended.
 - b. A substance identified by the administrator of the United States Environmental Protection Agency as a hazardous substance pursuant to section 102 of CERCLA, 42 U.S.C. § 9602, as amended.
 - c. A substance that is defined as a hazardous waste pursuant to section 1004(5) of RCRA, 42 U.S.C. § 6903(5), as amended, including a substance listed or identified in 40 CFR 261.
 - d. Any petroleum product.
6. Operating period – The annual time period during which field activities (logging, hauling, construction, etc.) may be conducted.
7. Paid or payment – Except as otherwise expressly stated in the Contract, full remuneration by either cash, money order or certified check.
8. Purchaser – The signatory party to this Contract other than the Administrator. Purchaser is also defined to include employees and agents of the Purchaser authorized to conduct activities as required for execution of the timber sale Contract. As an independent contractor, neither the Purchaser, its employees or agents shall be considered employees of the State of Montana or the United States Forest Service pursuant to work performed under this Contract.
9. Sawlog – A green or dead log as further defined under Section VII.C.

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10. State – The State of Montana and its agents and employees, including but not limited to the Department of Natural Resources & Conservation.
11. USFS - The United States Forest Service and its agents and employees.
12. Stream – A stream is a natural watercourse of perceptible extent that has a sandy or rocky bottom or definite banks and confines and conducts continuously or intermittently flowing water.
13. Stumpage – The rate paid in dollars per ton as specified in Table 1 for Sawlogs and/or Other Material.
14. Supervisor – A person designated by the Purchaser in charge of operations on site at the sale area at all times when construction or harvesting operations are in progress. The Supervisor shall have authorization to receive notices from the Forest Officer and take appropriate action with regard to breach and/or violations of the terms of the contract.

B. REMOVAL OF TIMBER AND TITLE TRANSFER:

1. Provided the Purchaser has paid for timber as required in Section II.B.1, ADVANCE STUMPAGE PAYMENT, the Purchaser has the right to cut and remove timber from the sale area provided all Contract requirements related to the commencement of operations have been met.
2. Title to all timber included in this contract shall be retained by the USFS until:
 - a. The timber has been paid for.
 - b. The timber has been measured, as described in Section III.A. MEASUREMENT AND LOG ACCOUNTABILITY.
 - c. The timber has been properly marked, branded and ticketed as described in Section III.C & E. MEASUREMENT AND LOG ACCOUNTABILITY and Attachment E, which is attached hereto and incorporated herein by reference, and removed from the gross sale area.
3. Title to timber remaining on the gross sale area at termination of the contract shall remain with the USFS.
4. As documented in this contract, or otherwise agreed to, all roads and other improvements become the property of the USFS as they are constructed.

C. TERM OF CONTRACT: This Contract is effective upon approval and execution by the Administrator and shall terminate on the Termination Date shown on page 1 unless terminated sooner for successful completion or for gross or persistent breach and/or failure to promptly and properly remedy contract violations of the Contract terms pursuant to Section IV. B, TERMINATION.

D. PRE-OPERATIONS MEETING: No activity may occur on the sale area until a pre-operations meeting is conducted between the Purchaser and the State. The Purchaser shall notify the Forest Officer at least seven (7) days prior to the start of operations to schedule the pre-operations meeting. The Forest Officer will specify to the Purchaser what information the Purchaser must provide to the State at the pre-operations meeting.

E. ANNUAL OPERATING PLAN: Purchaser may be required to submit a written annual operating plan, as specified by, and at the request of the Forest Officer.

F. CONTRACT TERM EXTENSION:

1. In the event that Purchaser's operations are delayed and Purchaser is not able to complete the requirements of this Contract prior to the harvest completion date or the termination date, the State may grant an extension of the term of this Contract. An extension will be considered by the State under only the following circumstances:

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- a. The State determines an extension is in the USFS and State's best interests;
 - b. Purchaser applies for the extension in writing at least 30 days prior to the termination date.
 - c. The State notifies the Purchaser that an extension is required.
 - d. Purchaser has provided the State with written notice from the surety that the performance bond on this contract has been extended for a period commensurate with the requested contract extension.
 - e. Purchaser has made a good faith effort to complete the sale.
 - f. The extension request is not based on poor log and/or market conditions.
2. If the contract term extension is granted, Purchaser shall conduct continuous operations through the operating periods and/or resume operations at the start of the next operating period until the requirements of this Contract are completed. No extension shall be granted for a period longer than eighteen (18) months after the termination date as provided herein unless a longer extension is determined to be in the State's and USFS's best interest.
 3. If the extension is requested and granted because of delays resulting from matters within Purchaser's control, the following will apply:
 - a. Purchaser shall pay an extension fee of \$ 500.00.
 - b. Stumpage rates for any volume cut, skidded or hauled during the extension period will be escalated a minimum of 10%.
 - c. No de-escalation will occur from the time the extension is granted by the Administrator, as documented in a signed modification, through the remainder of the Contract.
 4. An extension may be granted to the Purchaser without penalty if the State prohibits logging activity for more than 2 weeks during the operating period described in this Contract.
 5. All conditions of this contract shall remain in force during any period of extension, unless those conditions are amended by the terms of the extension.
 6. In the event the Contract terminates pursuant to Section I.C, TERM OF CONTRACT due to expiration of the time period within which its performance shall have been completed, and the State has not granted an extension, the Purchaser shall immediately cease all operations within the Gross Sale Area as shown in Table 1. Operations beyond the contract termination date for which the State has not granted an extension will be treated as trespass.
- G. LIABILITY FOR LOSS:** The Purchaser is responsible for loss, degradation, or damage to timber while the timber is in his, her or its custody, including but not limited to, timber which has been felled, skidded or decked and/or timber which has been lost, damaged or stolen after removal from the sale area but before scaling or weight is recorded.
- H. SUPERVISION:** When construction or harvesting operations are in progress, the Purchaser shall have exclusive control over the manner in which the Contract is executed if, as determined by the State, the Purchaser has and is complying with all terms and conditions provided herein. Purchaser is required to have a supervisor(s) in charge of operations on the sale area at all times. Such supervisor(s) shall have authorization to receive notices from the Forest Officer and take appropriate action with regard to breach and/or violations of the terms and conditions of the Contract.
- I. COMPLAINTS:**

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1. Complaints by the Purchaser concerning any action or decision of a Forest Officer, including suspension orders, must be made in writing to the Administrator postmarked within 30 days of the disputed action or decision. In the interim, Purchaser must comply with the directions of the Forest Officer.
2. Upon receipt of a complaint, the Administrator, or a designated representative, shall promptly hold an informal conference with the Purchaser and the Forest Officer to review the disputed action. The Purchaser shall be given adequate notice of the conference and shall be given the opportunity to present evidence and an argument to rebut the reasons given by the Forest Officer for the disputed action. After review, the Administrator shall notify the Purchaser in writing of his decision. The decision of the Administrator is final on behalf of the State, except regarding termination of the contract.

J. ASSIGNMENT: This contract shall not be assigned in whole or in part unless approved in writing by the Administrator. Any person or entity that is currently suspended or debarred from bidding on or operating government contracts is also suspended or debarred from bidding or operating (including as a sub-contractor) on this contract.

K. MODIFICATIONS:

1. This Contract, together with the attachments listed herein, contains the entire agreement of the parties and no statements, promises or inducements made by either party, or agents of either party, that are not contained in such written Contract shall be valid or binding. This Contract, except as described in Section I.K.2 below, cannot be enlarged, modified or altered except upon written agreement signed by all parties to this contract. Only the Administrator, his successor, or his designated representative is authorized to enter into such modification on behalf of the State.
2. To protect cultural or natural resources the State may modify provisions of the Contract without prior agreement by the Purchaser.

L. EQUAL EMPLOYMENT OPPORTUNITY: Pursuant to Section 49-3-207, MCA, any hiring by the Purchaser under this agreement must be on the basis of merit and qualifications and there must be no discrimination on the basis of race, color, religious creed, political ideas, sex, marital status, physical or mental handicap, national origin or ancestry by any person performing this Contract.

M. LIABILITY INSURANCE:

1. Prior to the commencement of any work to be performed under this Contract, the Purchaser or their agents shall obtain, carry and keep in good standing for the remainder of the Contract period, with any extensions:
 - a. Comprehensive general liability insurance coverage to the limit of \$1,000,000.00 per occurrence and \$2,000,000.00 per aggregate. Each such policy shall include endorsements, which shall name the State, US Forest Service, its elected and appointed officials, agents and employees as additional insured and shall provide that the State shall be given 30 days written notice, at the address stated above, prior to cancellation or any material change in such policy.
 - b. Automobile Liability Insurance: The Purchaser shall purchase and maintain coverage with split limits of \$500,000 per person (personal injury), \$1,000,000 per accident occurrence (personal injury), and \$100,000 per accident occurrence (property damage), OR combined single limits of \$1,000,000 per occurrence to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns, or subcontractors.
2. In lieu of such coverage, the Purchaser may provide proof of self-insurance in at least an amount equal to that provided above.

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3. Prior to the commencement of any work to be performed under this Contract, Purchaser shall deliver to the State a certificate of insurance from the insurer(s) of the Purchaser or their agents certifying that coverage in at least the amounts stated above is in force. Such certificate shall be submitted to the State for approval of the insurer(s), the amount, and the form. The State reserves the right to require a certified copy of any such policy or to examine the policy itself.
4. A self-insured Purchaser shall provide an equivalent certificate of insurance subject to the approval of the State.
5. It is further understood and agreed that this Contract shall terminate immediately in the event that the mandatory liability insurance coverage required under this part is for any reason not obtained or is discontinued.

N. WORKERS' COMPENSATION INSURANCE:

1. Prior to the commencement of any work under this Contract, Purchaser shall provide written verification to the Administrator that any and all individuals who are to be engaged in work under this Contract, including but not limited to employees, agents or independent contractors of the Purchaser or of its subcontractors, are either insured for workers' compensation coverage or are exempted from such coverage as certified independent contractors pursuant to § 39-71-401 MCA.
2. It is expressly understood and agreed that no such individual may engage in work in furtherance of this Contract at any time during its period unless either insured for workers' compensation coverage or exempted from such coverage as indicated above.
3. It is understood and agreed that this Contract shall terminate immediately in the event that workers' compensation coverage or exemptions required under this part is discontinued for any individuals engaged in work under this Contract.

O. SAFETY: The Purchaser, employees, subcontractors and their employees shall conduct their activities in a safe and workmanlike manner, shall cooperate in making it possible for the Forest Officer to safely, efficiently, and economically perform his, her or its administrative duties, and shall comply with federal and State safety standards for logging operations as established by the United States Department of Labor, Occupational Safety and Health Administration (OSHA; 29 Code of Federal Regulations 1910 and any other such applicable regulations promulgated by OSHA) and as required by Title 50, Chapter 71 of the Montana Code Annotated, and any regulations promulgated to implement the statutes found in that Title and Chapter of the Montana Code Annotated. The Purchaser, and not the State, is responsible for instituting and maintaining all precautions, procedures and programs for the safety of all persons on the project site, and the State hereby disclaims any and all responsibility for injuries or accidents occurring at the site.

P. SAWMILLS PROHIBITED: No sawmills shall be allowed to operate on the gross sale area.

Q. LOG CHIPPERS OR GRINDERS: No log chippers or grinders shall be allowed to operate on the gross sale area unless written approval to do so is granted by the Forest Officer. In order for approval to be granted, the Purchaser shall identify a method acceptable to the State for the measurement of all wood to be ground or chipped. If the Purchaser intends to operate a log chipper outside of the gross sale area, provisions must be made for obtaining certified weights of either the material removed from the sale or of the resultant products.

R. SALE DELAYED OR PRECLUDED BY JUDICIAL ACTION OR GOVERNMENT REGULATORY ACTION:

1. In the event judicial action, change in applicable law, or implementation of government regulatory action renders proceeding with this Contract unlawful, the State will suspend or terminate the Contract in whole or in part. Upon notice of such suspension or termination, Purchaser shall

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immediately cease all or any portion of such operations under the Contract as directed by the State. If a court of competent jurisdiction has entered a final judgment rendering further proceeding with this Contract unlawful, or government regulatory action takes effect, the State may terminate the Contract or, at the State's option, suspend the Contract in whole or in part, pending appeal of the court's final judgment. If the Contract is suspended, the State shall not be liable to the Purchaser for damages or losses resulting from the delay. In the event the Contract is terminated due to judicial action, a change in law, or government regulations, the State shall be liable to Purchaser only as follows:

- a. The State shall refund any portion of advance stumpage payments or down payments not needed to compensate the State for timber removed.
 - b. The State shall release any portion of the performance bond not needed to compensate the State for timber removed or other losses suffered by the State due to breach of contract by the Purchaser.
- S. VENUE AND CHOICE OF LAW:** In the event of litigation concerning this agreement, venue shall be in the First Judicial District, Lewis and Clark County, Montana, and this agreement shall be governed by the laws of the State of Montana both as to interpretation and performance.
- T. AUTHORIZATION TO ENTER:** The Purchaser is authorized to enter the sale area only for purposes related to the performance of this Contract. Any person or entity that is currently suspended or debarred from bidding on or operating government contracts is also suspended or debarred from bidding or operating (including as a sub-contractor) on this Contract.
- U. OTHER OPERATIONS BY THE STATE:** The State or USFS reserves the right to at any time conduct within the gross sale area forest management operations including, but not limited to, slash piling, burning, handwork, broadcast burning, mop-up, patrolling, thinning and tree planting during the term of this Contract.
- V. INDEMNITY AND LIABILITY:**
1. The Purchaser agrees to indemnify the State and the USFS, its officials, agents, and employees, while acting within the scope of their duties and hold the State harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense, arising in favor of the Purchaser's employees or third parties on account of bodily or personal injuries, death or damage to property arising out of services performed, goods or rights to intellectual property provided or omissions of services or in any way resulting from the acts or omission of the Purchaser and/or its agents, employees, subcontractors or its representatives while engaged in work under this Contract, all to the extent of the Purchaser's negligence.
 2. The Purchaser shall be responsible for, indemnify, defend and hold the State and the USFS harmless from and against any loss, cost (including, without limitation, reasonable legal, accounting, consulting, engineering and similar expenses), damage, claim, fine or liability, including the necessity for tests, inspections or other work, and any damage, claim, fine or liability arising as a result of such tests, inspections or other work, the State must perform:
 - a. Based upon an actual or alleged violation by the Purchaser of, or failure by the Purchaser to comply with, any Environmental Law during the term of this Contract;
 - b. Arising from the discharge, release, threatened release, handling, storage, treatment, deposit or disposal of any Hazardous or Deleterious Substances caused or exacerbated by the activities of the Purchaser on or in the gross sale area during the term of this Contract; or
 - c. Otherwise arising out of or in connection with any environmental condition or action caused or created by the Purchaser.

- W. OTHER LAWS AND REGULATIONS:** This Contract is subject to all applicable federal, state, county, and municipal laws, ordinances, and regulations in effect at the date of this Contract or which may, from time to time, be adopted, and which do not impair the obligations of this Contract and which do not deprive the Purchaser of an existing property right recognized by law. A violation by the Purchaser of any federal, state, county, and/or municipal laws, ordinances and/or regulations while conducting operations under the terms of this Contract, shall, in the discretion of the State, constitute sufficient reason for the suspension or termination of this Contract. If any part of the lands or premises under this Contract are used or allowed or permitted to be used for any purpose contrary to the laws of this state or the United States, such unlawful use shall, in the discretion of the State, constitute sufficient reason for the suspension or termination of this Contract.
- X. FORCE MAJEURE:** Neither party shall be responsible for failure to fulfill its obligations due to causes beyond its reasonable control, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts, or any other causes, directly or indirectly beyond the reasonable control of the nonperforming party, so long as such party is using its best efforts to remedy such failure or delays. Force majeure will not relieve the Purchaser from liability for damage or otherwise excuse performance of this Contract should the Purchaser cause a fire for which they would be liable under § 50-63-103, MCA.
- Y. CERTIFICATION REGARDING DEBARMENT AND SUSPENSION:** The Purchaser must complete and deliver to the State form AD-1047, Certification Regarding Debarment, Suspension, and Other Responsibility Matters – Primary covered transactions and form AD-1048 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower tier Covered Transactions.

II. CHARGES AND PAYMENTS

A. PERFORMANCE BOND:

1. As a guarantee of the faithful performance of this Contract, Purchaser shall furnish a bond, with sufficient sureties, to the State in an amount equal to the potential loss to the State in the event of Purchaser's breach or default under the terms of this Contract as determined by the Administrator. The performance bond may be in cash, bond, irrevocable letter of credit, or certificate of deposit with sufficient sureties. A letter of credit must be automatically renewable without amendment for the term of the Contract. The bond shall not be less than five percent (5%) of the estimated value of the timber sold. The performance bond the Purchaser must submit for this Contract is shown in Table 1.
2. Upon full performance of the terms of the Contract, the State shall release the performance bond.
3. Upon substantial performance of the terms of the Contract, the Administrator may release a portion of the performance bond not needed to compensate the State for any remaining timber to be removed or any other losses that may be suffered by the State due to breach of Contract by the Purchaser. The bond shall not be reduced to less than five percent (5%) of the estimated value of the total Contract volume.

B. PAYMENTS:

The Purchaser agrees to make payments to the Treasurer of the State of Montana as follows:

1. **ADVANCE STUMPAGE PAYMENTS:** The Purchaser is required to pay for all timber in advance of cutting at the rates shown in Table 1. Advance stumpage payments will be held by the State to cover the Purchaser's estimated timber cutting for at least six (6) weeks of operations. Advance stumpage payments may be reduced just before completion of the sale or when cutting requirements are to be suspended for at least 3 months. Advance stumpage payments may be in cash, bond, irrevocable letter of credit, or certificate of deposit with sufficient sureties.

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2. INITIAL ADVANCE STUMPAGE PAYMENT: The initial advance payment will be made by the Purchaser prior to the start of timber cutting operations.
3. PAYMENT SCHEDULE: Payments in full for individual invoices will be made by the Purchaser as called for by the Administrator; in no event will payments be made by the Purchaser more than 14 days from the date of billing.

C. ROAD USE AND MAINTENANCE PAYMENTS:

1. PAYMENTS: The Purchaser is required to make payments for road use and maintenance at the rates listed in Table 1 or as amended by revisions to road use permits. Payments will be made as called for by the Administrator or as otherwise directed in this Contract.
2. ALTERNATE HAUL ROUTES: The Purchaser is authorized by the State to use the haul route described in this Contract and attachments. If the Purchaser chooses to use an alternate haul route, that haul route must be approved by the State. Road use charges, maintenance requirements and payments may be adjusted to reflect the haul route used by the Purchaser. The Purchaser is responsible for obtaining any right-of-way required for an alternate haul route and for meeting all requirements of any agreements associated with that right-of-way. Proof of any such agreement must be provided to the State prior to use. Stumpage fees are not subject to a downward adjustment under this clause.

III. MEASUREMENT AND LOG ACCOUNTABILITY

A. PRODUCT MEASUREMENT:

1. The State will determine the value of products removed from the sale based on the total gross weight of material hauled. Weight tickets will be used to obtain the total value.
2. When mixed products with different payment rates per ton are hauled on one load, the entire load will be charged at the rate of the product with the highest value contained in the load.
3. Upon request by the State, the most recent load delivered to a receiving mill must be made available for inspection by the State or their representatives. The weight ticket identifying the load must remain affixed to the load.

B. WEIGHT TICKETS: The Purchaser is required to furnish weight tickets to the State as agreed to by the Forest Officer and the Purchaser.

1. All weight tickets shall be mailed or delivered with corresponding load tickets, as outlined below, directly to the DNRC Unit or Land Office administering this Contract. In this case, **send truck tickets to Jordyn Yarid at 177 State Lands Office Rd, Libby, MT 59923**. This requirement may be waived or changed by the Forest Officer.
2. Weight tickets shall show gross, tare and net weights and the corresponding load ticket number of each product load. Weight tickets must be from State of Montana certified scales, and all weight tickets must have mechanically stamped weights for the gross and tare weights unless otherwise permitted in writing by the Forest Officer. Weight tickets will be mailed or delivered to the State on a bi-weekly basis or as otherwise agreed to by the Forest Officer. A weight ticket will be considered as missing if not furnished within 4 weeks of the load delivery date. Failure to comply with this provision may be treated by the State as a contract violation.
3. Truck ticket information may be provided to DNRC electronically if all required ticket information is provided. The information must be provided to the State on a bi-weekly basis prior to the tenth (10th) and twenty-fourth (24th) of each month. The paper copy of the weight tickets must also

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continue to be provided to the State. The requirement to supply the paper copy of the weight tickets may be waived by the Administrator.

- C. LOAD TICKETS:** The Purchaser will be issued load ticket books with consecutively numbered tickets for uniquely identifying truckloads of logs. A load ticket shall be attached to the driver's side bunk log of each product load prior to hauling, with the Scaler's copy given to the State from the delivery point. The Purchaser shall complete each ticket with the sale information required by the State. The Purchaser shall provide to the Forest Officer a complete list of destinations to which loads will be delivered. The State, at its discretion, may require a separate ticket book for each destination. Failure to comply with this provision may be treated by the State as a contract violation.
- D. SORTING OF PRODUCTS:** The State may require separate ticket books for any loads sorted by the Purchaser by size or species or by specific products intended for different delivery points. Load tickets designated for a specific product must only be used for that specific product. When a load ticket is used with an incorrect product the State may treat such misuse as a contract violation
- E. LOAD MARKING:** The Purchaser is required to mark all loads of logs before removal from the loading area to assist in identification while in transit or at the point of delivery. Marking shall be accomplished by painting "GNA" in blue paint and the last three digits of the truck load ticket number on log ends of at least three logs on each load, both front and back. The driver's side bunk log shall be one of the marked logs. Failure to comply with this provision may be treated by the State as a contract violation.
- F. PROMPT DELIVERY:** The Purchaser will deliver loads from the timber sale area to a receiving log yard directly without diversion. "Over-nighting" loads during transit are expressly forbidden unless approved by Forest Officer prior to hauling. Failure to comply with this provision may be treated by the State as a contract violation.
- G. SCALE RULE:**
1. Any sawlogs scaled by the State shall be scaled using the Scribner Decimal "C" log rule. Log scaling will follow the procedures listed in the National Forest Log Scaling Handbook (FSH 2409.11) excluding Region 1 supplements.
 2. In cases where conversion is required, a conversion factor of **6.48** tons per thousand board feet will be used for sawlogs.
- H. LOG BRANDING:** This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, *et seq.*). The Purchaser must comply with log branding and accounting rules in Attachment E.

IV. CONTRACT VIOLATIONS AND PENALTIES

A. SUSPENSION:

1. **FAILURE TO PAY ADVANCE STUMPAGE:** If Purchaser fails to submit advance stumpage payments as directed by the Administrator pursuant to the terms of this Contract within 30 days of the request for such payments, all operations covered by this Contract shall immediately cease upon written or oral order from the State until all required advance stumpage payments, or guarantee of payment satisfactory to the State, have been made. The cutting and removal of timber may resume only upon receipt of written notice to the Purchaser from the State that acknowledges adequate payment or guarantee.
2. **LOSS OF BOND:** If the surety bond or other bond securing performance of this Contract is canceled or otherwise becomes ineffective, operations covered by this Contract shall immediately

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cease upon written or oral order from the State to the Purchaser. Cutting and removal of timber may resume only upon receipt of written notice from the State that acknowledges adequate bond.

3. OTHER CONTRACT VIOLATIONS:

- a. Should the Forest Officer observe a condition that violates the terms of this Contract, the Forest Officer may verbally notify the Purchaser or its employees or subcontractors of such condition and immediately suspend all or part of the operations in the sale area to prevent harm to the interests of the State or the public. Should the Purchaser or its employees or subcontractors fail to comply with any verbal suspension order, the Administrator may terminate the Contract pursuant to Section IV. B. Termination. The Forest Officer may rescind his/her verbal suspension order upon satisfactory cure of the Purchaser's violation and operations may resume.
- b. Suspension orders may be given in writing or verbally to the Purchaser, or to his, her or its employees or subcontractors. Once given, the Purchaser, and his, her or its employees or subcontractors shall immediately comply with such order of suspension and failure to do so shall constitute grounds for termination of this Contract. Suspension orders are reviewable under the provisions described in Section I.I. COMPLAINTS.
- c. The Administrator may issue a written notice of suspension depending upon the severity of the violation and Purchaser's ability to cure. Such notice shall contain information regarding:
 1. The breach observed and harm anticipated;
 2. The Contract provisions violated;
 3. If possible, the measures required to cure the violation and allow operations to resume; and
 4. The deadline within which the Purchaser must cure the violation.Should the Purchaser fail to cure the violation as required, or to obtain a written variance from the Administrator, the Administrator may charge the Purchaser a \$250 per day penalty for every day that the violation persists. Operations may resume only upon written notice from the Administrator. If satisfactory measures or remedies cannot be found to cure the violation, the Administrator may immediately terminate the Contract pursuant to Section IV.B. TERMINATION.

B. TERMINATION:

1. Gross or persistent Contract violations and/or failure to promptly and properly remedy Contract violations by the Purchaser pursuant to the terms of this Contract shall be grounds for termination of the Contract by the State.
2. If this Contract is terminated by the State, the Administrator shall immediately notify the Purchaser of the termination and the reasons for it by certified mail. Such notice shall describe in what respects the Contract has been breached, the means, if any, by which the breach can be remedied and the consequences of such termination. The Contract shall be terminated 18 days from the date the notice is mailed to the Purchaser at the address stated in this Contract.
3. Upon receipt of the notice of termination the Purchaser shall immediately cease all operations pursuant to and permitted by the Contract until the termination is resolved as provided pursuant to this Section of the Contract, Section IV.B. TERMINATION.
4. If the Contract is reinstated the Purchaser will not be penalized for any delays that resulted from the appeal.
5. If the Contract is terminated for breach, it is understood that the State may refuse to accept bids or proposals submitted under 77-5-212 MCA from the Purchaser on future State timber sales and permits for a minimum period of 2 years.

C. LIABILITY FOR DAMAGES:

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1. The Purchaser shall be liable for any damages sustained by the State arising from Purchaser's breach of the terms of this Contract and the State may cause all or part of the performance bond to be forfeited to recover such damages.
2. In the event that a portion of the timber sale under this Contract is resold as a result of the Purchaser's forfeiture and the stumpage rate pursuant to the resold contract is lower than the stumpage rate provided herein, the difference between the original rate and the new rate shall be considered damages and the Purchaser shall be liable to the State for those damages. The State may cause all or part of the Purchaser's performance bond to be forfeited to recover such damages.

D. STATE'S OPTION TO COMPLETE CONTRACT REQUIREMENTS: If the Purchaser fails to complete the requirements described in this Contract in a timely manner or if the Contract is terminated pursuant to Section IV.B. TERMINATION, the State reserves the right to complete the work itself or through a contractor. The Purchaser will be billed for any additional costs incurred by the State due to the Purchaser's failure to perform the requirements of this Contract. These additional costs may include State employee time and expenses that were extraordinary to the normal administration of the Contract, such as time and expenses incurred to hire a replacement contractor. Purchaser's failure to make payment within 14 days from the date of billing may cause all or part of the performance bond to be forfeited to recover such costs.

E. WAIVER OF PENALTIES: The penalties specified in this section shall be regarded as liquidated damages and may be waived or reduced at the discretion of the Administrator in exceptional cases.

F. FOREST PRACTICES LAWS: The Purchaser shall conduct logging operations in compliance with all applicable state and federal rules and laws relating to forest practices in the State of Montana. The Purchaser shall be responsible for all reclamation and penalties that result from violations of applicable forest practices rules and laws.

G. LOGGING REQUIREMENT VIOLATIONS:

1. **HIGH STUMPS:** The Purchaser may be charged \$25.00 for each tree stump cut higher than 12 inches on the side adjacent to the highest ground except in unusual cases when this height is not considered practical.
2. **LONG BUTTS:** The Purchaser may be required to pay \$25.00 per long butt for cutting long butts that contain useable material in excess of the minimum net scale in percentage of gross shown in Table 2.
3. **LARGE TOPS:** The Purchaser may be required to pay for cutting tops larger than the Top Diameter Inside Bark (DIB) shown in Table 2. This charge will be at the current contract rate for the net volume by species, or \$25.00 per large top, whichever is greater.
4. **UNDESIGNATED TREES:**
 - a. Undesignated or reserve trees that are cut or damaged as a result of Purchaser's operations shall be considered cut in trespass and the Purchaser may be charged three times the highest Contract stumpage rate (minimum \$10.00/ton) for the Contract product class(es) the tree contains.
 - b. If the Forest Officer determines that a suitable replacement for a reserve tree as described above is not available, Purchaser agrees to pay the State \$500.00 per tree, in addition to the rates charged in Section IV.G.4.a. UNDESIGNATED TREES.
5. **FAILURE TO REMOVE:** The State may charge the Purchaser for trees that are designated for cutting under the terms of this Contract and/or logs that meet the Manufacturing and Recovery Standards shown in Table 2 that are not removed from the sale area or presented for

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measurement. This charge may be up to triple the Contract stumpage rate plus the Forest Improvement rate for the class of material contained in those trees fixed in accordance with the terms of this Contract. If the State removes such material from the sale area, the Purchaser will be required to reimburse the State for all applicable cutting, yarding, processing, loading and hauling costs.

6. **LOSS IN WEIGHT DUE TO PURCHASER DELAY:** A 15% increase in net weight of logs may be added by the State for loss in weight due to delay by the Purchaser in delivering cut logs to the manufacturing point. A delay is defined as in excess of 30 days after felling.

H. MEASUREMENT AND LOG ACCOUNTABILITY VIOLATIONS:

1. **MISSING LOAD TICKETS:** The Purchaser will be charged up to \$500.00 for each unused load ticket that the Purchaser has lost or misplaced while in his, her or its possession. An unused ticket is defined as a ticket that is not turned into the State with an associated truckload weight.
 2. **FAILURE TO ATTACH OR COMPLETE LOAD TICKET:** The Purchaser may be charged \$500.00 per load for failure to attach a load ticket to each product load prior to hauling, or for failure to complete the load ticket with all required information.
 3. **MISSING WEIGHT TICKETS:**
 - a. The Purchaser may be charged triple the Contract stumpage rate [stumpage x 3 = penalty] for each truck weight ticket not furnished to the State.
 - b. The Forest Officer will notify the Purchaser of each missing weight ticket.
 - c. The load weight will be determined by averaging weights from other loads hauled by the Purchaser to the same mill within the same billing period, or 30 tons for single loads and 38 tons for loads with a pup trailer attached.
 - d. For Other Material, as defined by this Contract, the minimum stumpage for purposes of penalty shall be \$10.00 per ton or the Contract stumpage rate multiplied by 3, whichever is higher.
 4. **IMPROPERLY LABELED PRODUCT:** The Purchaser may be charged up to \$1,500.00 per load for loads with an incorrect load ticket for the product (Sawlog or Other Material) in the load. In addition, the stumpage paid for an improperly ticketed load shall be at the highest Contract stumpage rate for products hauled pursuant to this Contract.
 5. **IMPROPERLY MARKED LOADS:** The Purchaser may be charged forty dollars (\$40.00) per load for each load not marked in accordance with Section III.E. LOAD MARKING.
- I. FAILURE TO MEET COMPLETION DATES:** The Purchaser may be charged \$100.00 for each complete calendar day the Purchaser fails to meet the deadlines shown in Table 3 and Table B1.
- J. LATE PAYMENTS:** The Purchaser may be charged \$100.00 per day beginning the 15th day after the billing date for failure to pay for forest products, pursuant to Section II.B PAYMENTS.

V. FIRE PROTECTION

- A. FIRE REGULATIONS:** The Purchaser is required to conduct all operations in accordance with the Montana Forest Fire Regulations, Attachment C, which by this reference is made a part of this Contract.

- B. FIRE PREVENTION:** During the time that this Contract remains in force, the Purchaser shall, to the greatest extent practicable, prevent forest fires on the area described in this Contract and in its vicinity, and shall require all employees, contractors and employees of contractors to do likewise.
- C. OPEN BURNING REQUIREMENTS:** The Purchaser is required to conduct any burning of slash or other debris in accordance with the Montana Department of Environmental Quality open burning restrictions. The Forest Officer must be notified prior to the start of any burning operations.
- D. FIRE SUPPRESSION:** Unless prevented by circumstances over which he, she or it has no control, the Purchaser shall place qualified employees, contractors and employees of contractors and all equipment at the disposal of any authorized State, County, or Federal Forest Officer for the purpose of fighting forest fires. Payment for such services shall be made at rates to be determined by the Forest Officer, which shall be within a range of payment rates shown in the Interagency Incident Business Management Handbook, NWCG Handbook 2. Any employees or equipment furnished by the Purchaser, contractors or employees of contractors, shall be relieved from fire fighting as soon as it is practicable for the Forest Officer to obtain other adequate labor or equipment.
- E. FIRE COSTS:** The costs borne by the Protecting Agency for suppressing fires that are intentionally lit by the Purchaser or that are caused by negligence or fault in the Purchaser's operations shall be paid by the Purchaser to the Protecting Agency. The Purchaser shall also be liable for property and resource damage resulting from these fires.
- F. FIRE REPORTING:** Any wildfires, which the Purchaser detects or suppresses, must be reported as soon as possible to the responsible fire protection agency and the State.
- G. SUSPENSION OF OPERATIONS:** When fire danger reaches extreme levels that cause operations to be curtailed through Stage II, Hoot Owl requirements or other measures, the State may suspend operations until fire conditions in and/or around the sale area improve. The State will grant a contract extension to compensate for the time suspended.
- H. CONTACT INFORMATION:** The Purchaser will provide the Forest Officer with phone numbers of the Purchaser and their employees and contractors when logging operations are in progress (including nights and weekends), in order to establish contact if a wildfire occurs within the sale area or on other lands accessed by road systems associated with the sale.

VI. RESOURCE PROTECTION

- A. DAMAGE PREVENTION:** The Purchaser shall use reasonable skill and care in all operations to prevent damage to soils, trails, meadows, stream banks, stream channels, wetlands, lakeshores or other natural features of the sale area.
- B. STREAM PROTECTION:**
 - 1. Construction and logging equipment will not be operated in Streamside Management Zones. An exception may be provided for, under this Contract, through the procurement of an Alternative Practice (with approval of the Forest Officer). Additional protection measures may be required in Section VII.G, SPECIAL OPERATING REQUIREMENTS and in Contract Attachments.
 - 2. The Purchaser shall notify the Forest Officer immediately if debris from logging or construction enters a stream or stream channel.
 - 3. Under the direction of the Forest Officer, the Purchaser shall remove any debris in a stream resulting from logging or construction operations. This work will be completed in a manner that causes the least disturbance to the streams.

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4. Logs shall not be hauled, skidded or yarded across streams unless the logs are fully suspended, or otherwise yarded as specified in this Contract. An approved Alternative Practice must be in place. The Forest Officer must approve all logging and construction plans, including changes, before implementation.
 5. All operations shall be conducted in a manner to comply with Montana Water Quality Standards, the Streamside Management Zone Law, and all applicable permits.
- C. CULTURAL RESOURCES:** If a cultural resource is discovered, the Purchaser shall immediately suspend all operations in the vicinity of the cultural resource and notify the Forest Officer. Operations may only resume if authorized by the Forest Officer. Cultural resources identified and protected elsewhere in this Contract are exempted from this clause. Cultural resources, once discovered or identified, are not to be disturbed by the Purchaser, or his, her or its employees and/or sub-contractors.
- D. DISCOVERY OF THREATENED AND ENDANGERED SPECIES:**
1. If a specific habitat feature for a federally listed threatened or endangered species is encountered, the Purchaser shall suspend all operations in the vicinity of the observation or discovery and immediately notify the Forest Officer. Operations may resume only if authorized by the Forest Officer. Habitat features identified and protected elsewhere in this Contract are exempted from this clause.
 2. If a federally listed threatened or endangered species is encountered, the Purchaser shall immediately notify the Forest Officer. The Purchaser may be required to suspend operations in the vicinity of the observation or discovery. If suspended, operations may resume only if authorized by the Forest Officer.
- E. SANITATION:** The Purchaser's operations, as described by this Contract, shall comply with all applicable State laws, rules and regulations concerning sanitation in operations. Refuse resulting from the Purchaser's activities, including the use, servicing, repair, or abandonment of equipment, shall be removed, buried or otherwise disposed of in a manner that complies with all State laws and meets the approval of the Forest Officer. The Purchaser shall not service tractors, trucks and similar pieces of equipment on lands that directly drain into or are within 100 feet of lakes, streams or recreational facilities. No logging camp will be located on the gross sale area without prior approval by the Forest Officer.
- F. HAZARDOUS SUBSTANCES:** In addition to the indemnification provided in Section I.W.2. INDEMNITY AND LIABILITY, with respect to Hazardous Substances, the following duties shall apply:
1. The Purchaser shall know and comply with regulations governing the storage, handling, application, disposal, and reporting of pesticides, herbicides, containers, biological waste, petroleum products, dust abatement compounds, and other hazardous substances. The Purchaser shall obtain the approval of the Forest Officer to store, handle, apply or dispose of these substances on the gross sale area.
 2. The Purchaser shall not transport, handle, store, load, apply, or dispose of any hazardous substance in such a manner as to pollute water supplies or waterways, or cause damage or injury to people, land, desirable plants, and animals.
 3. **Contractors will have spill prevention and containment materials on site to minimize the risk of an accidental spill of petroleum products.**
 4. **The Purchaser and/or Contractor shall notify the Forest Officer immediately of Hazardous Material Spills.**

- G. PROTECTION OF IMPROVEMENTS:** The Purchaser shall to the greatest extent practicable protect from damage all gates, signs, telephone lines, power lines, fences, irrigation ditches, cattle guards, drainage structures, road improvements, and any other improvements or infrastructure within the gross sale area and/or along haul routes. Damages caused by the Purchaser, his, her or its employees or subcontractors, and expenses associated with the repair or replacement of damaged structures and improvements are the sole responsibility of the Purchaser.
- H. PROPERTY CORNER RESTORATION:** The Purchaser is required to replace any General Land Office township, section, quarter or meander corners, monuments or witness trees on or adjacent to the timber sale area which may have been moved, disturbed or lost, as a result of the Purchaser's logging or construction operations. Any necessary replacements must be carried out by a licensed surveyor at the Purchaser's expense.
- I. PASSABLE ROADS:** The Purchaser will leave all roads and trails free from obstruction by logs, brush or debris following the completion of logging operations. Temporary or permanent obstructions may be acceptable if approved by the Forest Officer.
- J. NOXIOUS WEED MANAGEMENT:** All equipment used in road construction and off-road logging activity must be pressure-washed by the Purchaser and inspected by the Forest Officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.
- K. AQUATIC INVASIVE SPECIES MANAGEMENT:** All equipment operated in or adjacent to streams, lakes, or other bodies of water must be pressure by the purchaser and inspected by the forest officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and other material that may carry aquatic invasive species. Drafting from water sources with known aquatic invasive species is prohibited. When drafting, intake hoses must be fitted with a screen mesh equal to or smaller than 3/32 inches. If drafting from streams occurs place intake hoses in low velocity portions of the stream channel.
- L. WILDLIFE PROTECTION:**
1. The Purchaser is authorized to enter areas closed by gates, barricades or berms with motorized vehicles only for the purposes related to the performance of this Contract. Motorized vehicle entry for purposes other than contract performance, such as hunting or transporting game animals will be considered trespass and prosecuted to the fullest extent of the law (Montana Code Annotated § 45-6-203).
 2. The Purchaser is prohibited from carrying firearms while conducting contract operations [ARM 36.11.432(1)(m); 36.11.433(1)(d); 36.11.443(2)].
 3. The Purchaser will store human or pet food, livestock food, garbage, and other attractants in a bear-resistant manner.
 4. The Purchaser will not bury or discard attractants in the sale area, or burn attractants (such as food leftovers) in an open campfire.
 5. The Purchaser will provide each employee with a copy of Attachment D "Working in Bear Habitat" Brochure.
 6. The Purchaser will comply with Attachment F, the Kootenai National Forest Food Storage Order #R1-2023-02-NCDE.

M. PROTECTION OF SENSITIVE PLANTS: If previously undocumented populations of sensitive plants listed on the Regional Forester's Sensitive Species List are encountered, the Purchaser shall immediately notify the Forest Officer. The Purchaser may be required to suspend operations in the vicinity of the observation or discovery. If suspended, operations may resume only if authorized by the Forest Officer.

VII. LOGGING

A. TREES DESIGNATED FOR CUTTING: All trees meeting the following requirements must be cut by the Purchaser.

1. **TREES IN UNITS:** Trees that meet the Minimum Log Size of Trees Designated for Cutting in Table 2 are to be cut in each unit according to the Marking specifications shown in Section VII.F. UNIT DESIGNATIONS.
2. **RIGHT-OF-WAY TREES:** All trees within road right-of-way boundaries must be cut.
3. **DAMAGED TREES:** Reserved trees, which are root-cut, damaged by felling or skidding, uprooted or broken off by the Purchasers operations may be designated for cutting by the Forest Officer. The Forest Officer may mark additional reserve trees to replace those that have been cut or damaged.
4. **FIRE KILL, INSECT INFESTATIONS AND WIND THROWN:** The Purchaser may be required to cut and remove at current contract rates, fire-killed, high hazard, disease infected, insect-infested or wind thrown (defined as blown down or wind-damaged to the extent that the tree is expected to fall or is dying) trees that occur in any part of the gross sale area while this Contract is in effect, if the Forest Officer determines that the stumpage value per ton of the additional timber is approximately equal to the value of the timber being harvested under this Contract .

B. TREES RESERVED FROM CUTTING:

1. **LEAVE TREES:** Trees, both live and dead, marked to leave or otherwise described to leave are reserved from cutting. Any trees not specifically required to be cut are reserved from cutting.
2. **BOUNDARY AND BEARING TREES:** Trees marking the boundaries of ownership, logging units, equipment restriction zones, streamside management zones, road rights-of-way, and bearing trees, are reserved from cutting unless otherwise designated by this Contract or by the Forest Officer.
3. **VALID CLAIMS:** Timber to which there exists a claim under valid contracts with the State of Montana is exempted from this sale.

C. LOG MANUFACTURING AND RECOVERY STANDARDS:

1. **SAWLOG STANDARDS:** Trees cut by the Purchaser shall be manufactured to secure the maximum utilization of forest products according to III.G.1. All logs that meet or exceed the Manufacturing and Recovery Standards in Table 2 and this section shall be skidded to landings and hauled by the Purchaser.
 - a. Logs shall be bucked to utilize the entire length of the tree to the top diameter specified under Manufacturing and Recovery Standards in Table 2.
 - b. Logs meeting utilization specifications in Table 2 shall be manufactured in such a manner as to minimize waste during bucking operations.

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c. A tree or log larger than 5.6" top DIB is considered to be a sawlog if it contains Scribner Decimal C Net Scale \geq 33% of Gross.

2. **OTHER MATERIAL:** The Purchaser is **required to cut and skid Other Material to the landing** that does not meet Sawlog Manufacturing and Recovery Standards in Table 2. The Purchaser may elect to remove Other Material as approved by the Forest Officer. Such products shall be billed at the rate for Other Material shown in Table 1. Trees cut by the Purchaser shall be manufactured to secure the maximum utilization of Sawlog forest products according to III.G.1 and VII.C.1.

If the Purchaser elects not to haul Other Material, processing and decking may be required along National Forest System Roads.

- a. All contract provisions apply to the removal of Other Material.
- b. Other Material that has been manufactured by the Purchaser shall be decked and hauled separately from sawlogs. All decked non-sawlog material must be hauled, or disposed of by the Purchaser in accordance with instructions of the Forest Officer. All hauled loads will have a truck ticket assigned and will meet the specifications in Section III, MEASUREMENT AND LOG ACCOUNTABILITY.
- c. Butt cut logs (the first log cut above the stump) that meet LOG MANUFACTURING AND RECOVERY STANDARDS in Table 2, but do not meet TREES DESIGNATED FOR CUTTING minimum top DIB and length, may be considered as Other Material, not sawlogs.

3. **DOWN WOODY MATERIAL:**

a. **Units 9, 9A, 10, 10A, 10B, 11, 157, 158, 158B, 305, 306, 307, 307A, 307B:**

- i. Purchaser will leave **5** tons per acre of downed woody material larger than 3 inches in diameter scattered throughout the sale units. The Forest Officer will determine the appropriate amount of material and may designate pieces to be left for this purpose that would otherwise be skidded and hauled under Sections VII.C.1 or VII.C.2, LOG MANUFACTURING AND RECOVERY STANDARDS

b. **Unit 49:**

- i. Purchaser will leave **10** tons per acre of downed woody material larger than 3 inches in diameter scattered throughout the sale units. The Forest Officer will determine the appropriate amount of material and may designate pieces to be left for this purpose that would otherwise be skidded and hauled under Sections VII.C.1 or VII.C.2, LOG MANUFACTURING AND RECOVERY STANDARDS

c. **Units 12, 13, 14, 14A, 159A, 51, 52A, 53, 170, 170 Optional, 348, 350:**

- i. Purchaser will leave **12** tons per acre of downed woody material larger than 3 inches in diameter scattered throughout the sale units. The Forest Officer will determine the appropriate amount of material and may designate pieces to be left for this purpose that would otherwise be skidded and hauled under Sections VII.C.1 or VII.C.2, LOG MANUFACTURING AND RECOVERY STANDARDS.

4. **NUTRIENT RETENTION:** Removal from the site of fine branches and leafy material shall be minimized unless whole tree yarding is specified in VII.F Unit Designations.
5. **SNAGS:** The purchaser will retain a minimum of 2-3.5 snags per acre that are \geq 15 inches DBH within each harvest unit. If snags and recruitment trees of this size class are not available, the next largest available size class shall be retained. If snags present human safety concerns, the purchaser may substitute snag recruits for snags upon approval of the Forest Officer. Snags cut

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for safety purposes shall remain in the unit, unless removal is approved in writing by the Forest Officer.

TABLE 2.					
PRODUCT	TREES DESIGNATED FOR CUTTING		LOG MANUFACTURING AND RECOVERY STANDARDS		
	The Purchaser must fell all trees marked or designated for cutting that contain a log of this minimum size.		The Purchaser must skid and haul all sawlogs that meet this minimum specification. The Purchaser must handle Other Material according to contract provision V. II. C.2		
	Diameter at Breast Height	Length	Top DIB	Length	
Sawlogs	7.0"	16.5'	5.6" – 8.5" 8.6" +	10.5' 8.5"	Sawlogs meeting standards in Section VII.C.1.b through c.
Ponderosa Pine Sawlogs	7.0"	16.5'	5.6" – 8.5" 8.6" +	10.5' 8.5"	Sawlogs meeting standards in Section VII.C.1.b through c.
Other Material	4.0"	16.5'	4.0"	16.5"	Other material products meeting standards in Section VII. C.2

D. TREE AND BOUNDARY MARKING:

1. TREES MARKED TO CUT: N/A.
2. TREES MARKED TO LEAVE: Marked with horizontal **orange** paint mark at Diameter at Breast Height (DBH) and a mark below stump height.
3. HARVEST UNIT BOUNDARIES: Marked with three vertical **orange** paint stripes and a mark below stump height. One vertical strip faces into the unit and the other stripes are perpendicular to the unit boundary. On some private property boundaries, two **orange** dots face into the unit and a mark below stump height.
4. ROAD RIGHT-OF-WAY BOUNDARIES: N/A.
5. PROPERTY BOUNDARIES: Marked with **red** blazes.
6. STREAMSIDE MANAGEMENT ZONE BOUNDARIES: N/A
7. EQUIPMENT RESTRICTION ZONE BOUNDARIES: Marked with **blue and orange** flagging.

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E. HARVEST SCHEDULE: The purchaser must cut and remove trees from the sale or portions of the sale, such as units, by the dates shown on the HARVEST COMPLETION SCHEDULE, Table 3:

TABLE 3. HARVEST COMPLETION SCHEDULE		
Priority	Unit or Portion of Sale	Completion Date
1	ALL	October 1, 2033

F. UNIT DESIGNATIONS: The following requirements are to be performed by the Purchaser in the harvest units listed below and as shown on the sale map, Attachment A. Paragraph headings refer to paragraphs listed in Section VII.G, SPECIAL OPERATING REQUIREMENTS.

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
9	72.2	2,512
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 31-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 35-50 trees per acre with an average of 40. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees Required 5) IPS Slash Management 7) Landing Clean Up		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
9A	44.5	1,553
158B	19.9	1,564
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 31-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 35-50 trees per acre with an average of 40. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees 5) IPS Slash Management 7) Landing Clean Up 10) Temporary Spur Road Construction Required		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
158	86.6	2,181
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 31-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 35-50 trees per acre with an average of 40. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees 5) IPS Slash Management 7) Landing Clean Up 10) Temporary Spur Road Construction Required 12) Equipment Restriction Area		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
157	48.3	4,177
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 35-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 60ft² basal area and approximately 30-40 trees per acre with an average of 35. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: <ol style="list-style-type: none"> 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 3) Slashing Required 5) IPS Slash Management 6) Purchaser Slash Piling 7) Landing Clean Up 		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
49	56.8	2,478
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Upper 2/3 of unit: Leave an average of 60ft² basal area and approximately 30-40 trees per acre with an average of 35 on a 35-foot spacing. • Lower 1/3 of unit: Leave an average of 80ft² basal area and approximately 70 trees per acre with an average of 25-foot spacing. • Leave dominant and codominant trees of the largest and best form, leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. • Ensure DF leave trees are of good form, growing vigorously, and avoid thinning crowns or chlorotic needles. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 2) Purchaser Leave Tree Selection 3) Slashing Required 5) IPS Slash Management 6) Purchaser Slash Piling 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
10B	10.8	235
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Improvement Cut (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 31-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 35-50 trees per acre with an average of 40. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees Required 5) IPS Slash Management 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
10	53.1	4,367
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Shelterwood with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 3) Slashing Required 5) IPS Slash Management 6) Purchaser Slash Piling 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
10A	60.2	3,784
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Shelterwood with Reserves (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 40-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 40ft² basal area and approximately 20-30 trees per acre with an average of 25. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 3) Slashing Required 5) IPS Slash Management 6) Purchaser Slash Piling 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
11	111.5	8,561
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Shelterwood with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 3) Slashing Required 5) IPS Slash Management 6) Purchaser Slash Piling 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads 11) Fuelbreak and Fireline Construction		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
12	62	5,351
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Shelterwood with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 3) Slashing Required 6) Purchaser Slash Piling 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads 10) Temporary Spur Road Construction Required		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
14A	27.6	2,968
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Shelterwood with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 3) Slashing Required 6) Purchaser Slash Piling 7) Landing Clean Up 10) Temporary Spur Road Construction Required		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
170	70.7	5,016
YARDING METHOD: Combination		
<p>MARKING: Shelterwood with Reserves (Designation-by-Description) Operator will select leave trees based upon description:</p> <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 40-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 40ft² basal area and approximately 20-30 trees per acre with an average of 25. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must not have any signs of mistletoe infection. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
<p>SPECIAL OPERATING REQUIREMENTS:</p> <ol style="list-style-type: none"> 2) Purchaser Leave Tree Selection 3) Slashing Required 7) Landing Clean Up 10) Temporary Spur Road Construction Required 14) Combination of Skyline Yarding and Ground Based Skidding 15) Skyline Yarding Requirements 16) Deletion of Areas with Blind Leads 		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
170 Optional	25	1,775
YARDING METHOD: Cable		
MARKING: Shelterwood with Reserves (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 40-foot spacing. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 40ft² basal area and approximately 20-30 trees per acre with an average of 25. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must not have any signs of mistletoe infection. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 2) Purchaser Leave Tree Selection 3) Slashing Required 7) Landing Clean Up 10) Temporary Spur Road Construction Required 13) Optional Unit 15) Skyline Yarding Requirements** 16) Deletion of Areas with Blind Leads **Long distance yarding in unit 170 optional which requires 2,300 feet of external yarding distance uphill. A combination of methods may be used if approved by FO.		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
13	17	1,286
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Seed Tree with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 3) Slashing Required 5) IPS Slash Management 7) Landing Clean Up 11) Fuelbreak and Fireline Construction		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
14	41.4	3,112
159A	18.9	2,123
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Seed Tree with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 1) Logging on Slash Matt Required 3) Slashing Required 7) Landing Clean Up 11) Fuelbreak and Fireline Construction		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
51	3.5	280
53	44.2	3,067
YARDING METHOD: Combination		
MARKING: Seed Tree with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 3) Slashing Required 7) Landing Clean Up 11) Fuelbreak and Fireline Construction 14) Combination of Skyline Yarding and Ground Based Skidding 15) Skyline Yarding Requirements		

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
52A	21.6	2,428
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Seed Tree with Reserves (Leave Tree Marked in Orange)		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: 3) Slashing Required 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads 11) Fuelbreak and Fireline Construction		

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
305	55.7	3,634
350	24.5	1,122
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Commercial Thinning (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 25-foot spacing. Spacing may vary +/- 10 feet for retention of highest quality trees, ensure crowns of trees left in clumps are free to grow on 3 sides. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 70 trees per acre. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: <ol style="list-style-type: none"> 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees 5) IPS Slash Management 7) Landing Clean Up 		

SAMPLE

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
306	41.8	1,546
307A	105.1	2,801
307B	68.2	2,076

YARDING METHOD: Ground-based (Whole-tree skidding)

MARKING: **Commercial Thinning** (Designation-by-Description)
 Operator will select leave trees based upon description:

- Leave dominant and codominant trees of the largest and best form on an average of **25-foot spacing**. Spacing may vary +/- 10 feet for retention of highest quality trees, ensure crowns of trees left in clumps are free to grow on 3 sides. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an **average of 80ft² basal area** and approximately **70 trees per acre**.
- Species preference for leave tree selection is PP, WL, DF listed in preferential order.
- Do not leave PP with forked or crooked tops if possible.
- Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a **Hawksworth rating of 2 or less**.

OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.

SPECIAL OPERATING REQUIREMENTS:

- 1) Logging on Slash Matt Required
- 2) Purchaser Leave Tree Selection
- 4) Slashing of Logging Damaged Trees
- 5) IPS Slash Management
- 7) Landing Clean Up
- 8) Traffic Control Required for Felling Along Open Roads

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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
307	91	3,593
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Commercial Thinning (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 25-foot spacing. Spacing may vary +/- 10 feet for retention of highest quality trees, ensure crowns of trees left in clumps are free to grow on 3 sides. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 70 trees per acre. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: <ol style="list-style-type: none"> 1) Logging on Slash Matt Required 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees 5) IPS Slash Management 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads 9) Approved Skid Trails Required 		

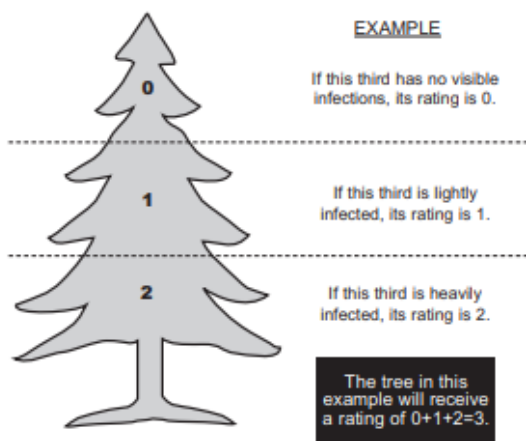
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HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
348	47	3,490
YARDING METHOD: Ground-based (Whole-tree skidding)		
MARKING: Commercial Thinning (Designation-by-Description) Operator will select leave trees based upon description: <ul style="list-style-type: none"> • Leave dominant and codominant trees of the largest and best form on an average of 25-foot spacing. Spacing may vary +/- 10 feet for retention of highest quality trees, ensure crowns of trees left in clumps are free to grow on 3 sides. Leaving smaller trees of a desired species is allowed when larger trees are unavailable. Ensure smaller trees are stout enough to survive wind and snow. Residual stand will retain an average of 80ft² basal area and approximately 70 trees per acre. • Species preference for leave tree selection is PP, WL, DF listed in preferential order. • Do not leave PP with forked or crooked tops if possible. • Leave WL with a 30% crown ratio with well-developed boles and all leave WL must have a Hawksworth rating of 2 or less. 		
OPERATING PERIOD: When soil conditions are dry, the ground is frozen or snow covered as required in VII.L.1 a-c and VII.L.2.		
SPECIAL OPERATING REQUIREMENTS: <ol style="list-style-type: none"> 2) Purchaser Leave Tree Selection 4) Slashing of Logging Damaged Trees 5) IPS Slash Management 7) Landing Clean Up 8) Traffic Control Required for Felling Along Open Roads 10) Temporary Spur Road Construction Required 		

G. SPECIAL OPERATING REQUIREMENTS: The following requirements are to be performed by the Purchaser in specific sale units as shown in Section VII.F, UNIT DESIGNATIONS.

1. **LOGGING ON SLASH MATT REQUIRED:** Purchaser shall return slash back to the unit as it is created in the landing, and distribute evenly on skid trails throughout the unit to create a slash matt for heavy equipment to operate on to minimize soil disturbance. Slash shall be scattered on skid trails as skidding progresses on each trail. The amount of slash needed based on present conditions will be determined by the Forest Officer. Harvest operation may only occur if operators utilize slash matting on all skid trails; unless winter conditions of frozen ground and/or snow depth of 18 inches, loose, or 12 inches, packed are present.
2. **PURCHASER LEAVE TREE SELECTION:** Leave Trees are not marked. All high-quality wildlife snags (DF, WL, PP snags >15" DBH, and at least 12-foot high), hardwood trees are designated as leave trees. Leave trees will be selected by the Purchaser based on direction and approval by the Forest Officer as follows:
 - a. All unit descriptions are outlined in VII. F. Unit Designation boxes.
 - b. All Purchaser leave tree selection and cutting must occur during hours with adequate visibility.
 - c. If the Purchaser fails to meet the cutting prescription, cutting operations will be suspended and the Forest Officer will require leave trees to be marked by the Purchaser, and the marking to be approved by the Forest Officer prior to harvest.

Hawksworth Dwarf Mistletoe Severity Rating



Step 1) Divide the live crown of the tree into 1/3rds.

Step 2) Rate each third according to this scale:

- 0 - No visible infection
- 1 - ½ or fewer of total # branches infected
- 2 - More than ½ of the total # branches infected

Step 3) Add rating for each 1/3

3. **SLASHING REQUIRED:** The Purchaser is required to slash down all non-merchantable material taller than 2 feet except large cull trees and snags after harvest operations are complete and approved in each unit. This includes leaners and pushovers. Stems shall be completely severed from the stump. Stumps shall not exceed 6" in height on the uphill side. Slashed material must be felled directionally so that it remains totally within the harvest unit and all drainage structures will be free of slashed material.
4. **SLASHING OF LOGGING-DAMAGED TREES:** The Purchaser shall fell all submerchantable trees with logging-related root or stem damage, causing lean. The stem shall be completely severed from the stump below the lowest live limb. Maximum stump height shall be 12 inches on the uphill side.

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5. **IPS SLASH MANAGEMENT:** Purchaser is required to treat logging slash in the following manner if harvest unit is logged between the months of December – July annually during this contract:
 - a. Purchaser shall return skid ponderosa pine slash back into the harvest unit and scatter in a manner that will allow it to dry and will be mechanically piled at a later date as directed by Forest Officer.
 - b. Heavier tree retention shall occur within 100 foot radius surrounding landing pile for future IPS trap trees. The retention amount, spacing, will be determined on each landing by the Forest Officer.
6. **PURCHASER SLASH PILING:** Mechanical piling of existing dead/down material and logging generated slash is required. Mechanical piling will occur post slashing/felling damaged residuals as approved by the Forest Officer:
 - a. Piling will be completed with an excavator equipped with a bucket and thumb or other attachment approved by the Forest Officer.
 - b. Prior to operation, the Purchaser's Supervisor and Forest Officer will visit each harvest unit and agree to a plan for slash hazard reduction.
 - c. Operations will be conducted under dry or frozen soil conditions only. The Forest Officer may temporarily suspend operations under unfavorable operating conditions.
 - d. Woody debris will be left on site to meet downed woody debris requirements, see Section VII.C.3 for unit specific tons/acre retention requirements.
 - e. All piles will be clean, 4 – 12 feet in height and 4 – 10 feet in width. All piles will be compacted with piling equipment to a sufficient degree to allow complete burning.
 - f. No piles will be constructed within 20 feet of residual trees, 30 feet from outside of unit boundary, system roads, powerlines, or underneath any portion of the crown of a residual tree. If spacing of residual trees makes this impractical, piles will be constructed in the largest openings available.
 - g. The operator will avoid damaging residual trees and will avoid displacement of soil during piling operations.
 - h. Machine piling equipment shall remain on existing skid trails to the extent practicable.
 - i. In cutting units in which utilization is accepted between July 16th and September 30th, mechanical piling shall be completed before October 31st of the same year. In cutting units in which utilization is accepted between October 1st of the previous year and July 15th of the current year, mechanical piling shall be completed by October 31st of the current year.
7. **LANDING CLEAN-UP:** Purchaser shall perform landing pile clean-up using either a grapple-type loader, or excavator w/ thumb and bucket unless otherwise approved by the Forest Officer. A landing is considered a place where any logs or products are gathered for loading and/or processing. Purchaser shall clean up all residual debris within the landing area, “fluff” pile edges and stack in center of pile to avoid “fairy rings” when burnt, grub/scarify high traffic areas within landing area, and spread grass seed as directed by the Forest Officer.
8. **TRAFFIC CONTROL REQUIRED FOR FELLING ALONG OPEN ROADS:** When felling operations begin along public roads, traffic guards with “STOP” signs shall be posted 500 feet in both directions from the units on open roads, providing a safety zone to warn oncoming traffic that logging operations are in progress. All traffic shall be stopped when tree felling is in progress. Traffic stops should not exceed 15 minutes at any one time. All saws will be shut off when traffic

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is moving through the safety zone. Wedges and/or jacks shall be used to ensure trees do not fall onto the roadway. In the event a tree falls across the roadway, all debris shall be removed immediately from the roadway and right-of-way. Closing open roads during logging operations for extended periods need to be approved by the Forest Officer.

9. APPROVED SKID TRAILS REQUIRED: Skid trail locations shall be flagged by the Purchaser and approved by the Forest Officer prior to felling trees in this unit.
10. TEMPORARY SPUR ROAD CONSTRUCTION REQUIRED: Purchaser is permitted to construct a temporary spur road for access to this unit. The Forest Officer will designate the location of the road. The road must be constructed and reclaimed to specifications in Attachment B.
11. FUELBREAK AND FIRELINE CONSTRUCTION: Purchaser shall construct approximately **5.1** miles of machine fire lines and fuelbreak within the boundaries of the unit as directed by the Forest Officer as shown in VII.F Unit Designations.
 - a. Fire lines will be cleared to mineral soil and be free of roots for a minimum width of **2 feet**. Erosion control structures shall be installed as the fire lines are built.
 - b. Fuelbreaks will be constructed to a minimum width of **20 feet** devoid of coarse woody debris. Purchaser shall fell all live and dead (*coniferous and deciduous*) vegetation not meeting utilization standards and over 2 feet in height, unless otherwise designated to be left standing. Stump height shall not exceed 6 inches on the uphill side. Trees shall be completely severed from the stump. All vegetative material removed from the fuelbreak shall be scattered within the unit, relatively free of mineral soil and not to exceed a height of **2 feet**.
 - c. Construction must be completed within 10 months of harvest completion.
 - d. Before constructing fireline, the Purchaser's Supervisor and Forest Officer will visit each area in the harvest unit and agree on fireline needs and locations. Some areas may have limited access.
 - e. Operations will be conducted under dry or frozen soil conditions only. The Forest Officer may suspend fireline construction operations under unfavorable operating conditions.
 - f. Snags and fireline hazards may be mitigated as directed by the Forest Officer. See Special Operating Restrictions for further snag retention requirements.
 - g. The operator will avoid damaging residual trees and will avoid displacement of soil during piling operations.
 - h. Large materials shall be placed at an angle approaching perpendicular to the slope to prevent rolling material during firing operations.
 - i. Cup trenches and excavated skid trails may be needed to facilitate construction on steep areas.
 - j. Firelines constructed along the bottom of a unit, on slopes over 35 percent, shall be "v" shaped, or "cup trenched" to at least 12" depth, with dirt thrown over the debris just outside the mineral soil line.
12. EQUIPMENT RESTRICTION AREA: Heavy equipment shall not be operated in areas flagged by the Forest Officer and areas where sustained ground slopes are 40% or greater. In these areas logs shall be winched to roads or trails outside the restricted area.
13. OPTIONAL UNIT: The Purchaser has the option to harvest in this unit. Operations in this unit will follow the specification of this contract. The Purchaser must inform the Forest Officer by **6/30/2027**

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if they elect to pursue or decline operating within the optional unit. Purchaser must submit an operating plan to the Forest Officer for approval prior to operation in this unit including unit access.

14. COMBINATION OF SKYLINE YARDING AND GROUND BASED SKIDDING: Skyline yarding is required in areas as designated on the sale map, Attachment A. Ground based yarding is permitted in areas as designated on the sale map. Locations and boundaries of yarding systems will be as directed by the Forest Officer.
15. SKYLINE YARDING REQUIREMENTS: A skyline yarding system capable of yarding 1,600-2,000 feet external yarding distance uphill must be used. A carriage capable of 50 feet minimum lateral yarding distance is required. The carriage must maintain a fixed position on the skyline while lateral yarding.
 - a. Skyline corridors shall be spaced not less than 75 feet apart unless approved by the Forest Officer. In the case of ridges where fan-shaped settings are required, the minimum distance at the widest divergence will be 150 feet.
 - b. The location of all skyline corridors shall be approved by the Forest Officer in advance of any felling operations.
 - c. Purchaser will be required to locate the following prior to approval by the Forest Officer:
 - all corridors after determining adequate deflection (minimum 5%)
 - tail trees or tail holds
 - intermediate support tree
 - guyline anchors
 - blind leads
 - decking areas
 - d. Clearing width for corridors must be kept to the absolute minimum necessary to accommodate yarding and shall not exceed 12 feet.
 - e. Except for lateral yarding, logs shall be yarded with one end suspended or fully suspended.
 - f. Multispan skyline yarding required: To obtain adequate deflection, intermediate supports may be required on some corridors.
 - g. High tail trees required: Tail trees or lift trees suitable to obtain adequate deflection may be required.
 - h. When rigging is attached to trees not designated for cutting, tree plates or similar effective protective devices may be required and will be removed at completion of use.
 - i. Mobile tailholds or mobile guyline anchors are restricted to areas where it is not necessary to build constructed trails for equipment access unless agreed upon in writing by the Forest Officer.
 - j. In the event that special problems outside the scope of the skyline logging specifications are identified by either party, the Purchaser and the Forest Officer will mutually agree upon the solution.
16. DELETION OF AREAS WITH BLIND LEADS: Within skyline yarding area, blindleads identified by the Purchaser and approved by the Forest Officer may be deleted from the harvest unit.

H. LOGGING OPERATIONS PLAN: The Forest Officer shall approve a plan for felling, yarding, and landing logs (both Sawlogs and Other Material) in each harvest unit prior to the start of operations in that unit.

I. SKID TRAIL LAYOUT AND YARDING PLAN: The Purchaser must follow these requirements along with those shown under VII.G. SPECIAL OPERATING REQUIREMENTS when developing a yarding plan for each unit. The Forest Officer may approve exceptions to these requirements in writing.

1. The Purchaser shall lay out skid trails and have locations approved by the Forest Officer prior to felling trees.
2. All skid trails will be located within the harvest unit boundaries.
3. Any constructed skid trails shall be completed and approved by the Forest Officer prior to felling timber.
4. Skid trails will not be located in draws, and may only cross draws at locations flagged and approved by the Forest Officer.

J. LANDINGS AND LOG DECKS:

1. The Purchaser shall construct landings at locations approved by the Forest Officer prior to felling timber.
2. Landings shall be kept to the minimum size necessary to allow the safe handling of logs. The Forest Officer must approve landing size.
3. All deck locations shall be approved by the Forest Officer prior to clearing or use. Decks shall be located so as to minimize the number of trees cut for construction of the deck area.

K. FELLING:

1. In each harvest unit, a felling pattern shall be used which conforms to the logging operations plan and causes the least damage to reserve trees and other resources.
2. Felling shall be systematic and continuous to avoid lost logs and minimize the number of skidding trips.
3. Trees shall be directionally felled away from features requiring protection within or adjacent to harvest units. Features requiring protection include streams, meadows, wet areas, and areas specified under Section VII.F. UNIT DESIGNATIONS. Wedges, jacks, winches, or other special equipment may be required to direct trees when felling. Trees falling into protection areas shall be winch-line skidded out of protected features. All necessary mitigation for damage caused by improper and/or non-approved felling into a protected zone is the responsibility of the Purchaser. The Forest Officer must approve all mitigation work.
4. Traffic Control Required For Felling along Roads: If felling operations occur along public roads, traffic guards with "STOP" signs shall be posted 500 feet in both directions from the units on open roads, providing a safety zone to warn oncoming traffic that logging operations are in progress. All traffic shall be stopped when tree felling is in progress. Traffic stops should not exceed 15 minutes at any one time. All saws will be shut off when traffic is moving through the safety zone. Wedges and/or jacks shall be used to ensure trees do not fall onto the roadway. In the event a tree falls across the roadway, all debris shall be removed immediately from the roadway and right-of-way. The Forest Officer must approve any extended road closures for logging operations.

L. YARDING AND MECHANICAL FELLING: The Purchaser must follow these requirements during logging operations, along with those shown under Section VII.G. SPECIAL OPERATING

TIMBER SALE CONTRACT

REQUIREMENTS. The Forest Officer will determine when restrictive conditions apply, and may approve exceptions to these requirements in writing.

1. Soil Compaction Restrictions: In order to prevent soil resource impacts, ground-based mechanical felling and yarding are restricted to periods when one or more of the following conditions occur:
 - a. Soil moisture content at 4-inch depth less than 20% oven-dry weight.
 - b. Minimum frost depth of 4 inches.
 - c. Minimum snow depth of 18 inches, loose, or 12 inches, packed.
2. Suspended Operations for Soil Compaction and Displacement: The Purchaser will be required to restrict or suspend logging operations when soils are subject to compaction or displacement by heavy equipment.
3. Equipment Restrictions:
 - a. Equipment shall not be operated in areas designated as EQUIPMENT RESTRICTION ZONES, WETLAND MANAGEMENT ZONES or STREAMSIDE MANAGEMENT ZONES as shown in Section VII.D.6 and 7, unless authorized by this Contract or the Forest Officer.
 - b. Equipment shall not be operated in soft soils, boggy areas or areas where skidding would cause excessive compaction and displacement.
 - c. Any trees designated for harvest within such zones shall be winchline skidded to skid trails outside the zone.
 - d. Slash will not be piled in or pushed into these zones.
 - e. The Forest Officer must approve any designated crossings of restricted areas.
4. Protection of Reserved Trees: The Purchaser shall exercise reasonable care to prevent damage to trees reserved from cutting during logging operations.

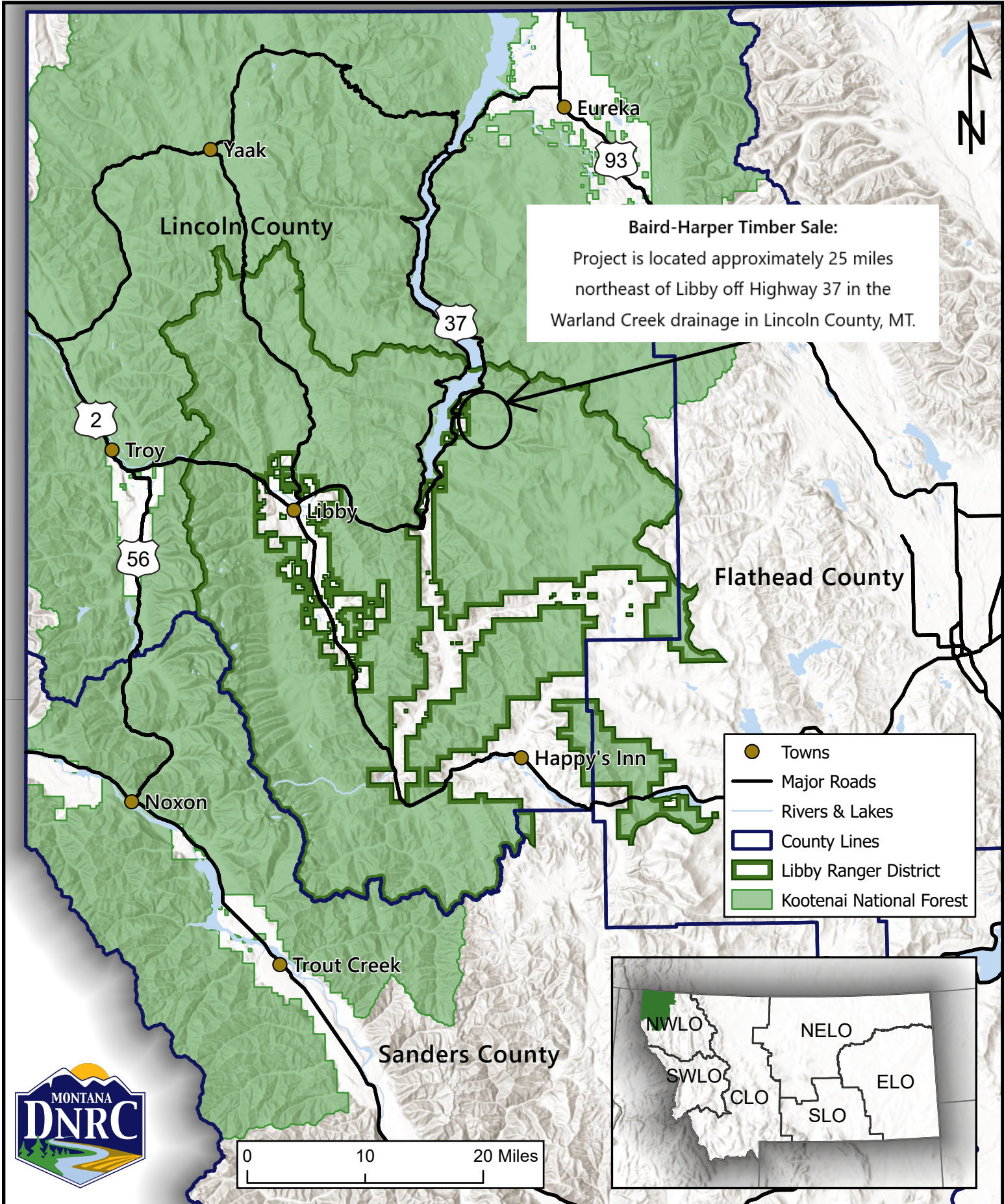
M. CLEAN-UP AND COMPLETION: The Purchaser must follow these requirements and those shown under Section VII.G. SPECIAL OPERATING REQUIREMENTS during logging operations. The Forest Officer will determine when restrictive conditions apply, specifications and dates to meet these requirements and may approve exceptions in writing. The Forest Officer must approve all designated work prior to the removal of Purchaser's equipment.

1. Slashing: The Purchaser shall fell all submerchantable trees with logging-related root or stem damage, causing lean. The stem shall be completely severed from the stump below the lowest live limb. Maximum stump height shall be 12 inches on the uphill side.
2. Logging Debris Confined To Units: All debris from logging shall be confined within the harvest unit boundaries. Any logging debris outside a harvest unit must be returned to within the unit boundary.
2. Skidding Debris on Roads: The Purchaser shall remove logging slash remaining on any portion of a road cutbank or traveled way. Cut and fill slopes, ditches, or road surfaces damaged by skidding operations shall be restored to original conditions. Reseeding is required if vegetation is damaged by skidding.
3. Repair of Improvements: Damage caused by the Purchaser's operations to culverts, waterlines, fences, roads, bridges, gates, cattleguards, signs, and all other improvements must be adequately repaired or replaced.

4. Erosion Control:
 - a. The Purchaser shall construct slash and debris erosion barriers, dips, water bars or ditches in skid trails and landings as directed by the Forest Officer.
 - b. The kinds and frequency of erosion control structures shall be adjusted to soil types, topography and climatic conditions as directed by the Forest Officer.
 - c. The Purchaser is required to recontour any excavated skid trails, and provide for effective erosion control in the trail location as directed by the Forest Officer.
 - d. Erosion control work shall commence as soon as skidding is completed on each skid trail or landing, and must be kept current with unit operations.
 - e. Erosion control work shall be completed and approved by the Forest Officer in unfinished units before operations cease for inactive periods including heavy winter snowfall, spring breakup and restricted dates.
 - f. All erosion control work in each unit shall be completed prior to notification pursuant to Section VII.M.7. Acceptance of Completed Harvest Units.
 - g. The Purchaser shall maintain erosion control structures in active sale areas throughout the contract period or extensions thereof.
 5. Landing and Decking Area Cleanup: The Purchaser is required to pile logging residues on landings and log-decking areas. Proper equipment (e.g. brush blade, log loader) shall be used to ensure that no dirt is incorporated into the piles. Mechanical scarification of landing and decking areas may be required. Where logs have been decked on the downhill or fill side of a road, the Purchaser may be required to pile residue with a log loader or by hand. Residue piles shall be a minimum of 15 feet away from any live trees. Piles shall be located and constructed as directed by the Forest Officer.
 6. Systematic Harvest Unit Operations: When harvest operations are begun on a designated harvest unit, the harvest operations on that unit shall be fully completed before cutting may begin on other harvest units.
 7. Acceptance of Completed Harvest Units: The Forest Officer shall notify the Purchaser in writing when all contract requirements for each specified harvest unit or area have been met. After notice has been received, the Purchaser is not required to do additional work on the specified area except as provided in Section VII.A.4. FIRE KILL, INSECT INFESTATION, AND WIND THROWN.
 8. Reseeding: The purchaser shall apply seed to skid trails, landings, obliterated roads and other areas disturbed by logging as directed by Forest Officer. Appropriate seed mix specified per ATTACHMENT B, Table B-2 and Grass Seeding Specifications.
- N. HAULING RESTRICTIONS:** The Purchaser will be required to restrict or suspend hauling during periods when the compacted road surface would be damaged, as directed by the Forest Officer. Restrictions are required when hauling would cause rutting into the subgrade, or surfacing materials would be displaced, such as during heavy rainfall or spring breakup freezing and thawing cycles
- O. LOGGING OPERATIONS SAFETY SIGNS:** Road signs warning of logging and road construction operations shall be posted 500 feet from the operations. When log hauling is in progress, warning signs shall be posted at major road junctions as directed by the Forest Officer. Warning signs must comply with specifications in the Manual on Uniform Traffic Control Devices.

Good Neighbor Authority - Libby District Vicinity Map

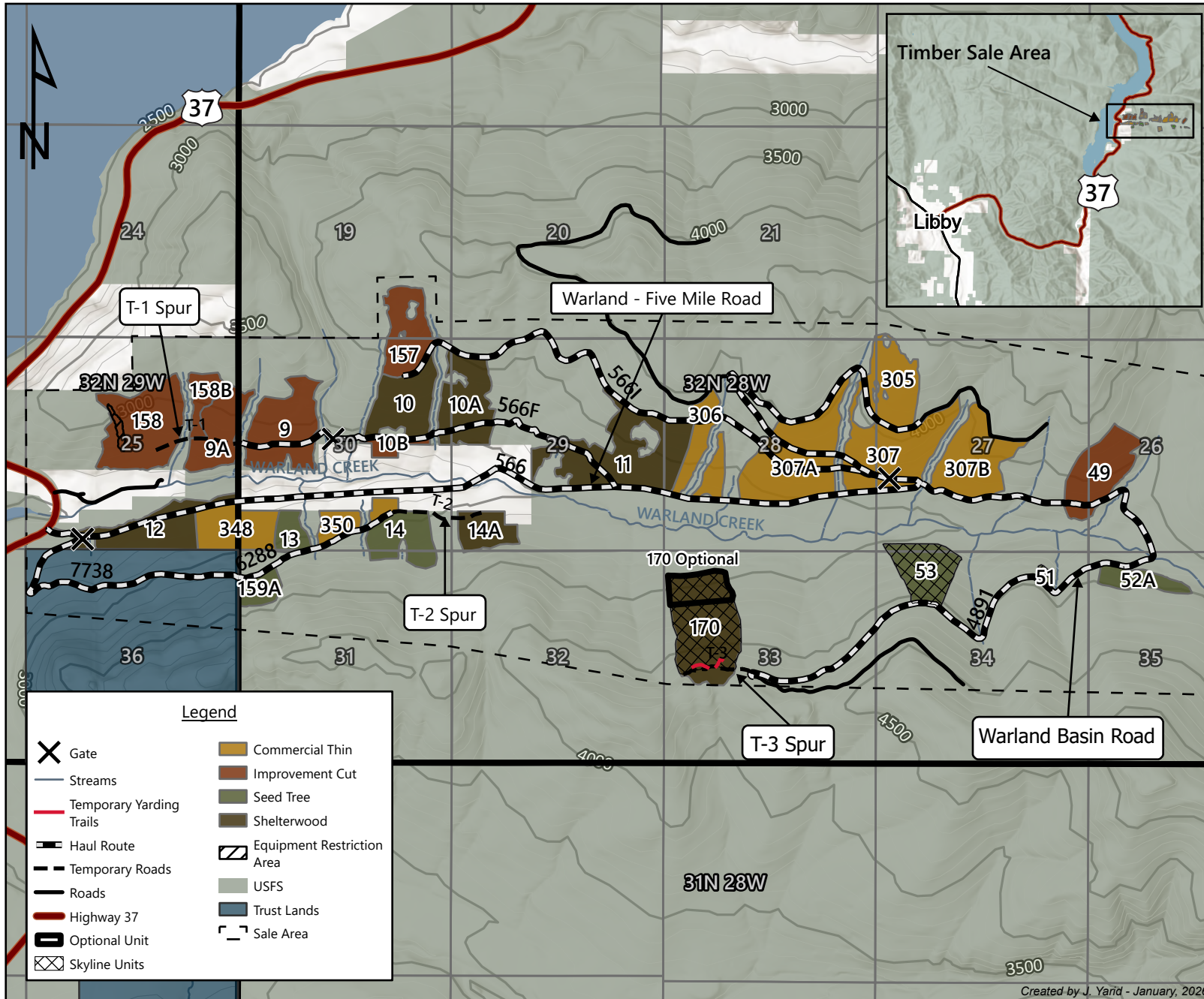
Kootenai National Forest



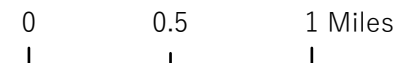


Baird-Harper Timber Sale Map

Sections 19-22, 26-35 T32N 28W & Section 25 and 36 T32N R29W
Attachment A. Page 2



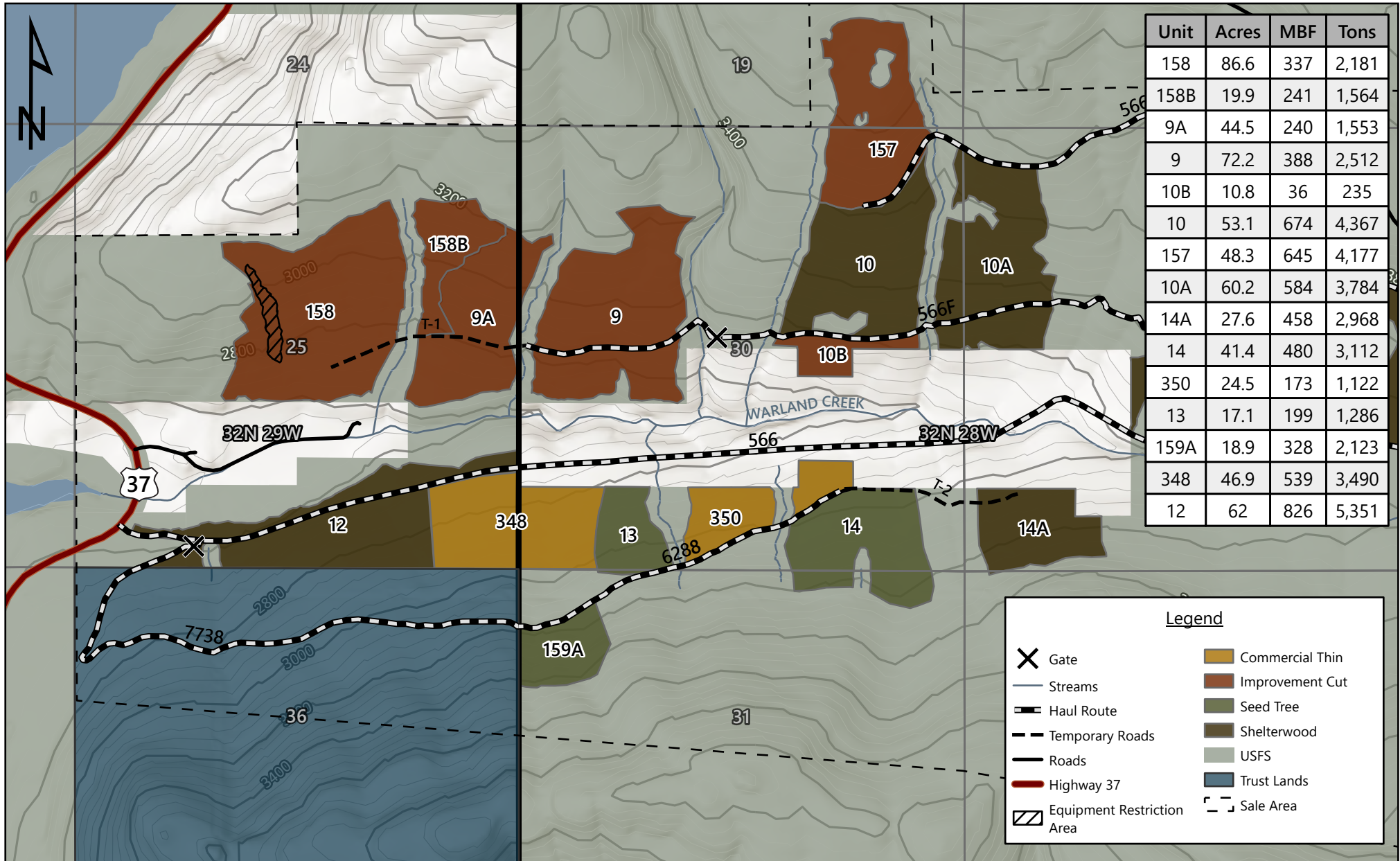
Unit	Acres	MBF	Tons
158	86.6	337	2,181
158B	19.9	241	1,564
9A	44.5	240	1,553
9	72.2	388	2,512
10B	10.8	36	235
10	53.1	674	4,367
157	48.3	645	4,177
10A	60.2	584	3,784
11	111.5	1,322	8,561
306	41.8	239	1,546
307A	105.1	432	2,801
307	91	555	3,593
305	55.7	561	3,634
307B	68.2	321	2,076
49	56.8	383	2,478
52A	21.6	375	2,428
51	3.5	43	280
53	44.2	473	3,067
170	70.7	774	5,016
14A	27.6	458	2,968
14	41.4	480	3,112
350	24.5	173	1,122
13	17.1	199	1,286
159A	18.9	328	2,123
348	46.9	539	3,490
12	62	826	5,351
Totals:	1,304	11,624	75,307





Baird-Harper Timber Sale Map

Sections 19, 29, 30, 31, & 32 T32N 28W & Section 25 and 36 T32N R29W
Attachment A. Page 3



Unit	Acres	MBF	Tons
158	86.6	337	2,181
158B	19.9	241	1,564
9A	44.5	240	1,553
9	72.2	388	2,512
10B	10.8	36	235
10	53.1	674	4,367
157	48.3	645	4,177
10A	60.2	584	3,784
14A	27.6	458	2,968
14	41.4	480	3,112
350	24.5	173	1,122
13	17.1	199	1,286
159A	18.9	328	2,123
348	46.9	539	3,490
12	62	826	5,351

Legend

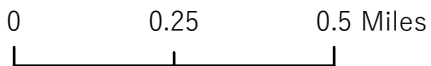
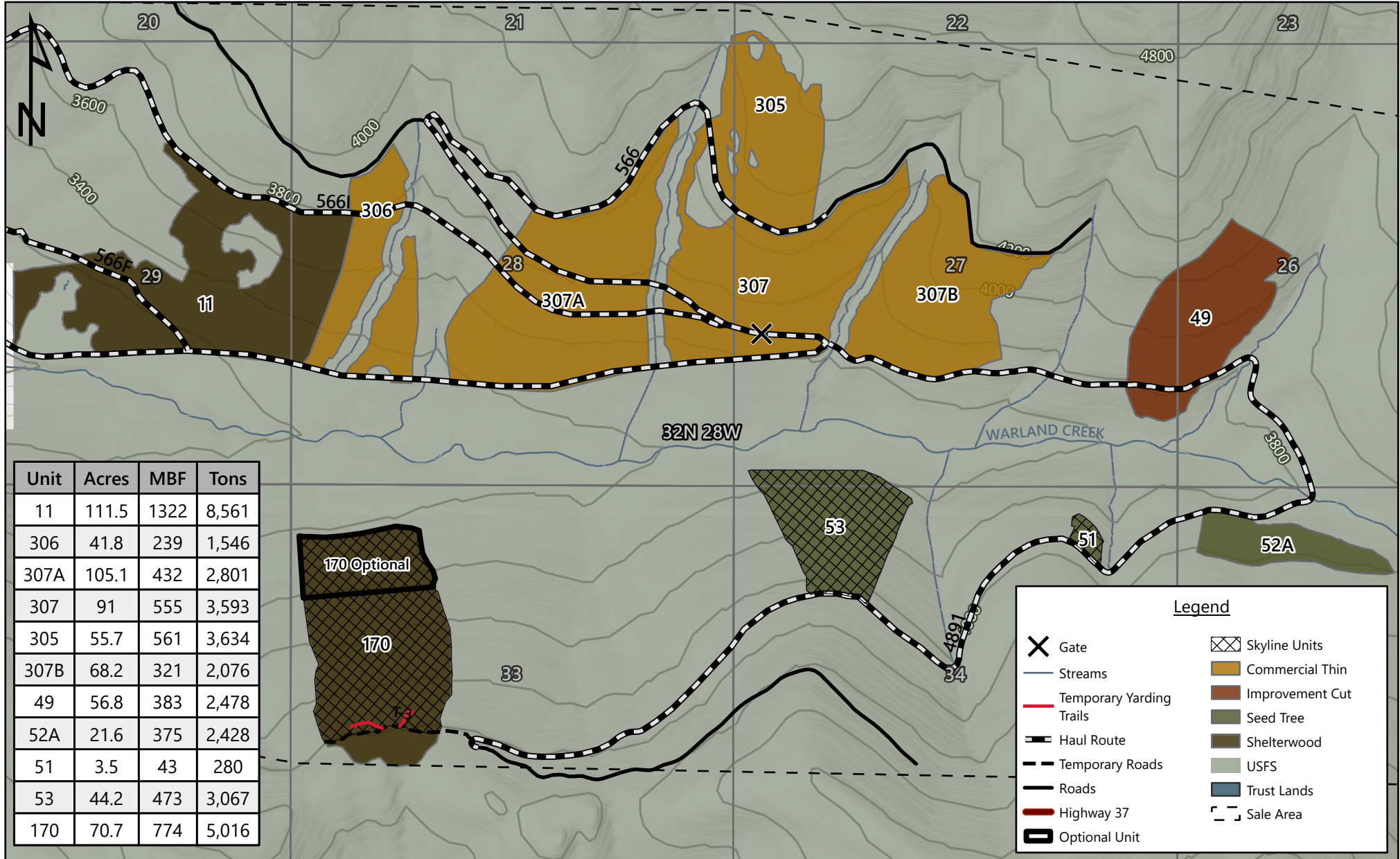
- Gate
- Streams
- Haul Route
- Temporary Roads
- Roads
- Highway 37
- Equipment Restriction Area
- Commercial Thin
- Improvement Cut
- Seed Tree
- Shelterwood
- USFS
- Trust Lands
- Sale Area

0 0.25 0.5 Miles



Baird-Harper Timber Sale Map

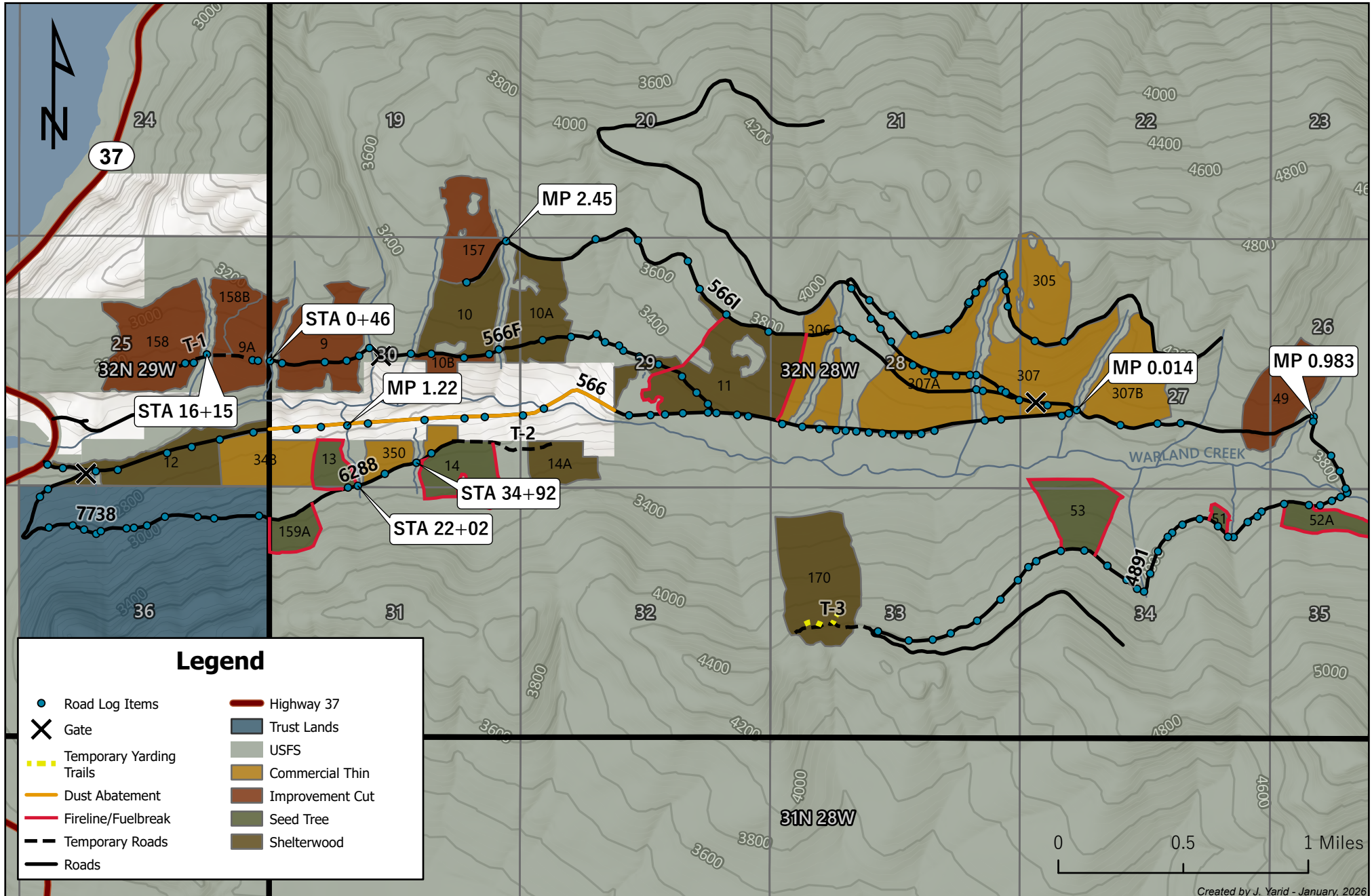
Sections 21, 22, 26-29, & 33-35 T32N 28W
Attachment A. Page 4





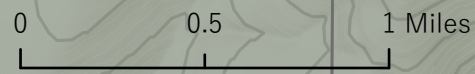
Baird-Harper Road Work Map

Sections 19-22, 26-35 T32N 28W & Sections 25 and 36 T32N R29W
Attachment A. 5



Legend

Road Log Items	Highway 37
Gate	Trust Lands
Temporary Yarding Trails	USFS
Dust Abatement	Commercial Thin
Fireline/Fuelbreak	Improvement Cut
Temporary Roads	Seed Tree
Roads	Shelterwood



**STATE OF MONTANA
TIMBER SALE CONTRACT
ATTACHMENT B**

ROAD MAINTENANCE, RECONSTRUCTION & TEMPORARY ROAD CONSTRUCTION SPECIFICATIONS	
SALE NAME: Baird-Harper	SALE NUMBER: GNA1064

I. CONSTRUCTION REQUIREMENTS

A. ROADS: The Purchaser is required to construct, improve and maintain the roads shown in Table B-1 per the schedules stated, as shown on the Sale Map, Attachment A, and to the specifications and drawings in Attachment B and other applicable attachments.

TABLE B-1. ROAD CONSTRUCTION REQUIREMENTS				
Road Name or Number	Approximate Length	Type of Work	Operation Period	Completion Date or Requirement
Forest Road #566/Warland-Five Mile Road	6.71 Miles	Maintenance	Operations may occur as soil conditions allow for adequate shaping and compaction, as directed by the Forest Officer. Large CMP replacement work is not allowed 4/1 – 715.	Prior to log hauling and post haul
Forest Road #566I	2.73 Miles	Maintenance		Prior to log hauling and post haul
Forest Road #4891/Warland Basin Road	3.65 Miles	Maintenance		Prior to log hauling and post haul
T-3 Spur	0.35 Miles	Temporary Construction		Prior to log hauling
Forest Road #7738	1.43 Miles	Maintenance		Prior to log hauling and post haul
Forest Road #6288	4,310 Feet	Reconstruction/Maintenance		Prior to log hauling and post haul
T-2 Spur	0.41 Miles	Temporary Construction		Prior to log hauling
Forest Road #566F/Martian Road	1.92 Miles	Maintenance		Prior to log hauling and post haul
T-1 Spur	2,885 Feet	Temporary Construction		Prior to log hauling and post haul
		Obliteration		Following Completion of Unit Requirements
Jump Ups	500 Feet each	Temporary Construction		Prior to log hauling and post haul
		Obliteration		Following Completion of Unit Requirements

B. ROAD CONSTRUCTION MATERIALS ESTIMATE:

TABLE B-2: MATERIALS FURNISHED AND INSTALLED BY THE PURCHASER:					
The Purchaser is required to furnish the described material and install as required in Attachment B. Quantities are estimated, and the Attachment B requirements and specifications must be met regardless of the estimated amounts. All materials furnished by the Purchaser become the property of the United States Forest Service when installed. If, due to a minor design change, material is not installed, the material will be delivered to the nearest DNRC Unit Office and become property of the State upon delivery.					
Corrugated Metal Pipe				Other Materials	
No.	Diameter	Length	Gauge	Amount	Description
1	18"	24'	16	13	18" CMP Bands
2	18"	32'	16	7	24" CMP Bands
2	18"	34'	16	2	36" CMP Bands
3	18"	36'	16	1	75' Long Sediment Fence
4	18"	40'	16	70 feet	Slash
1	18"	45'	16	235.5 oz	Milestone (Aminopyralid) Herbicide
1	24"	24'	16		
1	24"	27'	16	753.62 oz	2, 4-D (Amine) Herbicide
1	24"	34'	16		
1	24"	35'	16		
2	24"	50'	16	Varies	Surfactant and blue dye to accompany herbicide at manufacturer specified rates
1	24"	60'	16		
1	36"	75'	16		
Fill Material					
Yards	Type			Delivery Location	
262	Gravel – ¾" Crush			Road Construction Sites (See Road Log)	
96	Rip Rap				
30	1.5" minus				
10	Boulders				

TABLE B-2 (CONTINUED): SEED AND FERTILIZER REQUIREMENTS			
The Purchaser is required to furnish and apply certified noxious weed-free, pure live seed mixture(s) and fertilizer in the amounts shown. Total pounds mixed seed are pure live seed, corrected for germination and purity. Germination and purity tests must have been conducted within the last 12 months prior to delivery. Purchaser shall furnish documentation of germination and purity tests to the Forest Officer prior to application.			
Certified Noxious Weed-Free Seed		Fertilizer	
Pounds	Description	Pounds	Analysis (N-P-K)
2,597.4	30% <i>Elymus glaucus</i> , Blue Wildrye 15% <i>Pseudoroegneria spicata</i> , Bluebunch Wheatgrass 15% <i>Elymus trachycaulus</i> , Slender Wheatgrass 15% <i>Bromus marginatus</i> , Mountain Brome 25% <i>Lolium multiflorum</i> , Cover Crop of Annual Rye	N/A	N/A

- C. MINOR CHANGES:** The Forest Officer may require minor changes in location, design or specifications of road construction, improvement or maintenance requirements. Such changes must be within the scope of Attachment B requirements and must not result in a significant (one thousand dollars [\$1,000.00] or greater) increase or decrease in cost as agreed to by the Forest Officer and the Purchaser.
- D. ADJUSTMENT FOR CHANGE IN REQUIREMENTS:** If the State requests a change in road construction, improvement or maintenance specifications and the State in its discretion determines that the change would significantly increase the cost to the Purchaser, then the State must compensate the Purchaser. If the Purchaser requests a change in road construction, improvement or maintenance specifications and the State in its discretion determines that the change is acceptable and would significantly reduce the cost to the Purchaser, then the Purchaser must compensate the State. Compensation to the Purchaser will be in the form of stumpage credit. Compensation to the State will be in cash and will be billed as a supplement to the stumpage bill. All significant changes and compensation will be described in a contract modification.

II. RIGHT-OF-WAY CLEARING

A. CLEAR LIMIT DEFINITIONS are shown in Section IX. SPECIFICATIONS AND DRAWINGS.

B. CLEAR LIMIT MARKING: N/A

C. CLEARING REQUIREMENTS:

1. Brush or trees on existing roads may be removed by sawing individual stems, cutting with a rotary brush cutter, uprooting with an excavator or other methods approved by the Forest Officer.
2. Inside the clear limits, but outside the road prism, trees and brush less than 20 feet tall and less than 3 inches in diameter that do not interfere with visibility or slope stability may be left as directed by the Forest Officer.
3. All merchantable timber within the clear limits on all roads to be constructed under the terms of this Contract shall be cut to the specifications in the timber sale contract and skidded to decks, or decked with an excavator, prior to earth moving.
4. Clearing procedures shall protect residual stands, prevent incorporation of construction slash into the road prism, and protect roadside appearance outside clear limits.
5. Grubbing will be limited to only those stumps and large roots within the road prism.

III. TREATMENT OF RIGHT-OF-WAY CLEARING MATERIALS

A. GENERAL TREATMENT REQUIREMENTS:

1. Road construction slash more than 3 inches in diameter and 6 feet long and all concentrations of slash which would adversely affect the stability of the road shall be disposed of by the methods described in this section.
2. Slash and debris shall not be placed in drainages, roadside ditches or heads of culverts where the flow of water may be obstructed and shall be removed if placed therein.
3. Lopping and scattering is defined as delimiting and sawing slash materials into lengths which will easily scatter to a maximum depth of 18 inches. Materials shall be scattered outside the road prism.
4. All slash to be disposed of by piling and burning shall be piled in burn bays at locations approved by the Forest Officer. Construction of piles will be of such size and at a sufficient distance from

trees so that burning does not result in unnecessary damage to remaining trees. The Purchaser may be required to remove any trees damaged by burning operations at current contract rates. If burning is incomplete the residue must be disposed of as directed by the Forest Officer.

B. SIDESLOPES OF 35% OR LESS AND EXISTING ROADS:

1. Disposal will be by hand or machine piling for burning as directed by the Forest Officer.
2. Minor concentrations of slash or individual trees may be disposed of outside of the road prism by lopping and scattering as directed by the Forest Officer.
3. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits if approved in writing by the Forest Officer. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll.

C. SIDESLOPES OF 35% AND GREATER:

1. Treatment will be by excavator only, or by whole tree skidding to a decking area.
2. Where topography and timber type permit, piling for burning will be required as directed by the Forest Officer.
3. Where piling is not practical, treatment will be by windrowing at the toe of the fill. Slash will be windrowed on a trail constructed at the bottom of the right-of-way. Slash will be trampled and covered with organic surface material taken from the road prism as directed by the Forest Officer. Fill material may butt up against but not cover or bury the windrow.
4. Minor concentrations of slash or individual trees may be disposed of by lopping and scattering as directed by the Forest Officer.
5. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits if approved in writing by the Forest Officer. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll.

IV. EXCAVATION AND EMBANKMENT OF FILL MATERIALS

A. EXCAVATION OF ROAD CROSS SECTION:

1. All grubbing and clearing shall be completed prior to the beginning of any excavation.
2. Surface organic layer and ash cap (surface reddish-brown soils with low gravel content) will be bladed to the side of the road and not incorporated into fills.
3. Wasted soils and organic layer will be shaped and spread to natural contours at locations approved by the Forest Officer.
4. When excavating on tangents and when balanced section construction is indicated, the following table will be used as a guideline to determine if sufficient excavation of road solid has occurred. Tolerances for road solid will be +1.0 feet and -0.5 feet.

TABLE B-3: EXCAVATION OF ROAD SOLID			
SIDESLOPE PERCENT	ROAD WIDTH		
	12 FT.	14 FT.	16 FT.

	FEET OF ROAD SOLID		
5	8.7	10.1	11.4
10	8.8	10.2	11.5
15	8.9	10.2	11.6
20	8.3	9.5	10.8
25	7.8	8.9	10.1
30	7.6	8.9	10.1
35	7.8	9.0	10.2
40	8.1	9.2	10.6
45	8.5	9.4	11.0
50	8.8	9.8	11.6
55	9.4	10.2	12.2
60	10.1	11.7	13.3
65 & over	12.0	14.0	16.0

B. EMBANKMENT OF FILL MATERIALS:

1. Fill materials shall be unfrozen and free of snow and ice.
2. Fill materials shall be sorted to remove large rocks over 6 inches in diameter near the surface, which may interfere with surface blading.
3. Where possible all fill materials shall be applied in layers not to exceed 18 inches and each layer compacted with heavy equipment prior to application of the next layer.
4. If fill materials are too dry to allow compaction, the Forest Officer may require watering of layers followed by heavy equipment compaction.
5. Gravel used for surfacing shall be compacted into place using loaded dump trucks or a vibratory drum roller if specified in the Road Log.

C. PIT DEVELOPMENT AND RECLAMATION:

1. While the gravel pit or borrow area is open the surface of the pit shall be kept clean of noxious weeds. The Purchaser shall remove any weeds found growing at the pit by pulling, cultivating, covering with plastic, spraying, or other methods as directed by the Forest Officer.
2. At completion of use, the pit area will be reshaped to as near natural contours as possible. Backslope ratios shall not exceed 3:1. Purchaser may be required to save topsoil, recontour the pit wall, and reclaim the disturbed portion of pit. All disturbed portions of the pit shall be grass seeded and fertilized.
3. At completion of use, talus slopes shall be backsloped and reshaped as directed by the Forest Officer. Grass seeding and fertilizing are required on any disturbed areas with exposed soil.

V. DRAINAGE STRUCTURES

A. CORRUGATED METAL PIPE: The corrugated metal pipe required in Table B-2 will be installed as follows:

1. All pipes shall be installed with a backhoe or excavator. The exact locations shall be determined and approved by the Forest Officer after the right-of-way is brushed and cleared.
2. The excavation trench for culvert installation shall not be wider than necessary to permit satisfactory jointing and thorough tamping of the bedding material under and around the pipe.

ATTACHMENT B

3. The bedding surface shall be constructed to provide a firm foundation of uniform density through the entire length of the culvert and shall be slightly cambered along the centerline to correct for expected settlement.
4. Where the bedding surface is not firm at the grade established, all unstable soil under the pipe and for a width of at least one diameter on each side of the pipe shall be removed and replaced with suitable selected material. Rock encountered in the bedding foundation will be removed to at least 12 inches below the bottom of the pipe and one diameter on each side. The final bedding area shall consist of fine, compacted granular material.
5. Selected material shall be placed alongside the pipe for backfill in alternating layers not exceeding six inches in depth and thoroughly compacted by a handheld mechanical tamper (wacker packer). Special care must be taken to compact the fill thoroughly under the haunches of the pipe. Wacker packer compaction of backfill must be done for a horizontal distance on each side of the pipe equal to either one pipe diameter or to the outside limits of the trench, whichever is less. The depth of wacker packer compaction must extend at least to the top of the pipe.
6. Selected native fill material will be free from rocks and hard earth clods larger than 3 inches in size. Frozen material, sod or a high percentage of organic matter is not permitted.
7. The remainder of the fill above the top of the pipe may be compacted by tractor or rubber-tired roller. Fill is to extend above each pipe at least one-half the pipe diameter or a minimum of 12 inches, whichever is greater.
8. The pipe shall be protected by adequate fill cover before heavy equipment is permitted to cross during roadway construction.
9. Pipe that is damaged or improperly installed shall be repaired or replaced at Purchaser expense as directed by the Forest Officer.
10. The Forest Officer must be contacted two days before any culvert installation and must be present at any wet site culvert installation.
11. Riprap consisting of angular native rock of graded sizes 6 to 12 inches in diameter shall be installed to armor cuts and fills at both ends of all culverts installed in streams.
12. Energy dissipators consisting of native rock at least 24 inches in diameter with flat cross section shall be installed below culvert outlets in all perennial streams.

B. WET SITE CULVERT INSTALLATION REQUIREMENTS:

1. The Forest Officer and the Purchaser shall agree upon a site-specific sediment and erosion control plan that meets the requirements of all attachments and permits for each wet installation prior to any construction. Sediment and erosion control features may include any or all of the following at each site:
 - a. Filter Fabric Sediment Traps.
 - b. Sediment Control Fence.
 - c. Slash Filter Windrows.
 - d. Other measures as directed by Forest Officer.
2. The Forest Officer and the Purchaser shall agree upon a site-specific water diversion plan for each wet installation. Diversions may include: bypass ditches, plastic lined bypass ditches, plastic or metal pipe bypasses or other methods as directed by the Forest Officer. Pumping with discharge

back into the channel is not permitted.

3. All wet site culvert installations require seeding of all disturbed areas with Quick Cover Mix the same day as installation is completed.
4. Any equipment operated within the high-water level of any stream or river channel shall be free of oil and fluid leaks and shall be clean of mud. Said equipment must be inspected by the Forest Officer and approved prior to any use.
5. Filter fabric sediment traps shall be installed prior to any construction activities on all wet culvert installations.

VI. ROAD MAINTENANCE

A. ROAD MAINTENANCE SCHEDULE AND REQUIREMENTS:

1. Road maintenance may be required on all native material or gravel roads designated for hauling purposes.
2. Road maintenance is defined to include all operations listed under Section VI. of Attachment B.
3. Initial maintenance of the roads shall be completed prior to use for logging and hauling.
4. The Forest Officer will determine the number, type, extent and frequency of intermediate maintenance operations. Road maintenance shall be repeated as needed to facilitate traffic and proper road drainage. The Purchaser will be advised of the time limitations to complete each maintenance project.
5. Final maintenance of the road system is required after all logging and hauling and prior to termination of the Timber Sale Contract.

B. SURFACE BLADING:

1. Description: Surface blading is keeping a native or aggregate roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the crown or slope, shoulder, drainage dips, leadoff ditches, berms and turnouts, and provides a level of smoothness appropriate for the amount and kind of traffic served and consistent with existing surfacing.
2. Specifications:
 - a. The existing roadbeds, including turnouts, shall be bladed and shaped to reasonably conform to the designed cross section, and to eliminate ruts. Existing aggregate surfacing shall be bladed to conserve material and to prevent segregation of particle sizes. Rocks or other material remaining on the traveled way surface after final blading which are 4 inches or larger in size shall be removed from the road surface.
 - b. Roadside cutslopes should not be undercut when cleaning ditches or removing road sloughs. Berms shall be removed from road shoulders when blading, except where berms are located as part of road design.
 - c. Cutslopes that have been undercut may require backsloping, seeding and fertilizing.
 - d. At intersections, the roadbeds at side roads shall be graded for a reasonable distance to assure proper blending of the two riding surfaces.
 - e. Drainage dips and leadoff ditches shall be cleaned and graded to form their previous line and grade.

- f. Crowned roads should slope towards shoulders at least 2-5% (1/4-1/2 inch per foot road width) on native and gravel roads.
- g. At intersections where side roads enter the main road and the entering side road exceeds +3%, shallow ditching across the side road may be required to divert surface runoff and protect the main road's stability.
- h. The side-casting of road material into a stream, lake, wetland, or other body of water during road maintenance operations is prohibited in the SMZ.

C. DITCH CLEANING:

- 1. Description: Ditch cleaning is removing and disposing of all foreign and slough material from roadside ditches to provide an unobstructed waterway conforming reasonably to previous line, grade and cross section.
- 2. Specifications:
 - a. Slough material removed from the ditch may be blended into existing native road surface or shoulder only if it is the same material as the road surface. Slough material that is not suitable for blending should be disposed of as directed by the Forest Officer.
 - b. Live vegetation and other organic material shall be removed and disposed of as directed by the Forest Officer.
 - c. Unstable stumps, rocks, leaning trees or other debris shall be removed from the cutslope as directed by the Forest Officer.

D. CULVERT MAINTENANCE:

- 1. Description: Maintenance is work performed on inlets, outlets, catch basins, related channels, existing riprap, trash racks and any other facilities related to the drainage structure.
- 2. Specifications: Catch basins, outlets and energy dissipaters shall be kept functioning and cleaned of debris. Ends of culverts shall be kept straight and undamaged. Any washing alongside or underneath the culvert shall be repaired.

E. ROADSIDE VEGETATION MAINTENANCE:

- 1. Description: Maintenance of roadside vegetation includes removal of brush, tree growth, deadfall or other obstructions to passage, safety or visibility, as such obstructions are present or develop during the contract period.
- 2. Specifications:
 - a. All trees that have fallen across the road shall be removed from the road prism unless otherwise agreed upon. Merchantable timber, if any, shall be cut in appropriate lengths and decked along the roadside in locations where traveled way width or sight distances will not be impaired.
 - b. Brush and seedling trees that encroach upon the original road clear limits shall be removed when they reduce safe sight distances. Low shrubs and brush that do not restrict sight distance but provide cover and reduce erosion shall not be removed. Brush and seedling trees removed shall be disposed of as directed by the Forest Officer.

- F. SNOWPLOWING:** If hauling occurs during the winter months, the Purchaser will be required to plow snow to the following guidelines on all State and private roads.

1. Snow should be windrowed beyond the fill shoulder line.
2. To protect the road surface, a 1 to 4-inch cushion of snow may be left on the road.
3. At termination of use, the road will be prepared for spring runoff by opening drainage outlets through the plowed berms and by installing a snow-berm road closure.
4. Tracked equipment will not be used to plow snow without prior written approval from the Forest Officer.
5. The side-casting of road material into a stream, lake, wetland, or other body of water during snow plowing operations is prohibited in the SMZ.

G. DUST ABATEMENT: The Purchaser is required to apply dust abatement on **1.4 miles of Forest Road 566/Warland-Five Mile Road**. Dust abatement shall be applied prior to hauling through the private ownership and post haul. Magnesium Chloride shall be used for dust abatement.

1. If the Purchaser applies Magnesium Chloride for dust abatement, the following specifications will be followed:
 - a. Dust abatement will be applied prior to summer hauling of logs.
 - b. Scarify road surface and grade to final grading specifications. A minimum of two inches of loose material is required on the road surface prior to applying the abatement. Turnouts are considered part of road surface.
 - c. The road surface will be moist to a minimum of depth of two inches or watered uniformly to moisten the road. If the road is watered, it will be done twelve to twenty-four hours prior to application of the abatement.
 - d. The abatement will be applied at the rate of 0.25 gallons Magnesium Chloride per square yard or 0.20 gallons Calcium Chloride per square yard, followed immediately by another application at the same rate, for a total of 0.5 gallons Magnesium Chloride per square yard or 0.4 gallons Calcium Chloride per square yard.
 - e. Chemical abatement will not be applied for 50 feet on either side of any stream crossing. These "SMZ's" will be demarcated with orange, fluorescent flagging as well as paint on road surface.
 - f. Dust abatement application may only occur during weekdays, Monday-Friday, between 7:00 am and 5:00 pm.
 - g. Weight slips or other acceptable form w/ clear display of amount of dust abatement product used are required to be presented to the Forest Officer before final payment/closure of the project may occur.
 - h. Additional treatments using water may be required if deemed necessary by the Forest Officer.

H. NOXIOUS WEED MANAGEMENT: The Purchaser may be required to perform noxious weed management on any of the roads designated as part of the haul route and on landings. Noxious weed management may include grass seeding, equipment washing and herbicide spraying.

1. Grass seeding, if required, is shown in Section IX, GRASS SEEDING SPECIFICATIONS.
2. All road construction equipment and equipment used in off-road logging activity must be pressure-washed by the Purchaser and inspected by the Forest Officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the

sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.

3. If spraying is required in Attachment B, it shall be done by a commercial applicator licensed by the State of Montana or by personnel under the direct supervision of the licensed applicator. All herbicide applications shall follow EPA label requirements. Any weed control must comply with the current standards of the County Weed Board and as directed by the Forest Officer.
4. The Purchaser is required to spray herbicide along _ miles of unpaved haul roads post-haul. Spraying must occur between June 1st and August 15th, unless otherwise agreed in writing. Herbicide spraying requirements are shown in Section B. IX. C, HERBICIDE SPECIFICATIONS.

VII. ADDITIONAL REQUIREMENTS

A. TEMPORARY SPUR ROAD SPECIFICATIONS: Temporary spur roads are defined as any roads constructed by the Purchaser to access a harvest unit or landing which is not an existing road and may not be shown as a required road to be constructed in Table B-1. All temporary roads will be constructed to the following specifications:

1. Forest Officer shall approve the location prior to any construction.
2. Clearing and excavation shall be kept to the absolute minimum for safe truck hauling and to prevent erosion and water quality impacts. Some sidehill excavation, minor through cuts, ditching and turnpiking may be required.
3. Temporary culverts may be required at ditch crossings, wet areas or other locations as directed by the Forest Officer.
4. Temporary erosion control measures may be required to meet BMP standards on the road and/or the landing area while being used.
5. At the completion of use the road shall be shaped back to natural contours, temporary culverts removed, erosion control measures installed, the disturbed areas grass seeded, and the access closed to all vehicular traffic. The Forest Officer may require scarification or ripping of compacted landings and temporary spur roads.

B. GATES ON PRIVATE ROAD EASEMENTS: When using private road easements to access the timber sale area, any gate encountered on private land will be left as prescribed by the easement grantor.

C. GRID ROLLING ROAD PRISMS: N/A.

D. TRAFFIC CONTROL AND WARNING SIGN SPECIFICATIONS:

1. The Purchaser shall furnish, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Suitable warning signs shall be provided to properly control and direct traffic as requested by the Forest Officer.
2. All road barricades, warning signs, lights, temporary signals, flagger and pilot car operations and equipment, and other protective devices, shall conform with the specifications in the Manual on Uniform Traffic Control Devices (MUTCD).

E. KEEP ROADS CLOSED: Seasonal access to Forest Road #566F shall be closed to restrict public motor vehicle access during nights, weekends and periods of inactivity during closure of 10/15-6/30. Forest Road #566 and 7738 will maintain yearlong closure during nights, weekends and periods of inactivity.

VIII. ROAD LOG AND SITE DESCRIPTIONS

Station	Work Description	Materials or Type of Work	Type or Size	Length or Amount	Units
Miles	Forest Road 566/Warland-Five Mile Road				
0.00 - 6.71	This is a 22-30-foot-wide gravel surface that begins at Highway 37/Warland-Five Mile Creek Road junction. Maintenance required includes: Pre-haul blading required which includes reshaping road to crowned surface and outsloped road. Blading includes ditch rehabilitation and clearing where needed, including pullouts and truck turn arounds. If ditch line prism exists, it does not need to be pulled but all ditches need to be cleared of organics and debris to ensure functionality as directed by FO. Light to moderate brushing until MP 4.37 which includes brushing all pull outs/turn arounds. Grass seed all disturbed areas. Before beginning road work, Contact U-Dig to establish underground lines.	Blading		6.7	Miles
		Brushing		4.4	Mile
		Kootenai Blend Grass Seed		1.69	25lb Bags
		Laborer		3	Hours
0.02	Clean cattle guard, will need to lift grate to fully clean.	Earthwork	Excavator	4	Hours
		Laborer		4	Hours
0.08	Existing 24" CMP - Clean and rock armor inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
		Rock	Rip Rap	2	Cubic Yards
0.2	Existing 24" CMP - Clean and rock armor inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
		Rock	Rip Rap	2	Cubic Yards
0.29	Existing 18" CMP - Clean and rock armor inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
		Rock	Rip Rap	2	Cubic Yards

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0.5	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 40' CMP. Inhaul 10 cubic yards of 3/4" crush and bed the culvert in gravel and use the remaining to create a rollover the pipe. Rock armor inlet and outlet of the culvert with 2 cubic yards of rip rap. Purchaser dispose of CMP.	CMP	18" x 40'	40	Feet
		CMP Band	18"	1	Band
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
0.6	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 45' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with local borrow.	CMP	18" x 45'	45	Feet
		CMP Band	18"	1	Band
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
0.71	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 40' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with local borrow.	CMP	18" x 40'	40	Feet
		CMP Band	18"	1	Band
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
0.85	Existing 18" CMP - Clean and rock armor both inlet and outlet with local borrow	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hour
1	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 36' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with local borrow.	CMP	18" x 36'	36	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours

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		Laborer		5	Hours
		CMP Removal		2	Hours
1 - 2.4	Liquid dust abatement required pre and post haul as described in Att. B. VI. G.	Dust Abatement		1.4	Miles
1.12	Existing 18" CMP - Clean and rock armor both inlet and outlet with local borrow.	Earthwork		1	Hour
		Laborer		0.5	Hour
1.22	Existing 18" CMP not functional. Remove existing culvert and install a new 24" x 50' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with 4 cubic yards of rip rap. 124 Permit	CMP	24" x 50'	50	Feet
		CMP Band	24"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	4	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	8	Hours
		Laborer		8	Hours
		CMP Removal		2	Hours
1.3	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 40' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with 2 cubic yards of rip rap.	CMP	18" x 40'	40	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		Earthwork	Dump truck	3	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
1.53	Existing 18" CMP not functional. Remove existing culvert and install a new 18" x 32' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser deliver CMP to Canoe Gulch Ranger Station. Rebuild catch basin and rock armor inlet and outlet with 2 cubic yards of rip rap.	CMP	18" x 32'	32	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		Earthwork	Dump truck	3	Hours
		Earthwork	Excavator	5	Hours

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		Laborer		5	Hours
		CMP Removal		2	Hours
1.69	Existing 12" CMP not functional. Remove existing culvert and install a new 18" x 34' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rebuild catch basin and rock armor inlet and outlet with 2 cubic yards of rip rap.	CMP	18" x 34'	34	Feet
		CMP Band	18"	1	Each
		Rock	Rip Rap	2	Cubic Yards
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	3	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
1.76	Existing 18" CMP - Clean and excavate overtopping road fill. Rebuild catch basin and rock armor both inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Excavator	1	Hour
		Rock	Rip Rap	2	Cubic Yards
		Laborer		0.5	Hour
1.92	Existing 18" CMP - Clean and excavate overtopping road fill. Rebuild catch basin and rock armor both inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Excavator	1	Hour
		Earthwork	Dump truck	2	Hours
		Rock	Rip Rap	2	Cubic Yards
		Laborer		0.5	Hour
1.97	Install drain dip and rock armor bottom of drain dip with 2 cubic yards of rip rap. Install sediment fence on inboard ditch. Add slash filter windrow.	Earthwork		1.5	Hour
		Laborer		1	Hour
		Rock	Rip Rap	2	Cubic Yards
		Sediment Fence		75	Feet
		Slash		50	Feet
2	Existing drain dip - Reestablish existing sump hole and rock armor with 2 cubic yards of rip rap. Dig lead out from drain dip to reconnect to the sump hole. Inhaul 5 cubic yards of 3/4" crush gravel and cap and crown the road.	Earthwork	Excavator	2	Hour
		Laborer		2	Hour
		Rock	Rip Rap	2	Cubic Yards
		Rock	3/4" Crush	5	Cubic Yards

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2.39	Existing flapper - Remove flapper and install drain dip. Do not intercept ditch. Cap with 2 cubic yards of 3/4" crush gravel. Purchaser dispose of flapper.	Earthwork		1.5	Hours
		Rock	3/4" Crush	2	Cubic Yards
		Disposal		2	Hours
2.48	Existing 18" CMP - Clean and rock armor both inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hour
2.53	Existing 18" CMP not functional. Remove existing culvert and install a new 18" x 32' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rebuild catch basin and rock armor inlet and outlet with local borrow. From this station, blade outslope for approximately 30 feet.	CMP	18" x 32'	32	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
2.59	Existing flapper - Remove flapper and create turnpike, reconstruct ditch line, and recrown the road surface.	Earthwork		2	Hours
		Flapper Removal		2	Hours
2.69	Existing 18" CMP - Install drain dip before this culvert and do not intercept ditch. Excavate fill overtopping inlet and outlet. Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	2.5	Hours
		Laborer		0.5	Hours
2.71	Intersects with 566F/Martian Road on left.				
2.72	Existing 18" CMP not functional. Remove existing culvert and install a new 18" x 34' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rebuild catch basin and rock armor inlet and outlet with local borrow.	CMP	18" x 34'	34	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
2.86	Existing 18" CMP - Clean and rock armor inlet and outlet.	Earthwork	Excavator	1	Hours
2.8612	Install drain dip and do not intercept ditch. Create a long run out.	Earthwork		1.5	Hours

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3	Existing 18" CMP, outlet is shotgunned - clean inlet and outlet and inhaul 2 cubic yards of rip rap and use as energy dissipators and rock armor.	Earthwork	Excavator	1	Hour
		Rock	Rip Rap	2	Cubic Yards
		Laborer		1	Hour
3.09	Existing 18" CMP - Excavate overtopping fill on inlet and outlet, clean and maintain. Rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.15	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.22	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Install minor drain dip before culvert.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
3.26	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.29	Install drain dip and intercept ditch. Inhaul 2 cubic yards of rip rap and rock armor bottom of drain dip	Earthwork		1.5	Hours
		Rock	Rip Rap	2	Cubic Yards
3.35	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.4	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Install drain dip that will lead off culvert	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
3.45	Existing 18" CMP not functional- Remove CMP and inhaul 10 cubic yards of 3/4" crush and fill. Ensure ditch line connection. Purchaser dispose of CMP.	Earthwork	Excavator	6	Hours
		Earthwork	Dump Truck	2	Hours
		CMP Removal		2	Hours
		Rock	3/4" Crush	10	Cubic Yards
3.5	Install drain dip and do not intercept ditch	Earthwork		1.5	Hours
3.57	Existing 18" CMP - Clean inlet and outlet and maintain.	Earthwork	Excavator	1	Hour
3.6	Install drain dip and do not intercept ditch	Earthwork		1.5	Hours
3.78		Earthwork	Excavator	1	Hour

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	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Laborer		0.5	Hours
3.8	Install drain dip and do not intercept ditch	Earthwork		1.5	Hours
4	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Blade road with a minor outslope and redefine ditch line.	Earthwork	Excavator	1	Hours
		Earthwork	Blade	1	Hours
		Laborer		0.5	Hours
4.15	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
4.3	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Install drain dip before culvert and do not intercept ditch.	Earthwork	Excavator	1	Hour
		Earthwork		1.5	Hours
		Laborer		0.5	Hours
4.37 - 6.71	Roadway will require excavator brushing followed by a moderate tractor brushing to meet clearing limits.	Excavator Brushing		2.3	Mile
		Tractor Brushing		2.3	Mile
4.41	Existing 18" CMP - Clean, excavate overtopping fill, and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
4.45	Install drain dip and do not intercept ditch.	Earthwork		1.5	Hours
4.48	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Blade road with a minor outslope and redefine ditch line.	Earthwork	Excavator	1	Hours
		Earthwork		1.5	Hours
		Laborer		0.5	Hours
4.6	Existing 24" CMP - Clean, excavate overtopping fill, and maintain inlet and outlet. Move boulder near inlet. Inhaul 2 cubic yards of rip rap to rock armor inlet and outlet and add energy dissipators to ditch line and slash filter windrow.	Earthwork	Excavator	1.5	Hours
		Rock	Rip Rap	2	Cubic Yards
		Laborer		0.5	Hours
		Slash		5	Feet
4.65	Install drain dip, do not intercept ditch. Rock armor ditch line with local borrow and dig lead out on outslope	Earthwork		1	Hour
		Laborer		0.5	Hours
4.68	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
4.8	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hour

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4.82	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork		1	Hours
		Laborer		0.5	Hours
4.9	Existing 18" CMP - Clean, excavate overtopping road fill, and rock armor inlet and outlet with local borrow. Install minor drain dip after culvert and do not intercept ditch.	Earthwork		2.5	Hours
		Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
4.98	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
5.05	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow. Rebuild and rock armor catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
5.11	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
5.25	Existing 18" CMP not functional. Remove existing culvert and install a new 18" x 40' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with local borrow.	CMP	18" x 40'	40	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
5.4	Existing 18" CMP not functional. Remove existing culvert and install a new 18" x 24' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with local borrow.	CMP	18" x 24'	24	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
		CMP Removal		2	Hours
5.53	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours

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5.65	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
5.78	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
5.88	Install drain dip and do not intercept ditch.	Earthwork		1.5	Hours
5.92	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
5.97	Install drain dip and do not intercept ditch.	Earthwork		1.5	Hours
6.02	Existing 18" CMP shotgunned - Clean, maintain, and rock armor inlet and outlet with local borrow. Use local borrow to create energy dissipators on outlet. Excavate and grub overtopping fill on inlet and outlet. Rebuild catch basin and rock armor with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
6.11	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet. Rebuild catch basin and rock armor with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
6.14	Brush and reestablish ditch line around truck turnaround.	Brushing		0.1	Miles
		Earthwork		2	Hours
6.15	Existing 18" CMP - Clean, maintain, and rock armor inlet and outlet with local borrow. Excavate and grub overtopping fill on inlet and outlet.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
6.2	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
6.24	Existing low spot - Install minor drain dip, do not intercept ditch.	Earthwork		1.5	Hours
6.52	Brush and reestablish ditch line around turnaround.	Brushing		0.1	Miles
		Earthwork		2	Hours
0.00-6.71		Blading		6.7	Miles

ATTACHMENT B

		Kootenai Blend Grass Seed		1.62	25lb Bags
	Post haul blade, dust abatement through private, grass seed, and herbicide application.	Herbicide application	30-foot width	4.4	Miles
		Dust Abatement		1.4	Miles
		Herbicide application	16-foot width	2.3	Miles
6.71	End Road Work.				
Miles	Forest Road 566I				
0.00-2.73	This is a 14-foot-wide native surface that begins at Forest Road 566 and Forest Road 566I junction. Maintenance required includes: Pre-haul blading which includes reshaping road to outslope road. Blading includes ditch rehabilitation and clearing where needed including pullouts and truck turn arounds. If ditch line prism exists, it does not need to be pulled but all ditches need to be cleared of organics and debris to ensure functionality as directed by FO. Light to moderate brushing which includes brushing all pull outs/turn arounds. Grass seed all disturbed areas	Blading		2.7	Miles
		Brushing		2.7	Miles
		Kootenai Grass Seed Blend		0.69	25lb Bags
0.15	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.16	Existing 24" CMP - Clean inlet and outlet and rock armor with local borrow. Place slash filter windrow on excavated fill slope.	Earthwork	Excavator	1	Hours
		Laborer		1	Hours
		Slash		15	Feet
0.7	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.784	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
1.1	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.3	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.4	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.5	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours

ATTACHMENT B

1.844	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
2.04	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.45	Existing draw overflowing on road during high water events - Install a new 24" x 35' CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Rock armor inlet and outlet with local borrow. 124 Permit	CMP	24" x 35'	35	Feet
		CMP Band	24"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
2.734	Clear right of way and construct truck turnaround,	Earthwork	Excavator	5	Hours
		Excavator Brushing		0.2	Miles
0.00-2.73	Post haul blade, grass seed, and herbicide application	Earthwork	Blading	2.7	Miles
		Kootenai Grass Seed Blend		0.69	25lb Bags
		Herbicide Application	16-foot width	2.7	Miles
End Road Work.					
Miles	Forest Road 4891/Warland Basin Road				
0.00-3.651	This is a 22-30-foot-wide gravel surface road that begins at the Warland-Five Mile Road and the Warland Basin Road junction. Maintenance required includes: Pre-haul blading which includes reshaping road to crowned surface and outslope road. Blading includes ditch rehabilitation and clearing where needed including pullouts and truck turn arounds. If ditch line prism exists, it does not need to be pulled but all ditches need to be cleared of organics and debris to ensure functionality as directed by FO. Light to moderate brushing which includes brushing all pull outs/turn arounds. Grass seed all disturbed areas	Blading		3.7	Miles
		Brushing		3.7	Miles
		Kootenai Grass Seed Blend		0.92	25lb Bags
0.014		Earthwork	Excavator	8	Hours

ATTACHMENT B

	Existing 18" CMP - Remove existing culvert and bring to Canoe Gulch Ranger Station. Install 24" x 60' CMP. Inhaul 15 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 4 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	15	Cubic Yards
		Rock	Rip Rap	4	Cubic Yards
		CMP	24" x 60'	60	Feet
		CMP Bands	24"	1	Band
		CMP Removal		2	Hours
0.2	Existing 18" CMP - Clean, rock armor inlet and outlet, and reconstruct catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
0.4	Existing 18" CMP - Clean and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
0.5	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.9	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.983	Existing 24" CMP - Remove existing culvert and bring to Canoe Gulch Ranger Station. Install 36" x 75' CMP. Inhaul 30 cubic yards of 3/4" crush gravel to bed the culvert, fill, and use remaining to create a rollover. Inhaul 10 cubic yards of rip rap for fill. Inhaul 10 cubic yards of large boulders to armor inlet and outlet. Rebuild sump holes in ditch line and rock armor bottoms with rip rap. Add energy dissipators in ditch line. FO and FS hydrologist will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	10	Hours
		Laborer		8	Hours
		Rock	3/4" crush	30	Cubic Yards
		Rock	Rip Rap	10	Cubic Yards
		Rock	Large boulders	10	Cubic Yards
		CMP	36" x 75'	75	Feet
		CMP Bands	36"	2	Bands
		CMP Removal		2	Hours
1.005	Existing flapper - Remove and purchaser dispose of flapper. Install drain dip and intercept ditch. Inhaul 2 cubic yards of rip rap to rock armor bottom of drain dip.	Earthwork		1.5	Hours
		Rock	Rip rap	2	Cubic Yards
		Flapper removal		2	Hours
1.173	Existing 18" CMP - Clean and rock armor inlet and outlet. Rebuild catch basin with local borrow. Inhaul 10 cubic	Earthwork	Excavator	3	Hours
		Earthwork		1.5	Hours

ATTACHMENT B

	yards of 3/4" crush gravel and create rollover culvert. Use rollover as beginning of new drain dip and do not intercept ditch.	Earthwork	Dump truck	2	Hours
		Rock	3/4" Crush	10	Cu. Yard
		Laborer		0.5	Hours
1.245	Existing 18" CMP - Clean, rock armor inlet and outlet, and reconstruct catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.27	Install drain dip and intercept ditch. Inhaul 2 cubic yards of rip rap to rock armor bottom of drain dip.	Earthwork		1.5	Hours
		Rock	Rip Rap	2	Cubic Yards
		Earthwork	Dump truck	2	Hours
1.33	Existing 18" CMP - Clean, rock armor inlet and outlet, and reconstruct catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.335	Existing flapper - Remove and purchaser dispose of flapper.	Earthwork		1	Hour
		Flapper removal		2	Hours
1.4	Existing 18" CMP - Clean, rock armor inlet and outlet, and reconstruct catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.45	Existing 18" CMP - Clean, rock armor inlet and outlet, and reconstruct catch basin with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.497	Existing 18" CMP - Clean, excavate overtopping road fill, and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
1.59	Existing 18" CMP - Clean, excavate overtopping road fill, and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
1.602	Existing 18" CMP - Clean, excavate overtopping road fill, and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
1.675	Forest Road 4891B Intersection on right				
1.764	Existing 18" CMP is not functional - Remove and install 18" x 36' CMP. Inhaul 10 cubic yards of 3/4" crush to bed pipe and use remaining rock to create a roll over the pipe and 2 cubic yards of rip rap to rebuild a catch basin and rock armor the inlet and outlet.	Earthwork	Excavator	3	Hours
		CMP	18" x 36'	36	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards

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		Rock	Rip Rap	2	Cubic Yards
		Laborer		3	Hours
		CMP Removal		2	Hours
1.8	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.846	Existing 24" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
1.866	Existing 18" CMP is not functional - Remove and install 18" x 36' CMP. Inhaul 10 cubic yards of 3/4" crush to bed pipe and use remaining rock to create a roll over the pipe and 2 cubic yards of rip rap to rebuild a catch basin and rock armor the inlet and outlet.	Earthwork	Excavator	3	Hours
		Earthwork	Dump Truck	3	Hours
		CMP	18" x 36'	36	Feet
		CMP Band	18"	1	Each
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		Laborer		3	Hours
		CMP Removal		2	Hours
1.922	Existing 18" CMP - Excavate overtopping fill, clean, and maintain. Rock armor catch basin and outlet with local borrow.	Earthwork	Excavator	1	Hours
		Laborer		0.5	Hours
2.011	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.078	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.128	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.154	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.221	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours

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2.313	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.395	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.418	Existing surface water deflector - Remove and install drain dip, do not intercept ditch. Purchaser dispose of flapper.	Earthwork		1.5	Hours
		Flapper disposal		2	Hours
2.474	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.5	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
2.565	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.681	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.768	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.876	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Remove obstruction above.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.912	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
2.982	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.076	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.203		Earthwork	Excavator	1	Hour

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	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Laborer		0.5	Hours
3.322	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Add energy dissipators on outlet.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.397	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.49	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow. Excavate overtopping fill.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
3.622	Existing 18" CMP - Clean and maintain. Rebuild catch basin and rock armor inlet and outlet with local borrow.	Earthwork	Excavator	1	Hour
		Laborer		0.5	Hours
0.00 - 3.651	Post haul blade, grass seed, and herbicide application	Earthwork	Blading	3.7	Miles
		Kootenai Grass Seed Blend		0.92	25lb Bags
		Herbicide application	30-foot width	3.7	Miles
	End Road Work.				
Miles	T-3 Spur				
0.00-0.35	T-3 Spur is a temporary road that begins with a 6-foot-wide existing prism then turns to new temporary road construction. Build road to minimum standards necessary to for safe log haul. Use local borrow from adjacent areas for fill. Beginning of road prism will need to be filled directly off of switchback. Seed all areas of disturbance post haul.	Road Construction		0.35	Miles
		Earthwork	Excavator	40	Hours
		Brushing		4	Hours
		Kootenai Grass Seed Blend		0.66	25 lb. bags
	End Road Work.				
Miles	Forest Road 7738				
0.00-1.43	This is a 12-14-foot-wide native surface that begins at the Warland-Five Mile Road and Forest Road 7738 junction.	Blading		1.4	Miles
		Brushing		1.4	Miles

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	<p>Maintenance required includes: Pre-haul blading which includes outsloping the road. Blading includes ditch rehabilitation and clearing where needed including pullouts and truck turn arounds. If ditch line prism exists, it does not need to be pulled but all ditches need to be cleared of organics and debris to ensure functionality as directed by FO. Light to moderate brushing which includes brushing all pull outs/turn arounds. Grass seed all disturbed areas</p>	Kootenai Grass Seed Blend		0.36	25 lb. bags
0.183	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.228	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.526	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.61	Install minor drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.676	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.753	Existing 18" CMP - Clean and maintain.	Earthwork	Excavator	1	Hour
0.758	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.862	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.89	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
0.934	Existing 18" CMP - Clean and maintain.	Earthwork	Excavator	1	Hour
1.019	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.154	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.22	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.4	Install drain dip, do not intercept ditch.	Earthwork		1.5	Hours
1.43	Intersection with Forest Road 6228				
0.00-1.43	Post haul blade and herbicide application.	Earthwork		1.4	Miles

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		Kootenai Grass Seed Blend		0.36	25 lb. bags
		Herbicide application	16-foot width	1.4	Miles
1.43	End road work.				
Feet	Forest Road 6288				
0+00 - 43+10	<p>This is a 12-14-foot-wide native surface that begins at Forest Road 7738/ Forest Road 6288 junction. Maintenance required includes: Pre-haul blading Reshape road to an outsloped surface Right of way clearing and brushing, includes stump removal Light to moderate brushing which includes brushing all pull outs/turn arounds. Ditches will need rehabilitation and clearing to reestablish functionality Grass seed all disturbed areas</p>	Blading		0.8	Miles
		Earthwork		0.8	Miles
		Clipping		2	Hours
		Grubbing Stumps		5	Hours
		Tractor Brushing		0.8	Miles
		Kootenai Grass Seed Blend		0.21	25LB Bags
19+26	Install drain dip, do not intercept ditch	Earthwork		1.5	Hours
22+02	<p>Existing stream - Install 24" x 50' CMP, inhaul 10 cubic yards of 3/4" crush to bed culvert. Inhaul 2 cubic yards of rip rap to rock armor inlet and outlet. 124 Permit</p>	Earthwork	Excavator	5	Hours
		Earthwork	Dump Truck	4	Hours
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	24" x 50'	50	Feet
		CMP Band	24"	1	Band
27+51	Install drain dip, do not intercept ditch	Earthwork		1.5	Hours
34+92	<p>Existing stream - Install 24" x 34' CMP, inhaul 10 cubic yards of 3/4" crush to bed culvert. Inhaul 2 cubic yards of rip rap to rock armor inlet and outlet. 124 Permit</p>	Earthwork	Excavator	5	Hours
		Earthwork	Dump Truck	4	Hours
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	24" x 34'	34	Feet
		CMP Band	24"	1	Band

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38+70	Install drain dip, do not intercept ditch	Earthwork		1.5	Hours
0-43+10	Post haul blade, grass seed, and herbicide application.	Blading		0.8	Miles
		Kootenai Grass Seed Blend		0.21	25LB Bags
		Herbicide application	16-foot width	0.8	Miles
43+10	End of Road Work.				
Miles	T-2 Spur				
0.00-0.41	Begin temporary road construction. Exact location shall be agreed upon and drainage features constructed as directed by the Forest Officer. Dispose of slash generated from Right of Way clearing to the landing piles. Grass seed road post haul.	Road Construction		0.4	Miles
		Kootenai Grass Seed Blend		0.7	25LB Bags
	End of Road Work.				
Miles	Forest Road 566F/Martian Road				
0.00-1.919	This is a 22-foot-wide native surface road that begins at the Warland-Five Mile Road and Forest Road 566F junction. Maintenance required includes: Pre-haul blading required which includes reshaping road to an outsloped road. Blading includes pullouts and truck turn arounds. If ditch line prism exists, it does not need to be pulled but all ditches need to be cleared of organics and debris to ensure functionality as directed by FO. Light to moderate brushing which includes brushing all pull outs/turn arounds. Grass seed all disturbed areas.	Blading		1.9	Miles
		Brushing		1.9	Miles
		Kootenai Grass Seed Blend		0.48	25 lb. bags
0.037	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.098	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.188	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.296	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.379	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.447	Install drain dip, intercept ditch.	Earthwork		1.5	Hours

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0.473	Existing 24" CMP - Clean and rock armor inlet and outlet with 10 cubic yards of rip rap. Inhaul 30 cubic yards of 1.5" minus and create a lift over the pipe.	Earthwork	Dump Truck	8	Hours
		Earthwork		4	Hours
		Laborer		2	Hours
		Rock	Rip Rap	10	Cubic Yards
		Rock	1.5" Minus	30	Cubic Yards
0.561	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.58	Existing 24" CMP - Clean and rock armor inlet and outlet with 10 cubic yards of rip rap. Install minor drain dip before pipe and intercept ditch.	Earthwork	Dump Truck	2	Hours
		Earthwork		2.5	Hours
		Rock	Rip Rap	10	Cubic Yards
		Laborer		0.5	Hours
0.6	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.801	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
0.983	Existing 24" CMP - Clean and rock armor inlet and outlet with 10 cubic yards of rip rap.	Earthwork	Dump Truck	2	Hours
		Earthwork		1	Hours
		Rock	Rip Rap	10	Cubic Yards
		Laborer		0.5	Hours
1.024	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.127	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.259	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.336	Existing 24" CMP - Clean and rock armor inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Dump Truck	2	Hours
		Earthwork		1	Hours
		Laborer		0.5	Hours
		Rock	Rip Rap	2	Cubic Yards
1.509	Existing 36" CMP - Clean and rock armor inlet and outlet with 2 cubic yards of rip rap.	Earthwork	Dump Truck	2	Hours

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		Earthwork		1	Hours
		Laborer		0.5	Hours
		Rock	Rip Rap	2	Cubic Yards
1.568	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.623	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.706	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.878	Install drain dip, intercept ditch.	Earthwork		1.5	Hours
1.919	End of road, beginning of T-1				
0.00-1.919	Post haul blade and herbicide application	Earthwork		1.9	Miles
		Kootenai Grass Seed Blend		0.48	25 lb. bags
		Herbicide application	16-foot width	1.9	Miles
1.919	End of Road Work				
Feet	T-1 Spur				
0+00-28+85	This is a temporary road spur that is a 9-11-foot-wide existing road prism that begins at the end of the 566F/Martian Road. During construction: Reconstruct road with an outslope and dispose of Right of Way slash in landing piles.				
0+00	Begin temporary road construction.	Road Construction		0.5	Miles
0+46	Existing stream - Install 24" x 27' CMP. Inhaul 10 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 2 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	24" x 27'	27	Feet
		CMP Bands	24"	1	Band

ATTACHMENT B

2+57	Install drain dip.	Earthwork		1.5	Hours
4+18	Install drain dip.	Earthwork		1.5	Hours
16+15	Existing stream - Install 24" x 24' CMP. Inhaul 10 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 2 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	24" x 24'	24	Feet
		CMP Bands	24"	1	Each
20+41	Install drain dip.	Earthwork		1.5	Hours
28+85	Construct truck turn around, end of temporary road construction.	Earthwork		1.5	Hours
0+00-28+85	Scarify and rehabilitate temporary road following haul. New construction shall be recontoured; existing prisms must be placed in a stable condition. Add available slash, large woody material, and drainage features to the temporary road. Construct earth berm to restrict vehicular traffic. Seed all disturbed areas.	Road obliteration		0.5	Miles
		Kootenai Blend Grass Seed		0.89	25 lb. bags
End Road Work.					
Landing & Skid Trail Reclamation					
47 Landings	Landing clean up, grass seeding, and decompaction as directed by Forest Officer	Earthwork	Excavator	47	Hours
		Laborer		12	Hours
		Kootenai Blend Grass Seed		24.44	25 lb. bags
65 Acres	Major skid trails will be decompacted, recontoured, and have slash and large woody debris placed throughout the trail. Kootenai blend grass seed will be scattered and erosion control features installed as directed by Forest Officer.	Earthwork	Excavator	65	Hours
		Laborer		33	Hours
		Kootenai Blend Grass Seed		67.6	25 lb. bags

ATTACHMENT B

5 Approaches	Various units will be required to construct jump-ups to avoid skidding and landing on main road. Locations will be approved by the Forest Officer. All approaches will be no longer than 500 feet in length and will require full rehabilitation, re-contouring, and grass seeding prior to unit acceptance.	Earthwork	Excavator	25	Hours
		Brushing		20	Hours
		Kootenai Blend Grass Seed		0.86	25 lb. bag
	End Road Work.				

IX. SPECIFICATIONS AND DRAWINGS

A. REQUIREMENTS: Any construction requirements or structures shown in the Timber Sale Contract or Attachment B shall be constructed and installed by the Purchaser to specifications in this section. Structures shall be constructed at locations shown in the Road Log and as specified or staked by the Forest Officer.

B. SPECIFICATIONS:

- Road Construction Fabric: When road construction fabric is required the following specifications shall be met: minimum twenty mills thick with minimum trapezoid tear strength (ASTMD-1117-80) of 110 and mullein burst strength (ASTMD-3786-80) of minimum 375 psi; (e.g. Mirafi 500x or AMOCO 200208).

C. SPECIFICATION TABLES AND DRAWINGS:

- GENERAL SPECIFICATIONS
- GRASS SEEDING SPECIFICATIONS
- HERBICIDE APPLICATION SPECIFICATIONS
- GRAVEL AND ROCK MATERIAL SPECIFICATIONS
- CLEAR LIMITS AND TYPICAL CROSS SECTIONS
- CLEAR LIMIT DEFINITIONS FOR EXISTING ROADS
- STANDARD DRAIN DIP FOR SINGLE LANE ROAD
- SLASH FILTER WINDROW
- CULVERT INSTALLATION REQUIREMENTS
- STREAM CROSSING & WET SITE CULVERT INSTALLATION
- FILTER FABRIC SEDIMENT CONTROL FENCE
- HIGHWAY SAFETY SIGNS
- WARNING SIGN SPECIFICATIONS
- EARTHEN BERM CONSTRUCTION
- TEMPORARY ROAD OBLITERATION

GENERAL SPECIFICATIONS	
<p style="text-align: center;">ALIGNMENT</p> <p>Minimum Curve Radius:</p> <p>Switchbacks: 50 Feet</p> <p>Curves: As marked on the ground</p>	<p style="text-align: center;">CUT SLOPE RATIO</p> <p>Common excavation: 1:1 Angular Rock: 3/4:1 Solid Rock: 1/4:1</p> <p>Maximum tolerance: plus 15% minus 0%</p>
<p style="text-align: center;">ROAD GRADE MAXIMUM</p> <p>Favorable: 12%</p> <p>Adverse: 8%</p> <p>Grades as shown in the Road Log</p>	<p style="text-align: center;">FILL SLOPE RATIO</p> <p>Common material: 1-1/2:1 Angular rock: 1-1/3:1</p> <p>Maximum tolerance: plus 15% minus 0%</p>
<p style="text-align: center;">DITCHES</p> <p>Width: 3 feet</p> <p>Depth: 1 foot</p> <p>Located as shown in the Road Log or as directed by the Forest Officer</p>	<p style="text-align: center;">TURNOUTS</p> <p>Length: 75 feet</p> <p>Width: 7 feet</p> <p>Located by Purchaser and approved by the Forest Officer. Spacing will be intervisible as topography allows.</p>
<p style="text-align: center;">USABLE ROAD SURFACE</p> <p>Tangents: 14 feet</p> <p>Curves: 16 feet (radius over 75 feet) 20 feet (radius under 75 feet)</p> <p>Switchbacks: 22 feet</p> <p>Slough widening: Tangents: 1 foot (in addition to usable road surface) Curves and all fills over 6 feet height: 2 feet.</p>	<p style="text-align: center;">TURNAROUNDS</p> <p>Dimensions: large enough to safely turn around a long wheelbase 2-wheel-drive pickup.</p> <p>Location: at or near the end of all dead end roads as approved by the Forest Officer.</p>

GRASS SEEDING SPECIFICATIONS

A. SEED REQUIREMENTS: The Purchaser shall furnish certified noxious weed-free, pure live seed mixture(s) and fertilizer in the amounts shown in Table B-2. Total pounds mixed seed is pure live seed, corrected for germination and purity. Germination and purity tests must have been conducted within the last 6 months prior to delivery. Purchaser shall furnish documentation of germination and purity tests to the Forest Officer prior to application.

B. APPLICATION REQUIREMENTS:

1. Fertilizer and seed may be applied with a hand spreader or power blower, which adjusts to distribute seed evenly at the specified rate while limiting application to the desired area. Seed and fertilizer shall be applied separately. Mixing of seed and fertilizer is prohibited.
2. Seed and fertilizer shall be applied as listed in the following tables. In the event weather conditions or time of year are not conducive for successful seed establishment, the Forest Officer may require a different application schedule from the ones stated.
3. Application estimates are approximate figures only to be used for estimating purposes.

SEEDING CONCURRENT WITH ROAD CONSTRUCTION AND RECONSTRUCTION				
Areas shown in this table shall be seeded concurrent with initial road construction or reconstruction according to the following schedule:				
Cut slopes shall be seeded within <u>7 calendar days</u> of the day that each segment of cut slope is rough shaped with the dozer or excavator. A cut slope segment is defined as one day's work regardless of the amount of work accomplished or the length of the cut slope. Even if the driving portion of the road is not shaped, graded or drivable, cut slope seeding is still required.				
FILL SLOPES, DITCHES, SHOULDERS OF THE ROAD AND OTHER DISTURBED AREAS SHALL BE SEEDED WITHIN <u>15 CALENDAR DAYS</u> AFTER COMPLETION OF EACH ROAD SEGMENT.				
Road Name	Length (Miles)	Seed pounds per acre	Width (Feet)	Acres
Warland-Five Mile Road #566	6.7	26	2	1.63
Forest Road #566I	2.7	26	2	0.66
Warland Basin Road #4891	3.7	26	2	0.88
Forest Road #7738	1.4	26	2	0.35
Forest Road #6288	0.8	26	2	0.2
Martian Road #566F	1.9	26	2	0.47
Total Pounds Mixed Seed:		108.94		

ATTACHMENT B

SEEDING FOLLOWING DECOMMISSIONING, REHABILITATION, AND FINAL BLADING				
Areas shown in this table shall be seeded within 15 calendar days after completion of final road blading and shaping.				
Road Name	Length	Seed pounds per acre	Width (Feet)	Acres
Warland-Five Mile Road #566	6.7 Mi.	26	2	1.63
Forest Road #566I	2.7 Mi.	26	2	0.66
Warland Basin Road #4891	3.7 Mi.	26	2	0.88
Forest Road #7738	1.4 Mi.	26	2	0.35
Forest Road #6288	0.8 Mi.	26	2	0.2
Martian Road #566F	1.9 Mi.	26	2	0.47
All Landings (47)	Variable	26	.5 acres/landing	23.5
Skid Trails	Variable	26	5% of total acres	65
T-1 Spur	0.47 Mi.	26	15 Feet	0.85
T-2 Spur	0.37 Mi.	26	15 Feet	0.67
T-3 Spur	0.35 Mi.	26	15 Feet	0.64
Temporary Approaches (5)	500 Ft.	26	15 Feet	0.86
Total Pounds Mixed Seed:			2,488.46	

HERBICIDE SPECIFICATIONS

- A. HERBICIDE REQUIREMENTS:** The Purchaser must furnish herbicide in the amounts shown in Table B-2.
- B. APPLICATION REQUIREMENTS:** The roads shown in the table below shall be treated with herbicide to remove seed-bearing noxious weeds.
1. The Purchaser shall include a schedule for herbicide treatment of noxious weeds as part of the Annual Operating Plan.
 2. Applicators will complete a daily pesticide application report as required by the Montana Department of Agriculture. Applicators will use the daily pesticide application report form provided by the Forest Officer and submit within 10 days of application.
 3. No spraying of Milestone and 2, 4-D will take place within 25 feet of water or come in contact with open water at any time.
 4. No spraying shall occur when rain is expected within six (6) hours of completion of the treatment.
 5. Weather conditions shall be monitored before and during all spraying projects. Spraying is NOT allowed when any of the following conditions exist:
 - a. Hand-held equipment: temperature greater than 95 degrees F.; humidity less than 20 percent, or wind greater than 5 MPH.
 - b. Truck-mounted equipment: temperature greater than 95 degrees F.; humidity less than 20 percent; or wind greater than 5 MPH.
 6. Travelled roadway, cut and fill slopes must be treated for noxious weeds.
 7. The use of surfactants and blue dye is required at the rates recommended by the manufacturer.
 8. Application rates are shown in the following table. Application estimates are approximate figures only to be used for estimating purposes.

HERBICIDE APPLICATION ESTIMATES						
Areas shown in this table shall be sprayed with herbicide as described. The roads shall be sprayed from top of cut to toe of fill.						
Area Name	Length (miles)	Width (feet)	Milestone (Aminopyr alid) rate	2, 4-D (Amine)	Number of applications	Acres
Warland-Five Mile Road #566	4.37	30	5 oz/ac	16 oz/ac	1 (post haul)	15.89
Warland-Five Mile Road #566	2.34	16	5 oz/ac	16 oz/ac	1 (post haul)	4.54
Forest Road #566I	2.73	16	5 oz/ac	16 oz/ac	1 (post haul)	5.29
Warland Basin Road #4891	3.65	30	5 oz/ac	16 oz/ac	1 (post haul)	13.27
Forest Road #7738	1.43	16	5 oz/ac	16 oz/ac	1 (post haul)	2.77
Forest Road #6288	0.83	16	5 oz/ac	16 oz/ac	1 (post haul)	1.61
Martian Road #566F	1.919	16	5 oz/ac	16 oz/ac	1 (post haul)	3.72
Total acres to be sprayed:			47.09			
Total oz. of herbicide:			235.5 oz Milestone 753.62 oz 2, 4-D			

GRAVEL AND ROCK SPECIFICATIONS	
Material	Specifications
3/4" minus crushed gravel	Crushed gravel. Well graded. Fine fraction (minus 200 sieve) not to exceed 15%
Pit run gravel	Native gravel, well graded, with binder, compactable and not containing any rocks over 4" diameter.
Drain rock	1"- 3" diameter, screened clean rock.
<p>General Large Rock Requirements</p> <p>Stone shall be hard, durable, angular in shape, resistant to weathering and weather action, and free from overburden, soil, and organic matter. Stone must be hard enough, so pieces do not fracture or break during the loading, hauling, or placement activities. Neither breadth nor thickness of stone shall be less than one-third its length. Rounded stone or boulders from a streambed will not be accepted unless authorized by the State.</p>	
Rock armor	Large rock with most sizes ranging from 6" to 12" diameter, used to armor fill slopes and catch basins.
Talus rock	Large rock of variable sizes used as load-bearing fill or drainage rock in soft areas or French drains, as approved by Forest Officer.
Energy dissipators	Large rock 18-24" diameter placed in streams at culvert outlets.

SPECIFICATION DRAWINGS

ATTACHMENT B

Clear Limits and Typical Cross Sections

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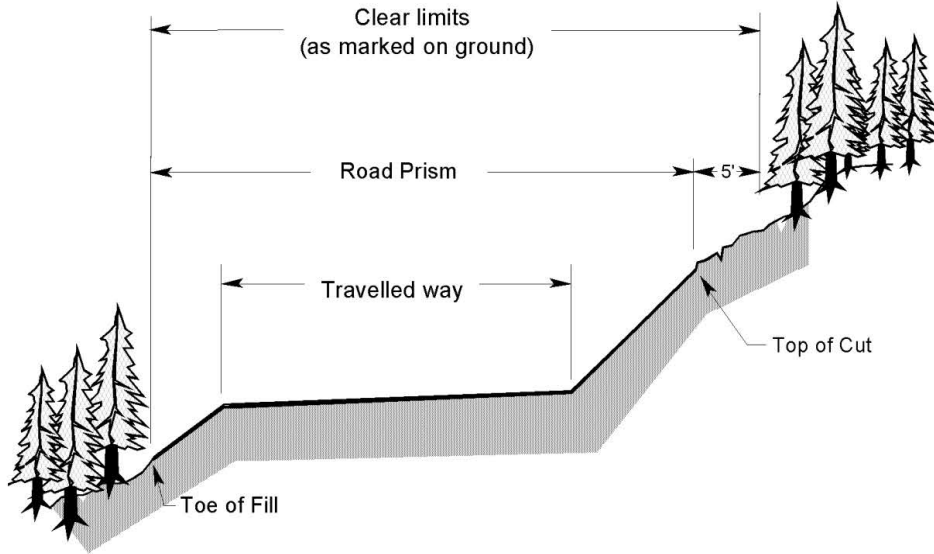


Figure I: Clear limits for New Construction

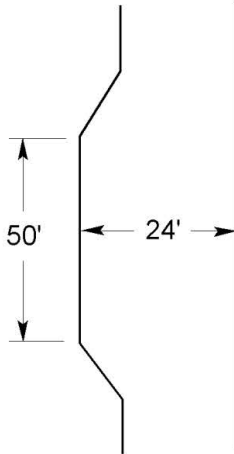


Figure II:
Typical turn out
construction

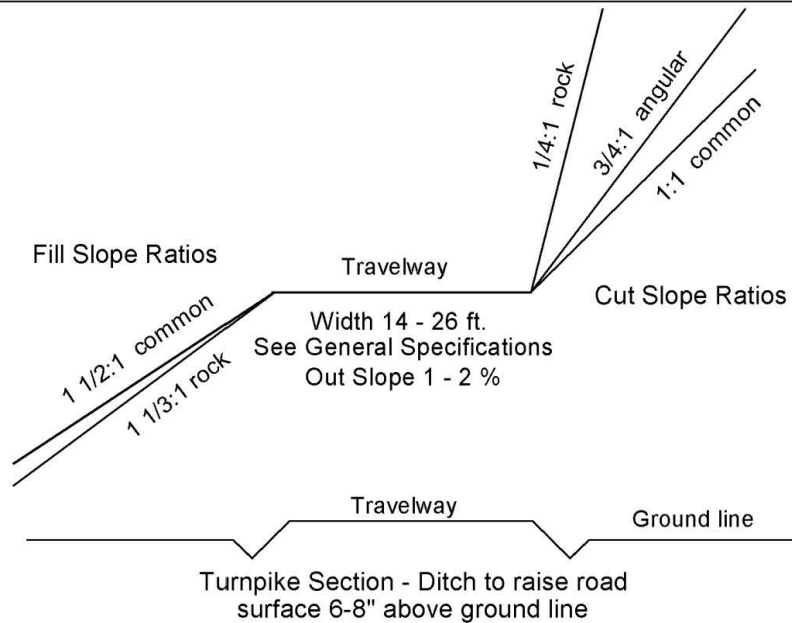
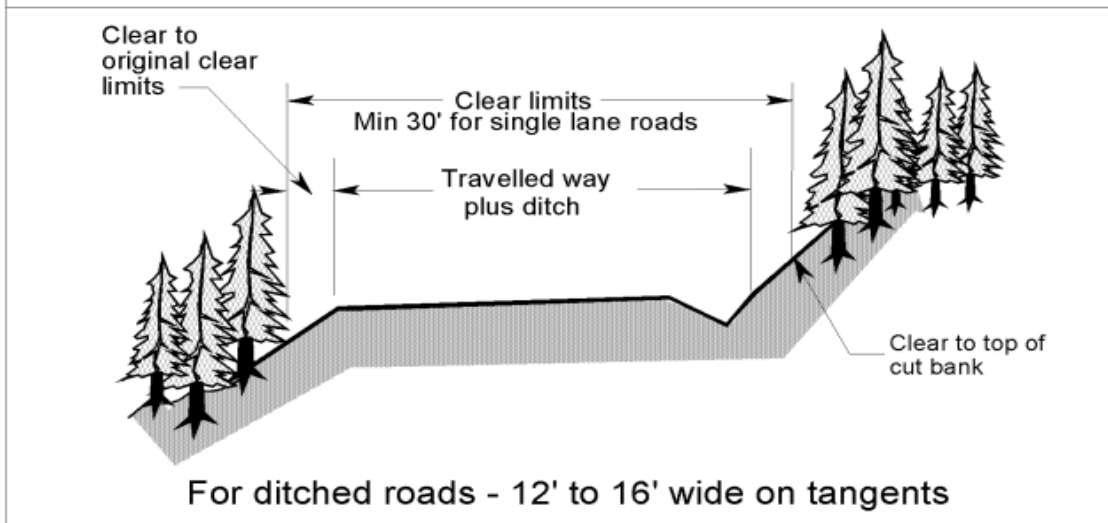
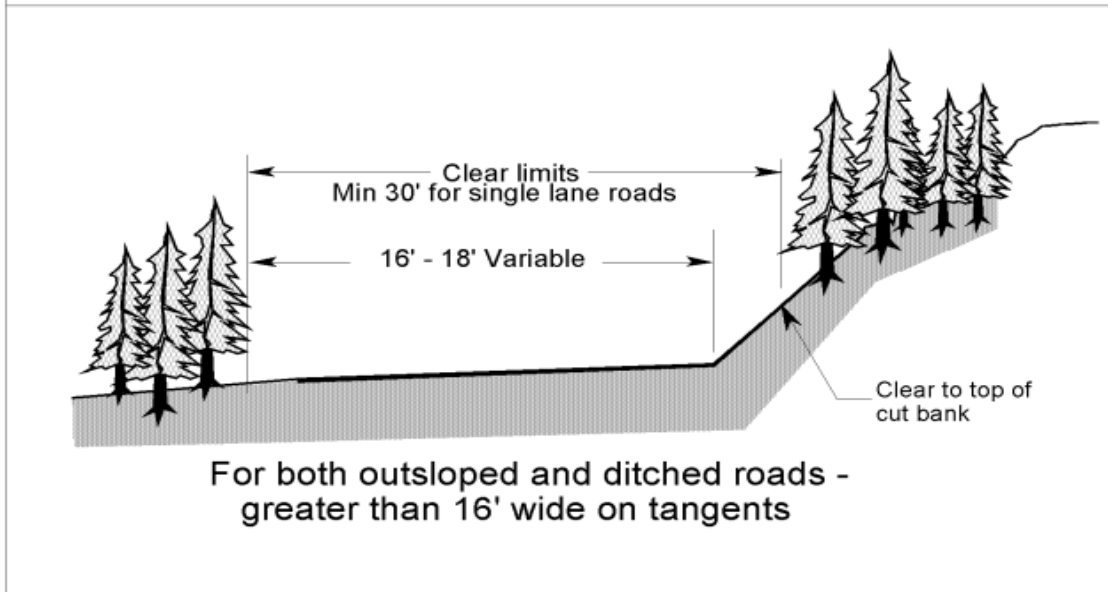
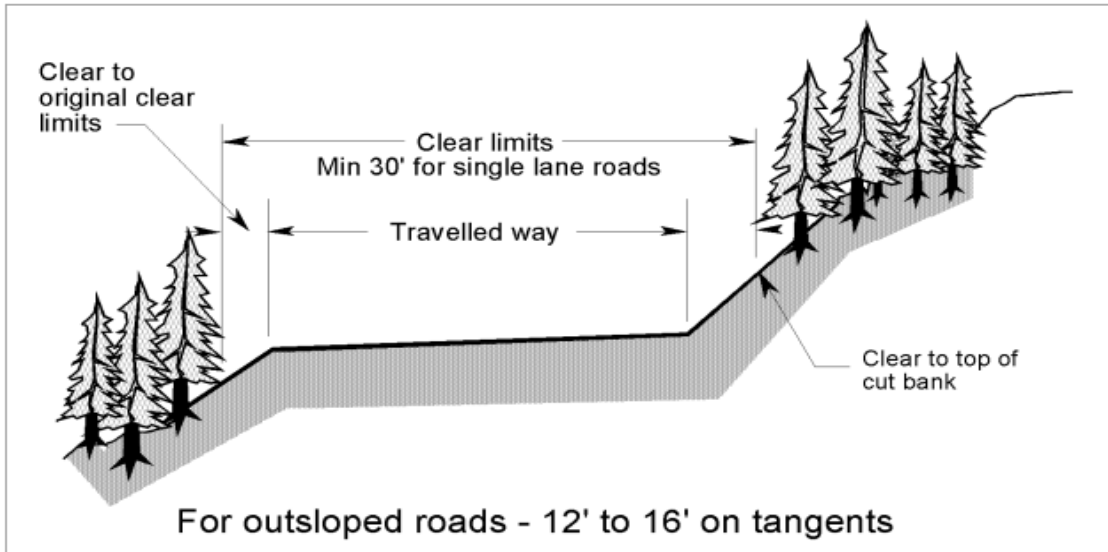
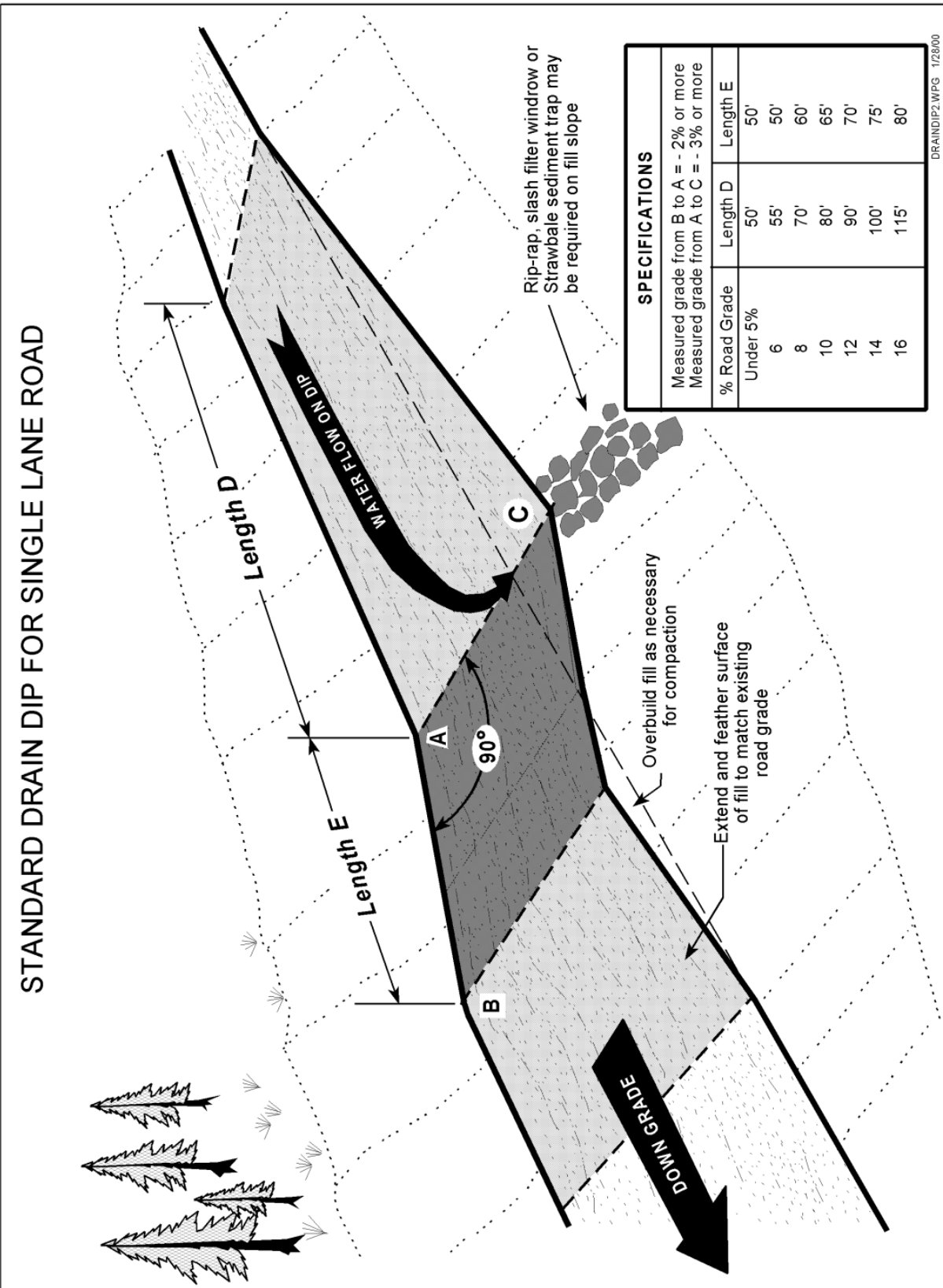


Figure III: Typical Cross Sections

CLEAR LIMIT DEFINITIONS FOR EXISTING ROADS



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SLASH FILTER WINDROW SPECIFICATIONS

Materials must be stockpiled prior to construction of windrows.

Cull logs must be anchored in place against undisturbed stumps, large rocks or trees at the toe of the fill.

Slash must be placed above the logs with a backhoe and tamped into place with the bucket.

Slash should be tamped so it is embedded approximately 6 inches into the fill surface to prevent water from running under the windrow.

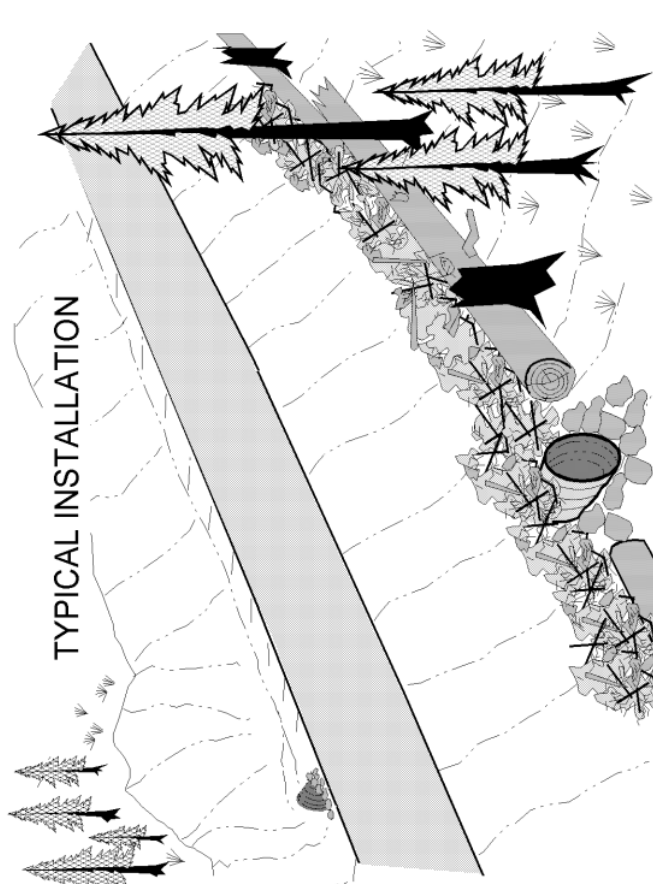
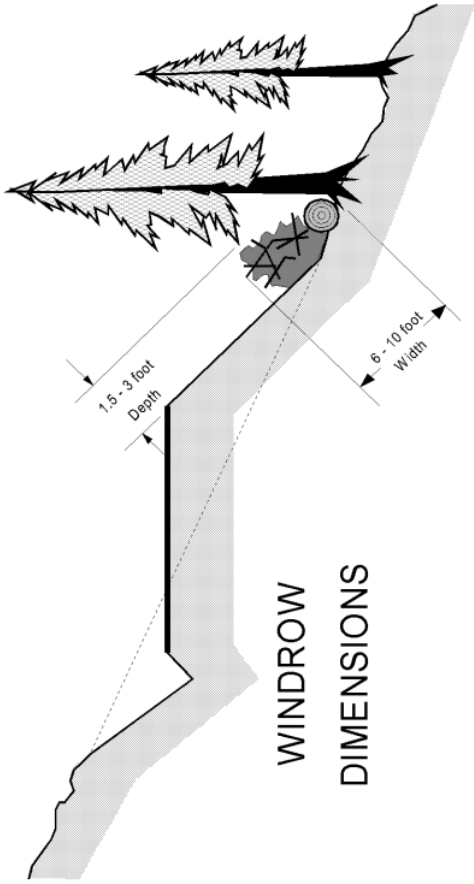
Slash, limbs and tops must be smaller than 12 feet long and 6 inches diameter. Stumps and root wads may not be used.

Anchor logs must be larger than 16 inches diameter. Reasonably sound cull logs may be used.

Windrows shall not interfere with the functioning of drainage structures or block stream channels.

All locations will be staked or flagged by the Forest Officer.

When installing windrows over the top of culverts, pipe length must be increased by 3 - 4 feet to accommodate windrow placement.



WINDROW.WPG - 1999

CULVERT REQUIREMENTS

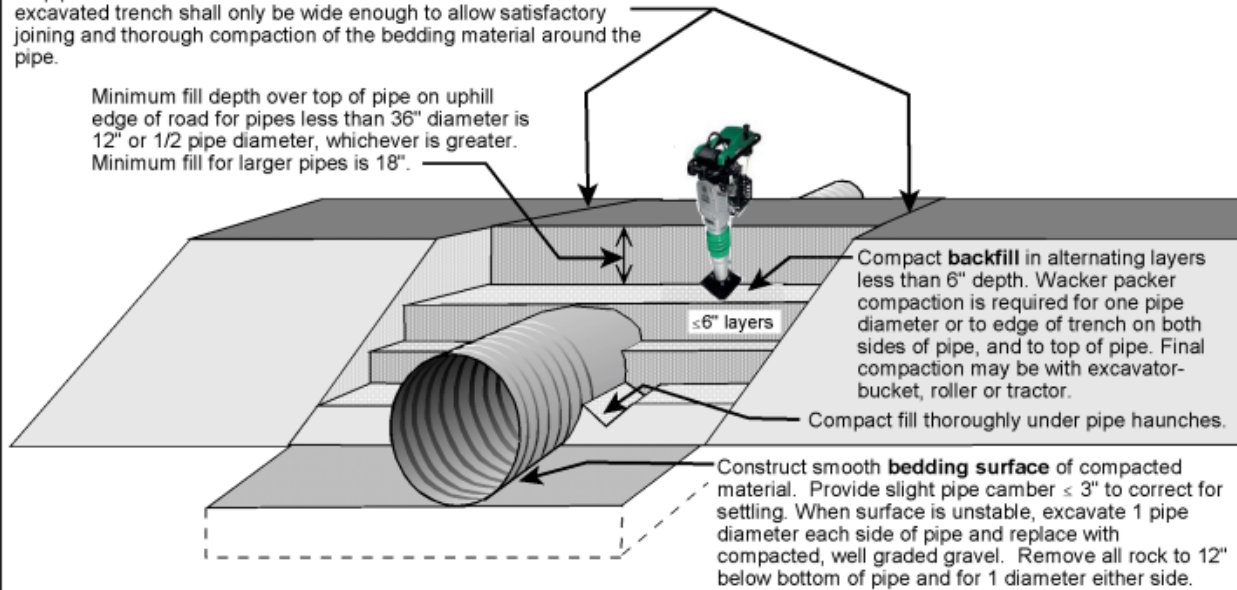
ATTACHMENT B

- ▶ Exact locations for pipes shall be determined by the Forest Officer after right of way has been cleared.
- ▶ Backfill shall be select, sorted material. Gravel may be required in road log. If native backfill is used, rocks over 3 inches diameter, organic or frozen materials are not permitted.
- ▶ Pipe shall be protected by adequate fill before equipment is allowed to cross.
- ▶ Pipe that is damaged or improperly installed shall be repaired or replaced at purchaser's expense.
- ▶ The Forest Officer must be contacted two days before any culvert installation and must be present for any wet site culvert installation.
- ▶ Wet site installations will have additional requirements for timing, erosion control and management.

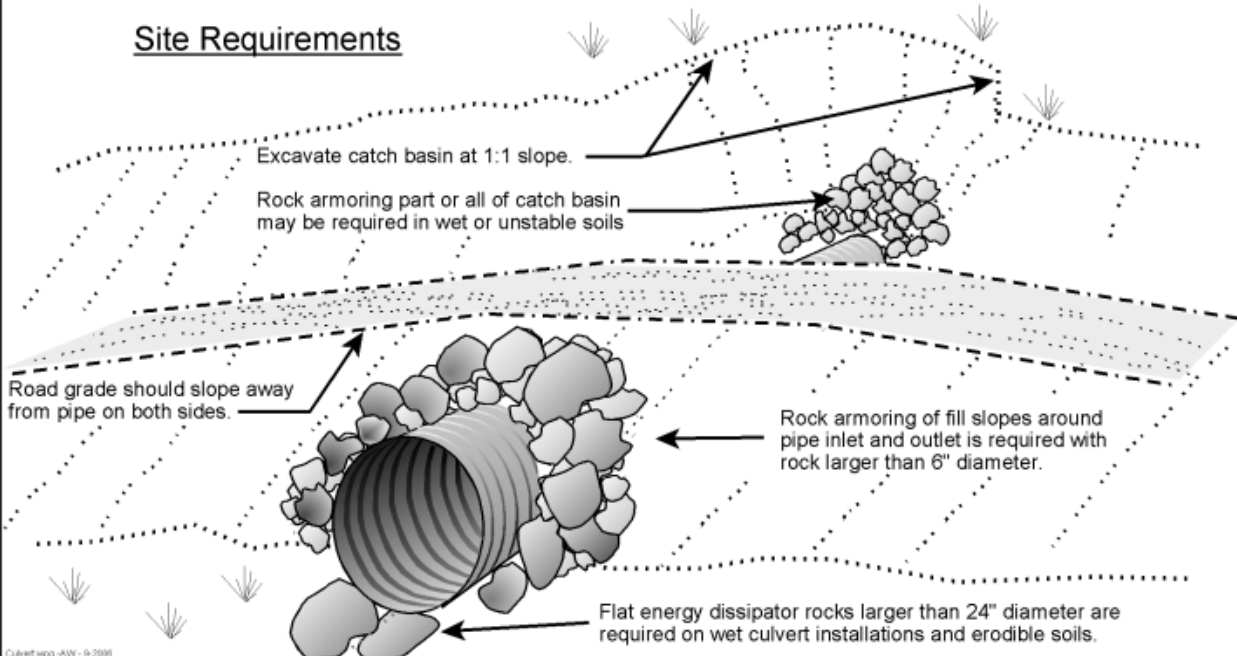
Installation Requirements

All pipes shall be installed with a backhoe or excavator. The excavated trench shall only be wide enough to allow satisfactory joining and thorough compaction of the bedding material around the pipe.

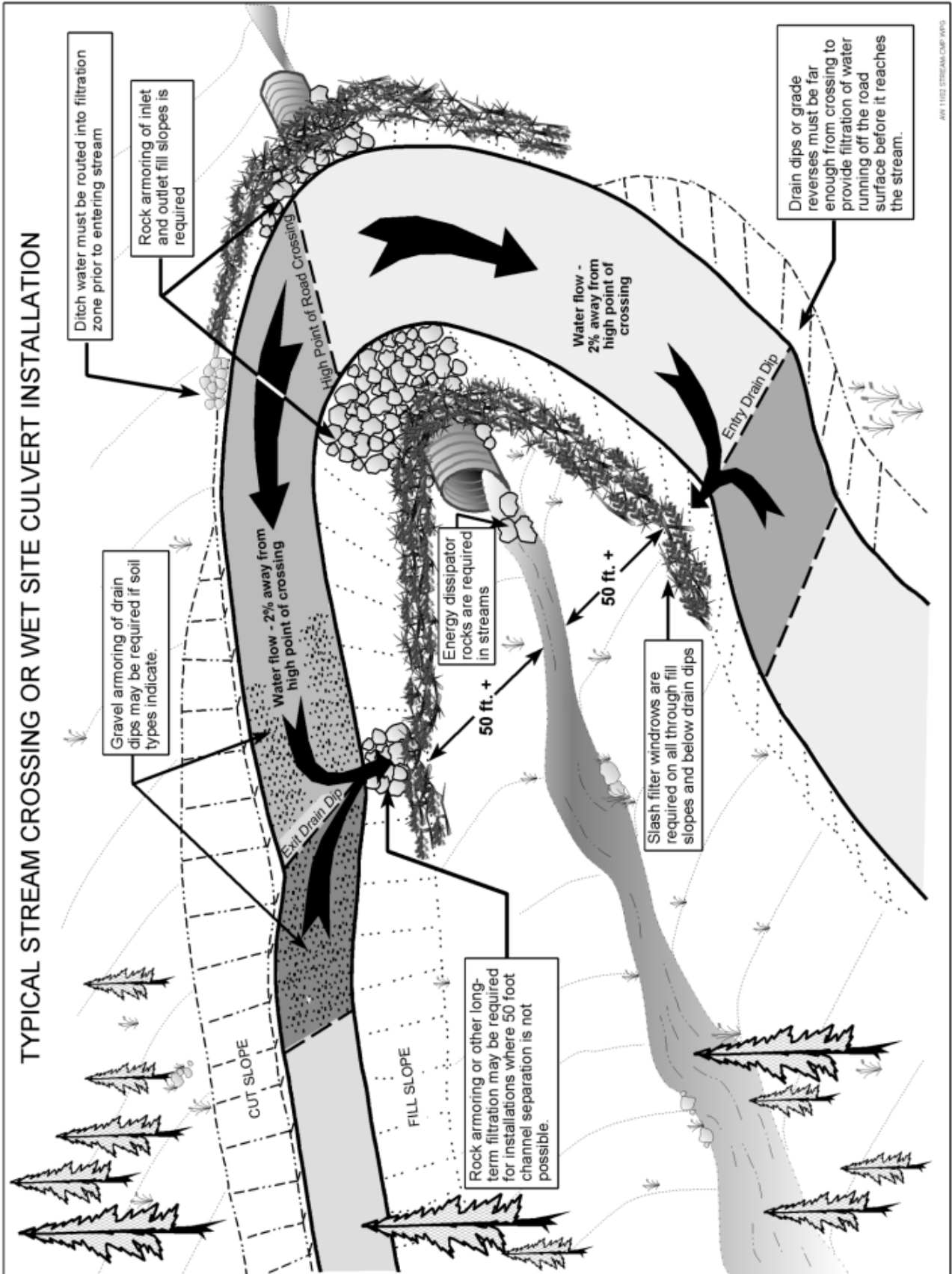
Minimum fill depth over top of pipe on uphill edge of road for pipes less than 36" diameter is 12" or 1/2 pipe diameter, whichever is greater. Minimum fill for larger pipes is 18".



Site Requirements



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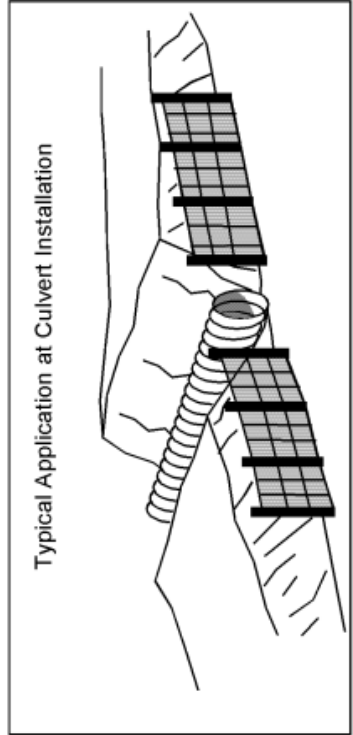
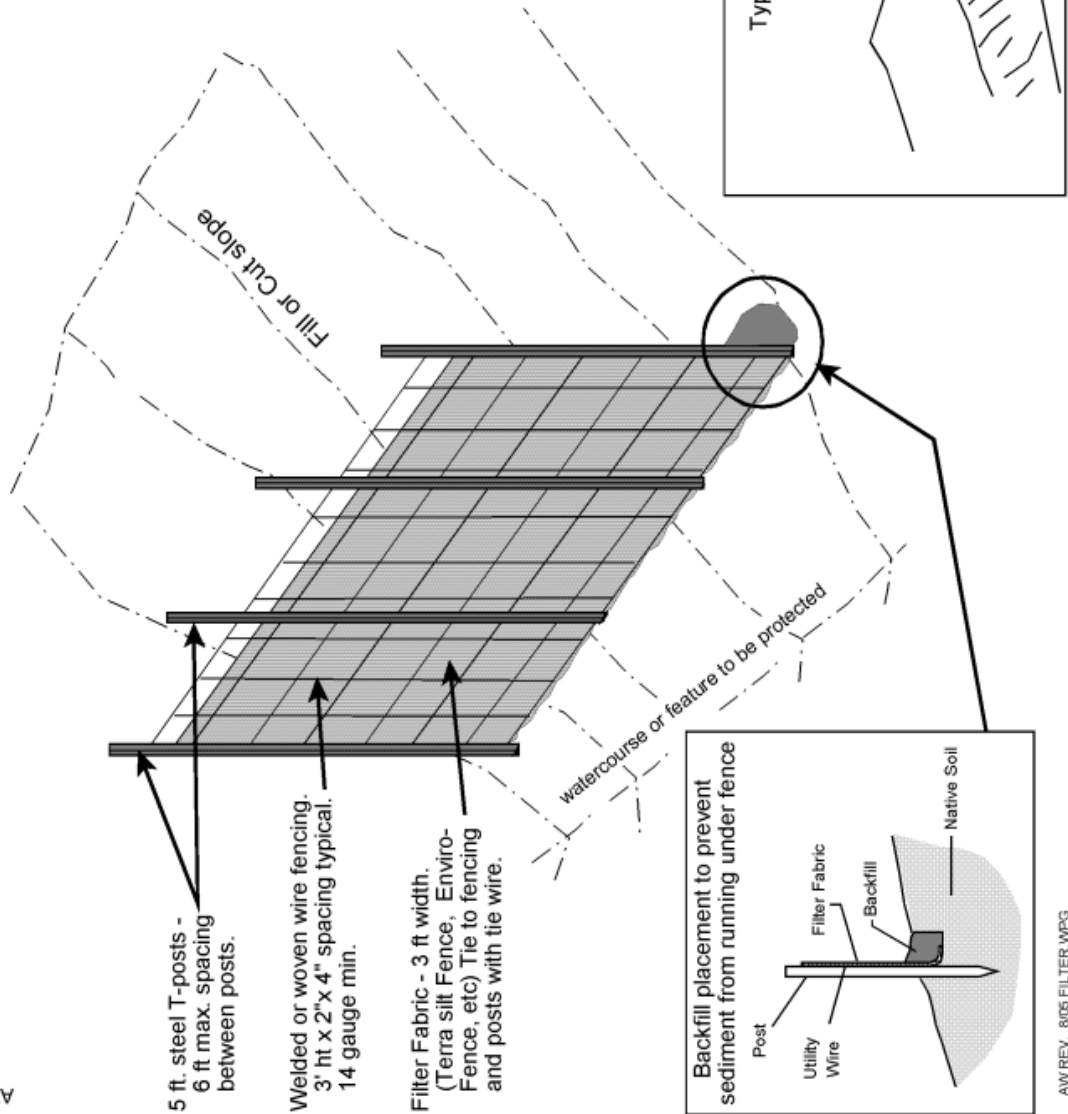


FILTER FABRIC SEDIMENT CONTROL FENCE

Install on stream bank or fill slopes to prevent sediment from entering watercourses

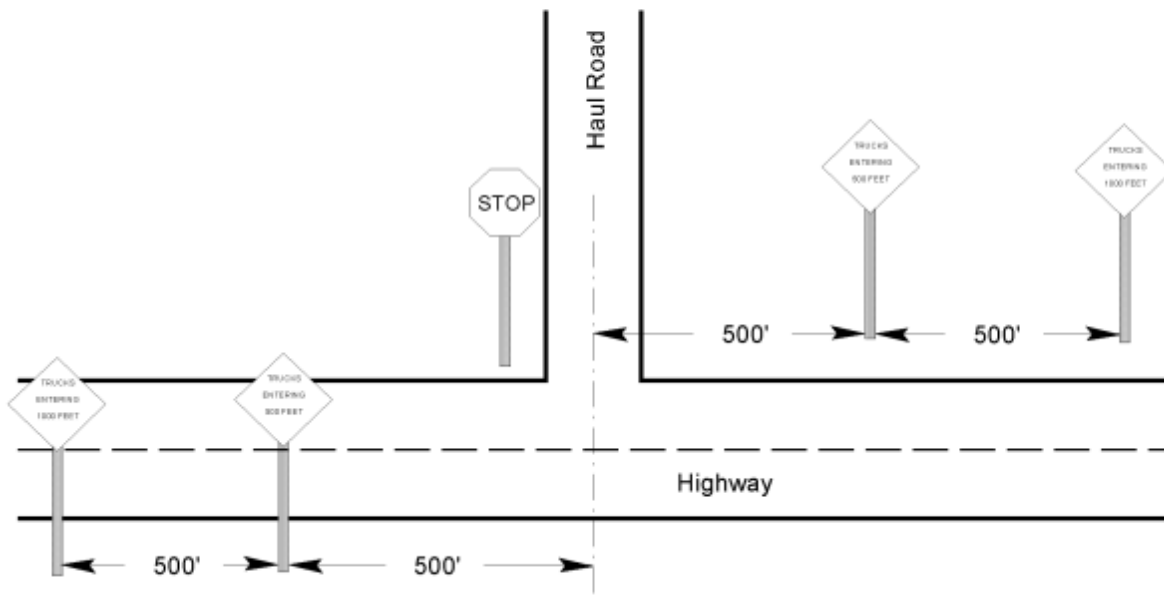
ATTACHMENT B

- INSTALLATION REQUIREMENTS**
1. Installation may be required prior to any construction activities at crossing sites.
 2. Two to four fences per crossing site may be required.
 3. Fences will be removed or left in place following construction as directed by the Forest Officer.
 4. Wood-staked commercial silt fence may be approved by the Forest Officer only for short-term, light duty fences used for less than one season.
 5. Steel posts and wire backing are required for all heavy duty applications, fences where fill may back up against the fence, fences that may overwinter, and permanent applications.



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HIGHWAY SAFETY SIGNS



Materials Required

- 1 each 4"x4"x10' full pressure treated wood post.
- 4 each 4"x4"x14' full pressure treated wood post.
- 1 each 30"x30" STOP sign, aluminum, octagon, white letters on red.
- 2 each 36"x36" TRUCKS ENTERING 500' sign, aluminum, diamond, black letters on orange, center hinged.
- 2 each 36"x36" TRUCKS ENTERING 1000' sign, aluminum, diamond, black letters on orange, center hinged.
- Mounting hardware as required.

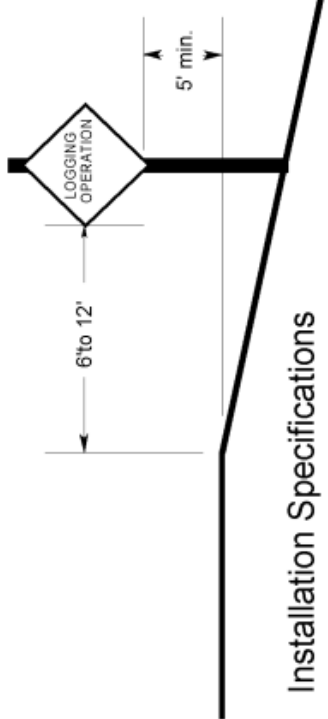
Specifications

1. All signs shall have reflectorized background and shall meet all specifications as per Manual on Uniform Traffic Control Devices.
2. All signs shall be new condition.
3. Bottom of sign shall be 5' vertical as measured from the roadway surface.
4. Lateral clearance of "TRUCKS ENTERING" signs shall be 10' as measured from the edge of pavement to the edge of sign.

Warning Sign Specifications



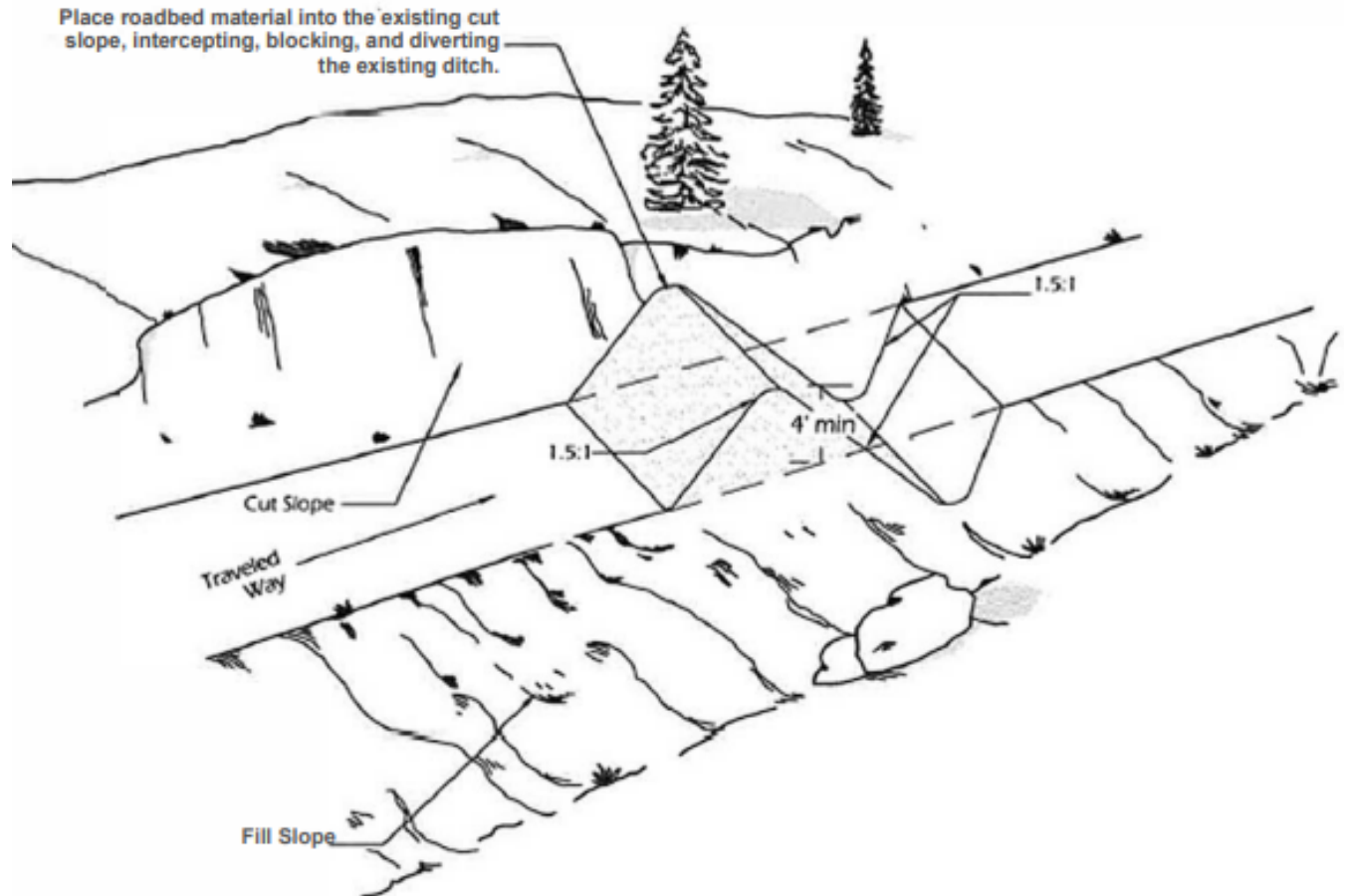
Size: 30"x 30"
Shape: Diamond
Color: Diamond: Orange and Black, Barricade: Red and Silver
Lettering: Minimum 4 inch letters, Standard Alphabet Series C, 1/2 inch Border.
Reflective Background Required
Mounting: Posts or portable sign stands, clearly visible to drivers. Do not mount on trees.



Attachment B

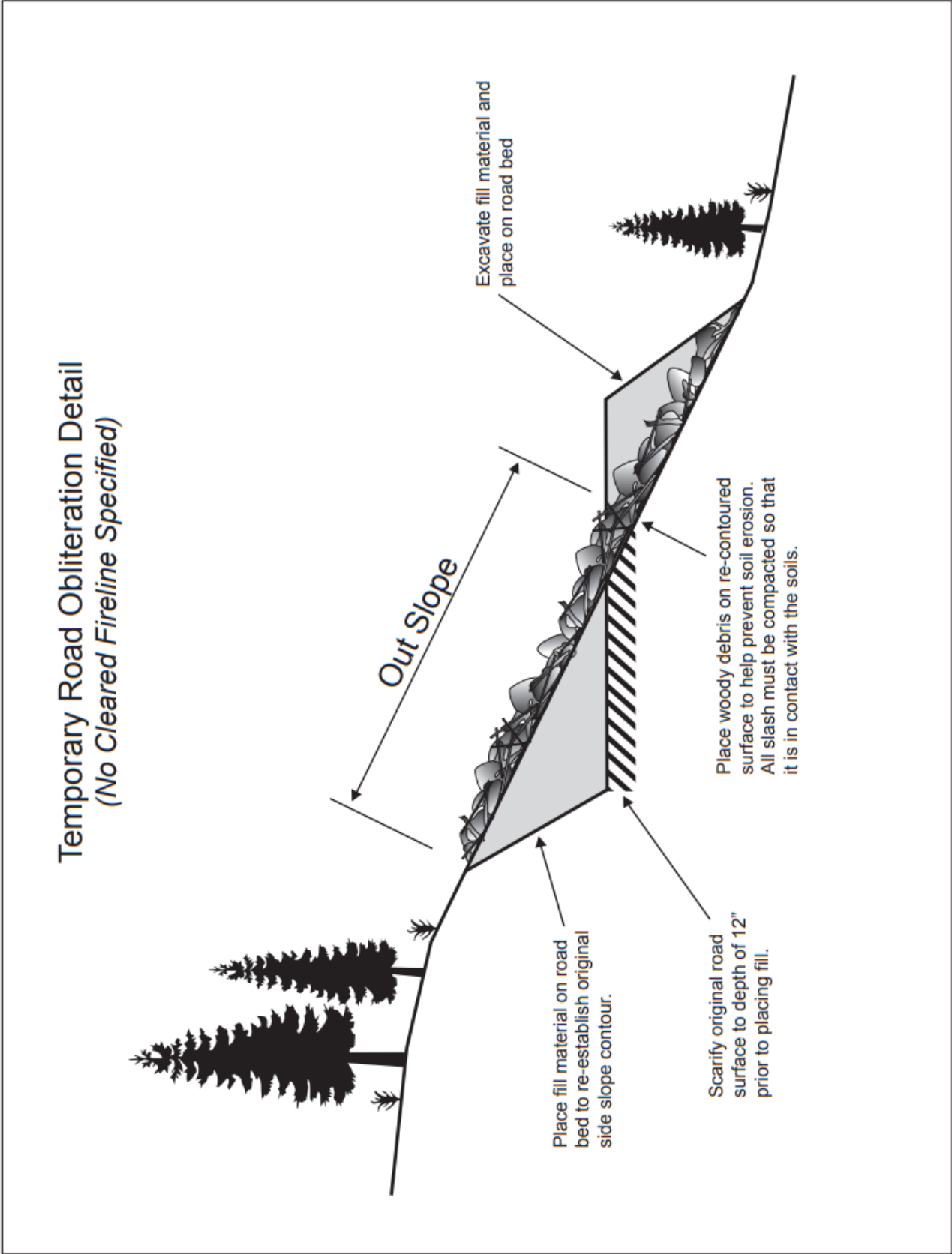
WARNSIGN.WPG

Earth Berm Construction Detail



Notes:

1. Care shall be taken to not deposit any excavated material onto existing fill slopes.
2. Earth berms shall be constructed to tie into the existing cut slope and to intercept, block, and drain across the road when built on ditched segments of road.
3. Seed disturbed areas utilizing the appropriate materials and rates specified in Table B-2.
4. Conserve any large rocks encountered in the excavation and place them along the roadside, adjacent to the berm as directed by the forest officer. Placement shall be in such manner to prevent traffic from driving around the berm.
5. Detail specifications and specific locations may be changed to fit local conditions.



FOREST FIRE RULES & REGULATIONS

These rules apply to all activities on all classified forest lands within Montana during the legal Forest Fire Season, including any extension thereof (see 77-5-103(3), 76-11-101, 76-13-102(7), and 76-13-109 MCA). Reference also ARM 36.10.119 through 132.

Related State statute numbers are provided as a reference.

RULE I - DEBRIS BURNING

1. The person conducting the burn shall obtain written authorization from the recognized fire protection agency before igniting any open fire during the legal forest fire season (required by 76-13-121 MCA). The recognized fire protection agency may deny, restrict, or rescind any authorization by notifying the person conducting the burn.
2. All burning must comply with the Department of Environmental Quality or State/county/local open burning regulations.
3. Written authorization is not required for campfires.

RULE II - CAMPFIRES

1. Campfires cannot be left unattended and must be completely extinguished (see 76-13-123 MCA).
2. All campfires must be constructed in cleared or bare areas, and not allowed to spread beyond the established ring, pit, grate, or container.
3. Anyone igniting a campfire is required to have fire tools listed in Rule VIII (4).

RULE III - RAILROADS AND POWERLINES

Railroad and powerline companies are required to prepare and annually update working agreements with recognized fire protection agencies. These agreements must stress safety and fire response procedures; and identify, remove, prevent, modify, abate, or correct forest fire hazards and risks associated with railroad and powerline company operations (see 69-14-721 MCA).

RULE IV - EQUIPMENT

1. All internal combustion engines must be equipped with an approved and effective spark-arresting system, as established in the National Wildfire Coordinating Group's Spark Arrester Guides. Spark-arresting devices must be marked, properly installed, and maintained in accordance with the Guides. The following vehicles are exempt:
 - a. automobiles and light trucks of less than 23,000 GVW when all exhaust gases pass through a properly installed and maintained exhaust system, baffle-type muffler, and tailpipe. Vehicles with glass-pack mufflers do not qualify for the exemption.
 - b. heavy-duty trucks of 23,000 GVW or greater, with a muffler and vertical stack exhaust system extending

above the cab.

- c. vehicles with other spark-arresting systems providing equal or increased effectiveness. Such vehicles must be inspected and have written authorization from the recognized fire protection agency.
2. Equipment used for commercial, ranching, or industrial activities must meet the fire extinguisher and tool requirements listed in Rule VIII (5).

RULE V - FLAMING AND GLOWING SUBSTANCES

1. All flaming and glowing substances, including but not limited to, lighted cigarettes, cigars, ashes, and matches, must be extinguished before being discarded (see 76-13-124 MCA).
2. Smoking is allowed only in areas free of flammable or combustible material. Examples of these areas include a graveled road or an enclosed vehicle.

RULE VI - FIREWORKS

Use of fireworks is prohibited on all classified forest lands unless written authorization is obtained from the recognized fire protection agency. Authorization will only be considered between June 24 and July 5, inclusive, to coincide with the legal dates for the sale of fireworks in Montana (see 50-37-106 MCA).

RULE VII - WILDLAND/URBAN INTERFACE

1. County governments without subdivision wild-fire protection standards are encouraged to establish standards for all new subdivisions by January 1, 2000.
2. The Fire Protection Guidelines for Wildland/Residential Interface Development (DSL/DOJ, 1993) is available for use to assist counties in the development of standards.

RULE VIII - FIRE EXTINGUISHERS AND FIREFIGHTING TOOLS

1. Chainsaw operators shall carry a fully charged and operable fire extinguisher, minimum-capacity 8-ounce liquid or 1-pound dry chemical, with a 4BC or higher rating.
2. Vehicles and equipment, mobile or stationary, with a combustion engine/motor used for commercial, ranching, or industrial activities must have one operable, dry-chemical fire

extinguisher with a minimum 2-1/2 -pound capacity and 4BC or higher rating.

3. Chainsaw operators shall maintain one usable shovel at chainsaw-fueling sites.
4. All persons or parties igniting a campfire shall have one usable shovel and bucket. Persons igniting a barbecue need not have a shovel or bucket if the ashes are not removed from the container and the ashes or container are not placed on or near combustible material.
5. All commercial, ranching, or industrial activities must have:
 - a. one usable shovel or pulaski with each vehicle and equipment with an internal combustion engine/motor, mobile or stationary.
 - b. one backpack pump with each vehicle and with any equipment, used off road, mobile or stationary, with an internal combustion engine/motor, that cannot be used to build fireline and is being operated on combustible material.
6. Other types of firefighting tools that provide increased efficiency or effectiveness may be substituted by written authorization from the recognized fire-protection agency. For example, a combi firefighting tool may be substituted for a shovel or pulaski.

RULE IX - FOREST ACTIVITY RESTRICTIONS

In areas designated by public proclamation by the administrator, division of forestry, as areas of high fire hazard, the administrator may request all persons, firms, or corporations present or engaged in any activity in the areas to voluntarily cease operations or to adjust working hours to less critical periods of the day. In the event such a request is refused, the administrator may issue a written order directing compliance.

RULE X - FOREST CLOSURE

1. During periods of dangerous fire conditions, no person may enter or be upon those forest lands designated by public proclamation by the governor of the state of Montana as areas of dangerous fire hazard except under written permit issued by a recognized agency.
2. Permits to enter upon such areas during the closure may be issued by the recognized agency upon a showing of real need by the applicant. Permits may be issued to those persons having actual residence as a permanent or principal place of abode in the forest lands designated or to persons engaged in non-fire hazardous employment.
3. However, no permit may be required of persons engaged in either firefighting, fire prevention, or law enforcement who are engaged in official business.

RULE XI - CORRECTION OF HAZARD AND UNUSUAL CIRCUMSTANCES OR EVENTS

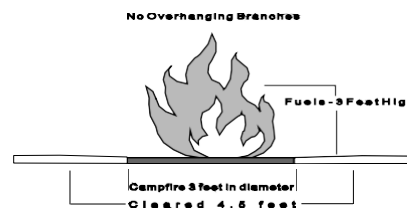
The recognized fire-protection agency may require identified wildland-fire hazards and/or risks be halted, prevented, abated, removed, disposed of, mitigated, or patrolled. This applies to public, private, nonprofit, commercial, and/or residential circumstances or events.

RULE XII - REQUEST FOR REVIEW

If any operator believes that in his case any requirement of a recognized agency is excessive, the operator may request the administrator, division of forestry, to review the requirements. If in the opinion of the administrator any or all are not necessary in the interest of public safety, he may make such changes as he considers advisable.

RULE XIII - DEFINITIONS

Backpack Pump: 5-gallon minimum; standard galvanized metal, fiberglass, or rubberized backpack water container with attached handpump; full of water at all times.



Bucket: Metal, plastic, canvas, or fiberglass container capable of holding at least one gallon of water. Motorcycle helmets qualify.

Campfire means a fire set for cooking, warming, or ceremonial purposes; not more than 3 feet in diameter or height; void of overhanging branches; with all combustible material cleared at least 1-1/2 times the diameter of the fire; or a barbecue in a noncombustible container.

Combi Tool: A tool combining a shovel and pick.

Fireworks: As defined in 50-37-101 MCA.

Forested Land: As defined in 76-13-102 MCA and 36.10.101 ARM.

Hazard: Condition that promotes the ignition and/or spread of a wildland fire.

Open Fire: The burning of a bonfire, rubbish fire, or other fire in an outdoor location where fuel being burned is not contained in a closed incinerator, or outdoor fireplace. Barbecue pits and burn barrels are considered open fires and therefore require a burning permit (Rule I).

Pulaski: An ax with a medium size sharp grub hoe opposite the ax blade.

Recognized Fire-Protection Authority: An agency organized for the purpose of providing fire protection and recognized by the board as giving adequate fire protection to forest lands in accordance with rules adopted by the board.

Risk: Action or device that could cause a wildland fire to ignite.

Shovel: Vehicle, equipment, and chainsaw operator shovels will have a minimum overall length of 36 inches with a round pointed shovel head with a minimum width of 6 inches. Shovels required for campfires must be at least 24-inches in length with a pointed shovel head. Folding handles qualify.

RULE XIV - APPLICABILITY

The forest fire rules, Rule I through Rule XIII, (ARM 36.10.119 through 30.10.132) are in effect each year on classified forest land during the forest fire season May 1st to September 30th inclusive, or any legal extension thereof. Requirements pertaining to motor vehicles do not apply to those being operated solely on roads that are a part of federal or State maintained highway systems or on any paved public road.



WORKING IN BEAR HABITAT



12/03/12

Grizzly bear distribution is expanding in Montana and human/bear encounters are becoming more common. Working in bear habitat increases the likelihood of interactions with bears. It is important for contractors and their employees to be aware of steps that can be taken to minimize conflicts and how to react if an interaction occurs. This pamphlet provides information about bear behavior, preventive measures, and what to do in the event an encounter occurs. *This pamphlet is intended to provide information about possible ways of avoiding encounters with bears. It should not, however, be relied on as the sole means of doing so. In addition to adhering to the guidelines outlined in this document, you should always rely on your experience, training, education and judgment about the best, safest manner to avoid encounters with bears.*

ENCOUNTERS

- ▲ Stay calm, keep the animal in view, and avoid direct eye contact. Bears may interpret eye contact as a sign of aggression. Back away slowly. Never run from a bear unless you know you can reach safety. Determine whether the animal is a black bear or a grizzly bear.
- ▲ If the bear charges, stand your ground. Bears commonly “bluff charge,” stopping within a few feet of a person, before fleeing in a different direction.
- ▲ Keep bear spray handy. Always have a canister of bear spray (at least eight ounces) on your belt. Make sure it is an EPA registered bear spray with 1 to 2% capsaicin and related capsaicinoids, has a spray duration of at least six seconds, and a range of 25 feet. Familiarize yourself with the directions for using the spray. Use it only if confronted by a charging bear. Spray toward the bear, aiming slightly downward.
- ▲ In the event that you have no bear spray, or it was ineffective and the charge is not a bluff, or the bear is exhibiting predatory behavior, you must change your approach. Signs of predatory behavior include: following, showing interest, coming into a tent, and unprovoked attacks. How you respond will depend on the species of bear attacking you. **Black bear and young grizzly attacks:** Always fight back. Jump up and down, wave your arms and yell. Try to look as large as possible. Never play dead – it makes you easier prey. Remember that black bears and small grizzlies can climb trees, so stay on the ground. **Mature grizzly attacks [particularly females with young]:** If a surprise encounter occurs or if bear spray is ineffective, drop to the ground and play dead. Lie on your stomach, clasp your hands behind your neck, and use your elbows and toes to avoid being rolled over. If the bear rolls you over, keep rolling until you land back on your stomach. Remain still and don't struggle or scream. A defensive bear will stop attacking once it feels the threat is gone. Don't move until you are sure the bear has left the area. **If the grizzly is exhibiting predatory behavior or comes into a tent at night, do all you can to escape or fight back.**
- ▲ **If an encounter occurs, contact the DNRC forest officer immediately and notify Montana FWP.**

JOB SITE PREVENTION

- ▲ Watch for bear signs. Signs include: tracks; droppings; recently overturned rocks or logs; logs torn apart; clawed, bitten or rubbed trees; bear trails; hair on tree bark; fresh diggings; and crushed vegetation. If you observe any of these signs, be aware that a bear may be frequenting the area. If camping, or stopping to eat your lunch, select a different area.
- ▲ When working or walking alone, make noise and carry bear spray. Bears don't like surprises but will move on if they hear people approaching. Make noise, especially when approaching blind corners, dense shrubs and streams, and when walking into the wind. Maintain regular communication with co-workers.
- ▲ If camping on site, leave coolers, food and beverages inside campers or secured vehicles. If cooking over an open fire, do not discard food or grease in fire pits.
- ▲ Don't leave trash, groceries or animal feed in your vehicle for extended periods. Bears can, and do, pry open car and truck doors and break windows to get at food and other items they associate with food.
- ▲ Bears are attracted to petroleum-based products. Keep all fuel and oil canisters in bear resistant containers. Bears have been known to damage hoses, oil filters and foam seats on heavy equipment. Dispose of empty containers promptly.

FOREST RESOURCES CONSERVATION AND SHORTAGE RELIEF ACT

USE OF TIMBER

(a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, *et seq.*).

(b) Except for determined pursuant to public hearing to be surplus, unprocessed timber designated for harvest shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Purchaser or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed timber designated for harvest shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Purchaser shall furnish to State, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Purchaser or affiliates.

(f) Prior to delivering unprocessed timber designated for harvest to another party, Purchaser shall require each buyer, exchangee, or recipient to execute an acceptable agreement (Domestic Processing Form) that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving the timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to the State a copy of each such agreement. Purchaser shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Timber designated for harvest.

(i) For breach of this Section, State may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by the State under this Section, the State will not be liable for any Claim submitted by Purchaser relating to the termination.

Branding and Painting Requirements

For sawtimber products being delivered to manufacturing sites within Region 1 and 4 –

Ten (10) sawtimber logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. Each paint spot must be not less than three (3) square inches in size. The brand and paint marks must be on the same end of the logs. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

For all sawtimber products being delivered to the IFG sawmill in Lewiston, ID-

Twenty (20) sawtimber logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. All ponderosa pine >15 inches and all other species >30" will require double end painting and branding. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

For sawtimber products being delivered to manufacturing sites within Region 1 located in Powell, Granite, and all other counties located east of the continental divide –

Painting and Branding requirements will be waived for all sawtimber logs.

If purchasers are violating export laws or are not complying with the terms as identified above the State will require single end painting and branding of all Logs.

For sawtimber products being delivered to non-manufacturing sites within Region 1 and 4, including sort yards, reloads and collection sites –

All Sawtimber logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and a single-end brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

For sawtimber products being delivered to Guy Bennett Lumber, port of Wilma, Clarkston Washington, -

At least twenty (20) logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

For logs being hauled to other Regions, the painting and branding requirements will be the following:

For sawtimber products being hauled to manufacturing sites within Region 2 –

At least ten (10) sawtimber logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. Or as identified by Region 2 given the location of where logs are being delivered.

Sawtimber products being hauled to manufacturing sites within Region 3 and Region 5 –

All sawtimber logs on each loaded log truck, greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be single end painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

Sawtimber products being hauled to manufacturing sites within Region 6 –

At least twenty (20) logs on each loaded log truck, that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs. Each paint spot must be not less than three (3) square inches in size. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

Sawtimber products being delivered to port of Umatilla, Oregon, other ports east of the Cascades, all points west of the Cascades and any port of entry into British Columbia –

All sawtimber logs on each loaded log truck that are greater than seven (7) inches d.i.b that are eight (8) feet or more in length and one-third (1/3) or more sound will be double end painted with highway yellow paint and branded with a hammer brand identifying the timber sale from which the log was removed. The brand and paint marks must be on the same end of the logs.

Each paint spot must be not less than three (3) square inches in size. The hammer brand will be assigned/registered by the State selling federal timber, in coordination with the appropriate Forest and Region.

Log and Load Identification Operating Procedures.

- a. If mule trains or truck/pup combinations are used, each bunked load stands on its own and these requirements will apply to each unit. If a flatbed stake trailer is used, each bundle will be treated as a separate unit.
- b. Bucking of broken-ended logs on the sale area to furnish a branding surface will not be required.
- c. Purchasers of Idaho timber sales will have to register their brands with the State Board of Scaling Practices at Coeur d'Alene, Idaho. Timber purchasers already having brands registered with the State of Idaho may use these brands on Forest Service timber sales, when approved in advance by the State Forester. The same applies to purchasers of Montana sales destined to be processed in Idaho.
- d. Branding and painting of non-sawtimber logs is not required.

Sample-DOMESTIC PROCESSING OF TIMBER AGREEMENT
USE OF TIMBER

The Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 U.S.C. 620 et seq.) (Act) and the _____ Timber Sale on the _____ National Forest, dated: _____, between: _____ of _____ (Purchaser)

_____ and the _____ (enter state).
(Address)

acting through the Forest Service, United States Department of Agriculture, expressly requires that all unprocessed timber sold or otherwise transferred thereunder shall not be exported from the United States and shall receive domestic processing within the United States. The requirement for domestic processing does not apply to Port Orford cedar and Alaska yellow cedar. Within the terms and conditions of this contract, "unprocessed timber" is defined to mean: "Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use and intended for remanufacture (36 CFR 223.186)".

The unprocessed timber originating from Federal lands which is being transferred under this agreement is branded with the following brand: _____

As a buyer of logs, bolts, or other roundwood originating from the sale area of said timber sale, (I) (We) acknowledge the Federal origin of such timber and agree to abide with the Act and by the terms and conditions of said contract with respect to the domestic processing of unprocessed timber. (I) (We) also agree that all hammer brands and/or yellow paint will not be removed from logs until they are domestically processed. In addition, (I) (We) agree to require the execution of another "Agreement" by any party we sell, exchange, or otherwise deliver such "unprocessed timber" to, as a condition of such a sale, exchange, or delivery, the "Agreement" shall (1) specify domestic processing for unprocessed timber, and (2) require that all hammer brands and/or yellow paint must remain on logs until they are domestically processed, and (3) require the execution of such agreements between the parties to any subsequent transactions involving unprocessed timber. And to submit a copy of each agreement within 10 calendar days of the transaction to the State from which the Federal timber originated.

(Name of Seller/Transferer)

(Name of Buyer/Transferee)

(Address)

(Address)

(Signature of Authorized Official)

(Signature of Authorized Official)

(Title)

(Title)

(Date)

(Date)

United States Department of Agriculture
U.S. Forest Service

Northern Continental Divide Ecosystem Area

Food/Wildlife Attractant Storage Order

Flathead, Lolo, Kootenai, Helena-Lewis and Clark, Beaverhead-Deerlodge National Forests
 USDA, Forest Service, Region One

PROHIBITIONS

Pursuant to 16 U.S.C. §551 and Title 36 C.F.R. §261.50(a) the following acts are prohibited or restricted on the Flathead, Lolo, Kootenai, Beaverhead-Deerlodge, Helena – Lewis and Clark National Forests, Montana, within the Northern Continental Divide Ecosystem area.

1. Possessing or storing any food or refuse, except as specified in this Order. Exhibit B, which is hereby made part of this Order. 36 C.F.R. § 261.58(cc)
2. Possessing, storing, or transporting any bird, fish, or other animal or parts thereof, except as specified in this Order. Exhibit B, which is hereby made part of this Order. 36 C.F.R. § 261.58(s)

PURPOSE

The purpose of these restrictions is to reduce the likelihood of a human-to-bear conflict, compromising the safety for both humans and bears.

AREA RESTRICTED

Appropriate food storage or attendance, as outlined in this Order, is required on all National Forest System (NFS) lands within the Flathead, Lolo, Kootenai, and Helena – Lewis and Clark, except the Crazy Mountain Range, on the Belt Creek–White Sulphur Springs Ranger District and on all NFS lands within that portion of the Beaverhead-Deerlodge National Forest, Butte Ranger District as depicted on the attached map, Exhibit A, which is hereby made part of this Order.

IMPLEMENTATION

1. This Order will be in effect from March 1st, 2022, to December 31st, 2022.
2. Food/Wildlife Attractant Storage Special Order Prohibitions, Information and Definitions are attached as Exhibit B and hereby made a part of this Order.

EXEMPTIONS

Pursuant to 36 C.F.R. §261.50(e), the following are exempt from this Order:

1. Persons with special use authorization or other Forest Service authorization specifically exempting them from the effect of this Order. 36 C.F.R. §261.50(e)(1)
2. Any Federal or State officer placing baits to capture animals for research or management purposes as part of their official duties. 36 C.F.R. §261.50(e)(4)


PENALTY

Violation of these prohibitions is punishable by a fine of not more than \$5,000 for an individual or \$10,000 for an organization, or imprisonment for not more than 6 months, or both (16 U.S.C. § 551 and 18 U.S.C. §§ 3559, 3571, and 3581).

INFORMATION

Further information regarding this order may be obtained at any of the following Supervisors Offices: Flathead National Forest, located at 650 Wolfpack Way, Kalispell, MT, (406)758-7502. Lolo National Forest, located at 24 Fort Missoula, Missoula, MT (406)329-3750, or Helena-Lewis and Clark National Forest, located at 2880 Skyway Drive Helena, MT (406)449-520, Kootenai National Forest, located at 31374 US Highway 2, Libby, MT (406)293-6211, Beaverhead-Deerlodge National Forest, located at 420 Barrett St. Dillion, MT (406) 683-3900.

Done this 27 day of April 2022.

By:  Digitally signed by LEANNE
 MARTEN
 Date: 2022.04.27 08:52:46 -06'00'

Leanne Marten
 Regional Forester
 Northern Region, USDA Forest Service

Exhibit A
Northern Continental Divide Ecosystem Area, Food/Wildlife Attractant Storage Order
Order# RI-2022-02

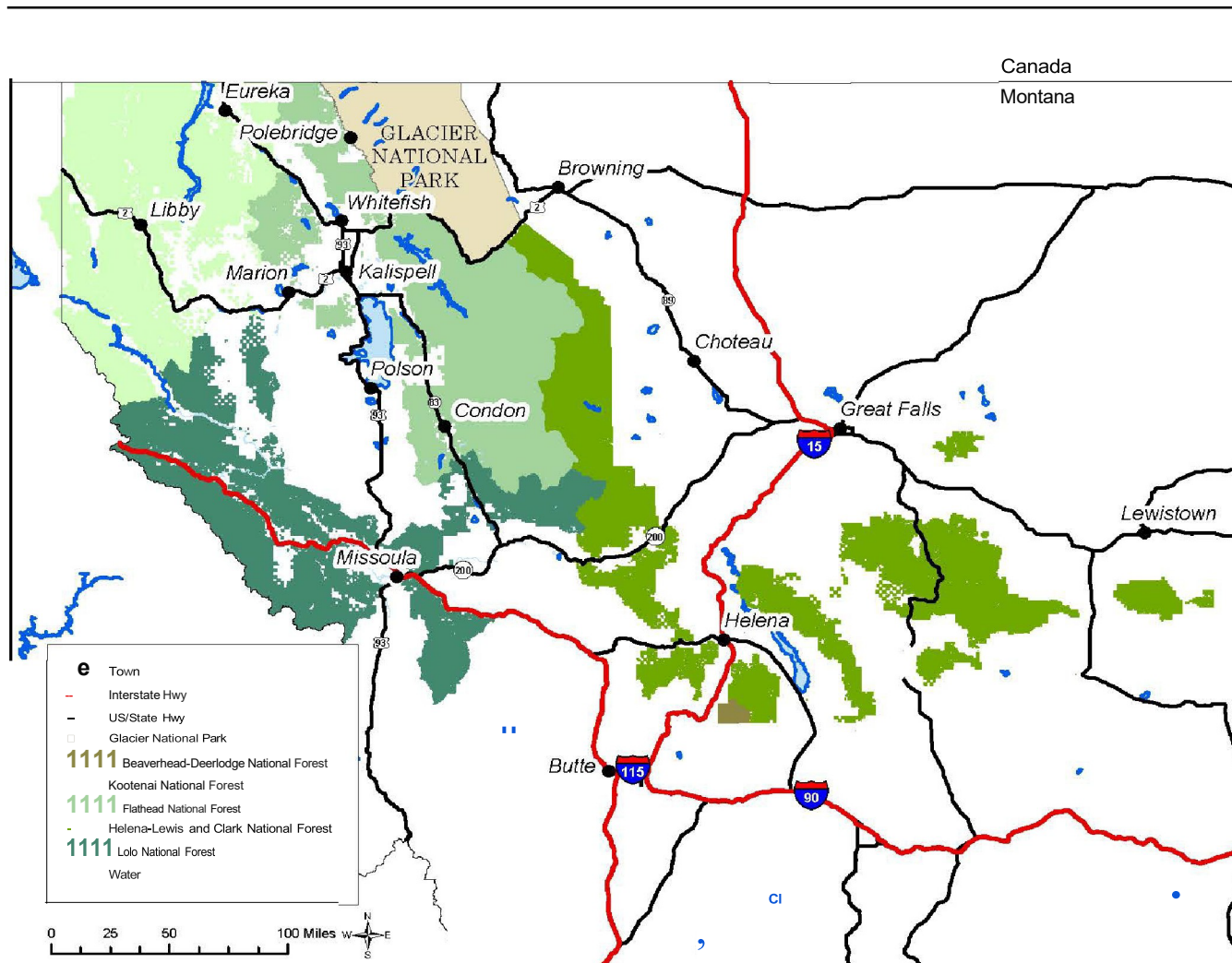


Exhibit B
Food/Wildlife Attractant Storage Special Order
Prohibition, Information and Definitions

It Is Required That:

1. During daytime hours, all attractants, including human, pet, and livestock food (except baled or cubed hay without additives) and garbage shall be stored in a bear resistant manner when not being attended.
2. During nighttime hours, all attractants, including human, pet, and livestock food (except baled or cubed hay without additives) and garbage shall be stored in a bear resistant manner unless it is in immediate control, being prepared for eating, being eaten, being transported, or being prepared for storage, as defined herein.
3. Any harvested animal carcasses (including big game, birds, fish or other animal parts) that are within 1/2-mile of any camp or sleeping area or within 200 yards of a National Forest System Trail shall be stored in a bear-resistant manner by the responsible party (unless the carcass is being field dressed, transported, being prepared for eating, or being prepared for storage, as defined herein). If a wildlife carcass is within an attended camp during daytime hours, it may be on the ground.
4. Attractants shall not be buried, discarded, or burned in an open campfire.
 - a. Leftover food or food waste products may be placed in an appropriate, sealed container and packed out with garbage.
 - b. Leftover food or other attractants may be burned in a contained stove fire.
 - c. Attractants may be placed into a suitable container (i.e. tin can) to prevent leaching into the ground and burned over an open campfire. Any remaining attractants unconsumed by burning shall be placed with other garbage and packed out.
5. The responsible party shall report the death and location of any livestock to a Forest Service Official within 24 hours of discovery. In some very remote areas, it may not be possible to meet the 24-hour requirement. In these special cases, the responsible party shall report to a Forest Official the discovery of any dead livestock within 48 hours.
6. Approved bear-resistant containers meet the following criteria: A container included in the most current Interagency Grizzly Bear Committee (IGBC) Certified Bear-Resistant Products list. A container not on the list may also be certified by the local District Ranger or their designated representative(s) if it is inspected and approved based on IGBC criteria.

Definitions

1. **Attended:** At least one adult person (attendee) is physically present within 100 feet who is awake and alert and in immediate control of attractants.
2. **Attractant:** Food as defined below and garbage from humans, livestock, or pet foods. Also includes items such as soft drinks, alcoholic beverages, personal hygiene products, and empty food and beverage containers.
3. **Food:** Any nourishing substance, which includes human food or drink (canned, solid, or liquid), livestock feed (except baled or cubed hay without additives) and pet food.
4. **Attendee:** An adult, 18 years of age or older, in control of attractants.
5. **Bear-resistant container:** A container included in the most current Interagency Grizzly Bear Committee (IGBC) Certified Bear-Resistant Products list (<http://igbconline.org/>).
6. **Bear-resistant manner:** Any attractants, including food and garbage, must be stored in one of the following ways if unattended:
 - a. secured in a hard-sided Recreational Vehicle, vehicle trunk, cab, or trailer cab.
 - b. secured in a hard-sided dwelling or storage building.
 - c. suspended at least 10 feet up (from the bottom of the suspended item) and 4 feet out from any upright support, i.e. tree or pole.
 - d. stored in an approved bear-resistant container.
 - e. stored within an approved and operating electric fence.
 - f. stored in any combination of these methods; or
 - g. stored by methods other than those described in Section #6, a-f, that shall be approved in writing by the Forest Supervisor.
7. **Contained fire stove:** A metal stove that completely encloses the fire.
8. **Daytime:** 1/2 hour before sunrise to 1/2 hour after sunset.
9. **Nighttime:** 1/2 hour after sunset to 1/2 hour before sunrise.
10. **Livestock:** A domesticated animal, such as mule, horse, llama, or goat.
11. **Wildlife carcass:** The body, or any parts thereof, of any deceased wild animal, bird, or fish.
12. **Approved electric fences will meet, as a minimum, the following specifications:**
 - a. **7 Strand Fence** (refer to Forest Service publication 9923-2321-MTDC, "Electric Fence Systems: Requirements for Meeting the NCDE Food Storage Special Order, 1999", for more description of fence specifications and set-up):
 - (1) The fence will be set up as a "tight wire" fence. The wire will be tight and under tension, not loose or sagging.
 - (2) Minimum fence height 4 feet.
 - (3) Minimum post height 5 feet.
 - (4) Maximum spacing between posts is 8 feet.
 - (5) Conductors (wire): Minimum of 7 wires, with 6-10 inch spacing between wires. Bottom wire must be

within 2 inches of the ground. All wire must be smooth metal fence wire of at least 16 gauge or poly wire, except the top wire which may be poly tape of at least six strand stainless steel.

- (6) The system will be set up to operate both as a ground wire return and a grounded system. The 2 top wires will be hot, with all other wires alternating hot and ground. The minimum length ground rod is 2 feet.
 - (7) Fence charger (minimum): (1) energizer output of 0.7 joules; (2) tested peak output of 5000 volts; (3) 40 shocks per minute. User must be able to test electrical output in the field.
 - (8) The charger must be made inaccessible to disturbance from a bear. The charger may be stored within the interior of the fence or located a minimum of 10 feet above ground.
 - (9) Minimum distance between fence and items enclosed by fence.....3 feet.
- b. **Portable Electric Mesh Fence** (refer to Forest Service publication 0723- 2305-MTDC, “Specifications for Portable Electric Fence Systems as Potential Alternative Methods for Food Storage, 2007”, for more description of fence specifications and set-up):
- (1) Portable electric mesh fence shall not be left in any location for more than 16 days.
 - (2) Minimum fence height.....33 inches.
 - (3) Minimum post length.....42 inches.
 - (4) Post construction required to be polyethylene with metal spike on bottom.
 - (5) Minimum of 3 strands of stainless-steel wire per horizontal wire.
 - (6) Minimum number of horizontal wires.....8.
 - (7) Horizontal opening in mesh required to be less than 12 inches.
 - (8) Minimum length of ground rod is required to be 1 foot and earth ground is mandatory.
 - (9) Fence charger (minimum): (1) energizer output of 0.11 joules; (2) Minimum tested peak output voltage (on every hot conductor, with no load other than the fence) required to be 5,000 volts. (3) Minimum pulse duration (with a 10,000-ohm load applied) required to be 0.05 milliseconds: (4) Minimum shocks per minute....35. **User must be able to test electrical output in the field.**
 - (10) Minimum distance between fence and items inside.....1½ feet.
 - (11) Readable placard indicating fence is electrified is required.
 - (12) Maximum fence length.....60 feet.
 - (13) Minimum of 2 LED lights.

-END-

Attachment G

Montana Department of Natural Resources and Conservation Downed Woody Debris Computation Form

Area/Unit: _____ Project Name: _____ Unit #: _____

Transect Number	Sound Logs			Rotten Logs			Total Weight
	Size (dia)	# Logs	Weight (tons)	Size (dia)	# Logs	Weight (tons)	

(Total Sound Log Weight + Total Rotten Log Weight) / Number of Transects = Tons/acre of woody debris

The following is an example of how the form is filled out and will be used to calculate tons/acre using the 50 foot transect tables:

Area/Unit: Swan Project Name: Ton Example Unit #: 1

Transect Number	Sound Logs			Rotten Logs			Total Weight
	Size (dia)	# Logs	Weight (tons)	Size (dia)	# Logs	Weight (tons)	
1	3"	2	1.7	6"	3	7.5	9.2
	10"	1	9.3				9.3
2	4"	1	1.5	5"	4	7.0	8.5

Calculation:

$((1.7+9.3+1.5) + (7.5+7.0)) / 2 \text{ transects} = 13.5 \text{ tons/acre for Ton Example Unit \#1}$

TEMPORARY ROAD USE PERMIT
TRUST LANDS MANAGEMENT to GOOD NEIGHBOR AUTHORITY
TRUP-305-2600045

Permission is hereby granted by Department of Natural Resources, Trust Lands Management Division, hereinafter called "Grantor", to Department of Natural Resources, Forestry Division, its personnel, contractors, representatives or other authorized agents, hereinafter called "Permittee", to use, subject to the conditions set forth below and in **Attachments A and B**, both of which are incorporated herein by reference, the following described lands:

Section 36, T32N R29W
Lincoln County, Montana

Grant: 100% Common Schools

as shown, approximately located on "**Attachment A**" attached hereto.

This Temporary Road Use Permit ("permit") covers an area of approximately **1.28** miles on an existing road. It is issued for the purpose of hauling an estimated volume of **10,617** tons of sawlogs from National Forest System Land pursuant to the Baird-Harper Timber Sale. National Forest System Land accessed under this permit is located in Section 36, T32N, R29W. This permit shall be valid until June 30, 2031, with an option to renew.

The area covered by this permit shall be of the minimum width necessary for roads of like standards, **16** feet in width, 7 feet on each side of centerline, with such additional width allowed for clearing limit, as required for adequate protection of cuts and fills.

Maintenance Costs

The value of the Permittee's commensurate share of road maintenance obligations for this permit is \$3185.10.

1. Unit 14A: **2,969.5 Tons**
 2. Unit 14: **3,113 Tons**
 3. Unit 350: **1,123.8 Tons**
 4. Unit 13: **1,286.8 Tons**
 5. Unit 159A: **2,123.6 Tons**
- Estimated 10,617 Tons over native surface road x \$0.30/ton = **\$3185.10**

Work in lieu of deposits is valued at **\$3,315.00**. Required work and specifications are outlined below in section Road Use and-Permittee's Site-Specific Requirements and Attachment B - *Road Use and Maintenance Specification*.

Permittee is required to provide road maintenance work in lieu of payment. No additional payment will be required.

Investment Cost Recovery Rate

No Cost Recovery will be collected under this permit.

The Permittee is hauling forest products from land tributary to roads authorized under this permit and is therefore subject to investment sharing under the state of Montana/Forest Service Road Right of Way Construction and Use Agreement – Section 14 – No Rights of Use Without Sharing. The Permittee and the Grantor have entered into a cooperative agreement for the Grantor to recoup the Permittee's share of the construction costs for roads authorized under this permit that have been borne by the Grantor (the Permittee's investment share). The Permittee's investment share will be calculated and collected when the roads are included in a Supplement to the Agreement.

The Permittee shall bear the cost of performed maintenance commensurate with road use exercised under this permit.

Permittee will provide maintenance equal to Permittee's proportionate share of the use of the roads with others who may be granted like permission, so that at the termination of this permit, the roads will be in a condition equal to that prevailing on roads of like standards. In the event that Permittee's exercise of the privileges granted shall cause damage which requires more than normal maintenance to repair, Permittee shall fully repair such damage to bring the road up to the aforementioned standard.

Permit Timber: Harvesting timber is prohibited unless approved by the Grantor's Forest Officer.

Conditions of Use

Permittee will comply with all applicable provisions of State and Federal laws pertaining to forest protection and will do all in Permittee's power to prevent and suppress wildland fires on the above-described lands.

Insurance, Workers Compensation, and Fire Protection Responsibilities Requirements will follow existing mutual State procedures for timber sales.

Insurance Requirements:

1. Prior to the commencement of any work to be performed under this permit, Permittee will require its purchasers, contractors, or their agents shall obtain, carry and keep in good standing for the remainder of the permit period, with any extensions:
 - a. Comprehensive general liability insurance coverage to the limit of \$1,000,000.00 per occurrence and \$2,000,000.00 per aggregate. Each such policy shall include endorsements, which shall name the Grantor and Permittee, their appointed officials, agents and employees as additional insured and shall provide that the Grantor and permittee shall be given 30 days written notice, at the address stated above, prior to cancellation or any material change in such policy.
 - b. Automobile Liability Insurance: The Permittee will require the purchasers, contractors, or their agents to purchase and maintain coverage with split limits of \$500,000 per person (personal injury), \$1,000,000 per accident occurrence (personal injury), and \$100,000 per accident occurrence (property damage), OR combined single limits of \$1,000,000 per occurrence to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns, or subcontractors.
2. In lieu of such coverage, the Permittee will require purchasers, contractors, or their agents to provide proof of self-insurance in at least an amount equal to that provided above.
3. Prior to the commencement of any work to be performed under this permit, Permittee will require purchasers, contractors, or their agents to deliver to the Permittee and Grantor a certificate of insurance from the insurer(s) of the Purchaser or their agents certifying that coverage in at least the amounts stated above is in force. Such certificate shall be submitted to the Permittee and Grantor for approval of the insurer(s), the amount, and the form. The Permittee and Grantor reserve the right to require a certified copy of any such policy or to examine the policy itself.
4. The Permittee must require that self-insured purchasers, contractors, or their agents provide an equivalent certificate of insurance subject to the approval of the Permittee and Grantor.
5. It is further understood and agreed that this permit will terminate immediately in the event that the mandatory liability insurance coverage required under this part is for any reason not obtained or is discontinued.

Road Use and Construction Specifications are outlined in **Attachment B – Road Use and Maintenance Specifications** as performance requirements of Permittee under this permit.

Permittee's Site-Specific Requirements are as follows:

1. Installation of 13 drain dips, following the standard specifications of "STANDARD DRAIN DIP FOR SINGLE LANE ROAD" located in Attachment B.
2. Blading of 1.43 miles of road. Blading will consist of maintenance of all currently effective BMP features, including drain dips and road out slope, along with light brushing within the current road width. All work must comply with the standards and specifications outlined in Attachment B.
3. This permit shall terminate **06/30/2031** or earlier when requested by Permittee, provided that the permit may be terminated or suspended upon breach of any of the conditions herein. Permittee may request an extension for this permit, provided written request is received at least 6 weeks prior to above termination date.
4. The Permittee will be required to restrict or suspend hauling during periods when the compacted road surface would be damaged, as directed by the Grantor. Restrictions are required when hauling would cause rutting into the subgrade, or surfacing materials would be displaced, such as during heavy rainfall or spring breakup freezing and thawing cycles.
5. Permittee will burn or otherwise dispose of all refuse caused by construction, reconstruction, maintenance and use of the roads in such manner and at such times as will not endanger the adjoining timber, and in accordance with all the laws of the State of Montana covering such disposal.

6. It is also understood and agreed that Permittee shall keep Grantor's property free from liens arising in any manner out of the activities of Permittee and shall promptly discharge any such liens that are legitimately asserted.
7. It is understood and agreed that the permission granted herein is not exclusive and Grantor reserves the right to use and grant to others the right to use the roads jointly with the Permittee.
8. This permit is subject to all valid rights existing on this date.
9. It is also understood and agreed that Permittee will cooperate with county weed control boards, conservation districts, special weed districts, adjacent private landowners, lessees, and public agencies to control the spread of noxious weeds.
10. The Permittee shall contact the DNRC Forest Officer before use and when timber hauling is complete, and prior to completion of the period of road use. Prior to completion of road use, any additional erosion control and maintenance work will be identified and marked on the ground. All work will be inspected and approved by the DNRC Forest Officer prior to termination of the Road Use Permit.
11. If any evidence or artifacts of archaeological, historical, cultural, or special significance are discovered in the course of using or maintaining the road, the Permittee will protect same and notify the Department of Natural Resources and Conservation immediately.
12. The Permittee shall use reasonable skills and care in all operations to prevent damage to soils, trails, meadows, stream banks, stream channels, wetlands, lakeshores or other natural features of the sale area.
13. Construction and logging equipment will not be operated in Streamside Management Zones.
14. The Permittee shall notify the Grantor immediately if debris from logging or construction enters a stream or stream channel.
15. The Permittee shall remove any debris resulting from logging or construction operations, which may affect the natural flow of any streams traversing the sale area. This work will be completed in a manner that causes the least disturbance to the streams.
16. All operations shall be conducted in a manner to comply with Montana Water Quality Standards, the Streamside Management Zone Law, and all applicable permits.
17. If a cultural resource is discovered, the Permittee shall immediately suspend all operations in the vicinity of the cultural resource and notify the Grantor. Operations may only resume if authorized by the Grantor. Cultural resources identified and protected elsewhere in this contract are exempted from this clause. Cultural resources, once discovered or identified, are not to be disturbed by the Permittee, or his, her or its employees and/or sub-contractors.
18. If a federally listed threatened or endangered species is encountered, the Permittee shall immediately notify the Grantor. The Permittee may be required to suspend operations in the vicinity of the observation or discovery. If suspended, operations may resume only if authorized by the Grantor.
19. The Permittee's operations, as described by this contract, shall comply with all applicable State laws, rules and regulations concerning sanitation in operations. Refuse resulting from the Permittee's activities, including the use, servicing, repair, or abandonment of equipment, shall be removed, buried or otherwise disposed of in a manner that complies with all State laws and meets the approval of the Grantor. The Permittee shall not service tractors, trucks and similar pieces of equipment on lands that directly drain into or are within 100 feet of lakes, streams, or recreational facilities. No logging camp will be located on the gross sale area with prior approval by the Grantor.
20. The Permittee shall know and comply with regulations governing the storage, handling, application and disposal of pesticides, herbicides, containers, biological water, petroleum products, dust abatement compounds, or other hazardous substances. The Permittee shall obtain the approval of the Grantor to store, handle, apply or dispose of these substances on State land.
21. The Permittee shall not transport, handle, store, load, apply, or dispose of any hazardous substance in such a manner as to pollute water supplies or waterways, or cause damage or injury to people, land, desirable plants, and animals.
22. The Permittee shall to the greatest extent practicable protect from damage all gates, signs, telephone lines, powerlines, fences, irrigation ditches, cattle guards, drainage structures, road improvements, and any other improvements or infrastructure within the gross sale area and/or along haul routes. Damages caused by the Purchaser, his, her, or its employees or subcontractors, and expenses associated with the repair or replacement of damaged structures and improvements are the sole responsibility of the Purchaser.
23. The Permittee is required to replace any General Land Office township, section, quarter or meander corners, monuments or witness trees on or adjacent to the timber sales area which may have been moved, disturbed or lost, as a result of the Permittee's logging or construction operations. Any necessary replacements must be carried out by a licensed surveyor at the Permittee's expense.

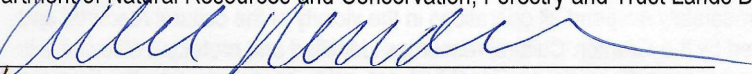
- 24. All equipment used in road construction and off-road logging activity must be pressure-washed by the contractor and inspected by the Permittee prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.
- 25. The Permittee is prohibited from carrying firearms while conducting contract operations [ARM 36.11.432(1)(m); 36.11.433(1)(d); 36.11.443(2)].

IN WITNESS WHEREOF, this permit is executed in duplicate this 26 day of February, 2020.

GRANTOR: State of Montana
Department of Natural Resources and Conservation, Forestry and Trust Lands Division

By: 
Logan Sandman, Libby Unit Manager

PERMITTEE: State of Montana
Department of Natural Resources and Conservation, Forestry and Trust Lands Division

By: 
Chloe Danison-Fieldhouse, Good Neighbor Authority Bureau Chief

Attachment A: Road Map

Baird-Harper TS Temporary Road Use

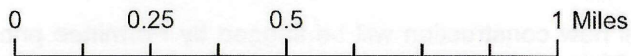
T32N R29W Section 36



Attachment A



- GNA Road Use
- ◇ Gate
- County Government
- Montana State Trust Lands
- US Forest Service



DNRC Libby Unit
2/6/2026

Attachment B: Road Use & Maintenance Specifications

General Requirements:

GENERAL SPECIFICATIONS	
<p>ALIGNMENT</p> <p>Minimum Curve Radius: Switchbacks: 50 Feet</p> <p>Curves: As marked on the ground by USFS</p>	<p>CUT SLOPE RATIO</p> <p>Common excavation: 1:1 Angular Rock: 3/4:1 Solid Rock: 1/4:1</p> <p>Maximum tolerance: plus 15% minus 0%</p>
<p>ROAD GRADE MAXIMUM</p> <p>Favorable: 12%</p> <p>Adverse: 8%</p> <p>Grades as shown in USFS plans for Mid Logan</p>	<p>FILL SLOPE RATIO</p> <p>Common material: 1-1/2:1 Angular rock: 1-1/3:1</p> <p>Maximum tolerance: plus 15% minus 0%</p>
<p>DITCHES</p> <p>Width: 3 feet</p> <p>Depth: 1 foot</p> <p>Located as shown in USFS Mid Logan plans</p>	<p>TURNOUTS</p> <p>Length: 50 feet</p> <p>Width: 10 feet</p> <p>General spacing will be intervisible as topography allows.</p>
<p>USABLE ROAD SURFACE</p> <p>Tangents: 14 feet</p> <p>Curves: 16 feet (radius over 75 feet) 20 feet (radius under 75 feet)</p> <p>Switchbacks: 22 feet</p> <p>Slough widening: (in addition to usable road surface) Tangents: 1 foot Curves and all fills over 6 feet height: 2 feet.</p>	<p>TURNAROUNDS</p> <p>Dimensions: large enough to safely turn around a long wheel base 2-wheel-drive pickup.</p> <p>Location: at or near the end of all dead end roads.</p>

II. RIGHT-OF-WAY CLEARING

A. **CLEAR LIMIT DEFINITIONS** are shown in Section IX. SPECIFICATIONS AND DRAWINGS.

B. **CLEAR LIMIT MARKING:**

1. Clear limits for all new construction will be flagged by Permittee prior to initiation of grubbing and clearing. A clearing width of 30 feet will be used. Clearing width may be adjusted as needed for turnouts, curve widening, or protection of cut and fill slopes to allow 5 feet beyond cut slope catchpoint or to the toe of the fill.

C. **CLEARING REQUIREMENTS:**

1. Brush or trees on existing roads may be removed by sawing individual stems, cutting with a rotary brush cutter, uprooting with an excavator.

2. Inside the clear limits, but outside the road prism, trees and brush less than 20 feet tall and less than 3 inches in diameter that do not interfere with visibility or slope stability may be left.
3. All merchantable timber within the clear limits shall be cut to the specifications in the timber sale or road construction contract, and skidded to decks, or decked with an excavator, prior to earth moving.
4. Clearing procedures shall protect residual stands, prevent incorporation of construction slash into the road prism, and protect roadside appearance outside clear limits.
5. Grubbing will be limited to only those stumps and large roots within the road prism.

III. TREATMENT OF RIGHT-OF-WAY CLEARING MATERIALS

A. GENERAL TREATMENT REQUIREMENTS:

1. Road construction slash more than 3 inches in diameter and 6 feet long and all concentrations of slash which would adversely affect the stability of the road shall be disposed of by the methods described in this section.
2. Slash and debris shall not be placed in drainages, roadside ditches or heads of culverts where the flow of water may be obstructed and shall be removed if placed therein.
3. Lopping and scattering is defined as delimiting and sawing slash materials into lengths which will easily scatter to a maximum depth of 18 inches. Materials shall be scattered outside the road prism.
4. All slash to be disposed of by piling and burning shall be piled in burn bays and burned by the Permittee at locations that protect adjacent timber stands. Construction of piles will be of such size and at a sufficient distance from trees so that burning does not result in unnecessary damage to remaining trees. The Permittee may be required to purchase and remove any trees damaged by burning operations at current road use permit rates. If burning is incomplete the residue must be scattered or replied for burning.
5. Burning of slash will be conducted with necessary manpower and equipment on location to control the fires. No burning may be done without prior written approval of the Forest Officer. The Permittee shall obtain proper air quality clearance and burning permits prior to burning.

B. SIDESLOPES OF 35% OR LESS AND EXISTING ROADS:

1. Disposal will be by hand or machine piling for burning.
2. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits if occurrence is infrequent and of scattered nature. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll. Minor concentrations of slash or individual trees may be disposed of outside of the road prism by lopping and scattering.

C. SIDESLOPES OF 35% AND GREATER:

1. Treatment will be by excavator only, or by whole tree skidding to a decking area. Where topography and timber types permit, piling for burning is preferred.
2. Where piling is not practical, treatment will be by windrowing at the toe of the fill. Slash will be windrowed on a trail constructed at the bottom of the right-of-way. Slash will be trampled and covered with organic surface material taken from the road prism. Fill material may butt up against but not cover or bury the windrow.
3. Minor concentrations of slash or individual trees may be disposed of by lopping and scattering. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll.

IV. EXCAVATION AND EMBANKMENT OF FILL MATERIALS

A. EXCAVATION OF ROAD CROSS SECTION:

1. All grubbing and clearing shall be completed prior to the beginning of any excavation.

2. Surface organic layer and ash cap (surface reddish-brown soils with low gravel content) will be bladed to the side of the road and not incorporated into fills.
3. Wasted soils and organic layer will be shaped and spread to natural contours within clearing limit width if possible.
4. When excavating on tangents and when balanced section construction is indicated, the following table will be used as a guideline to determine if sufficient excavation of road solid has occurred. Tolerances for road solid will be +1.0 feet and -0.5 feet.

TABLE B-3: EXCAVATION OF ROAD SOLID			
SIDESLOPE PERCENT	ROAD WIDTH		
	12 FT.	14 FT.	16 FT.
	FEET OF ROAD SOLID		
5	8.7	10.1	11.4
10	8.8	10.2	11.5
15	8.9	10.2	11.6
20	8.3	9.5	10.8
25	7.8	8.9	10.1
30	7.6	8.9	10.1
35	7.8	9.0	10.2
40	8.1	9.2	10.6

B. EMBANKMENT OF FILL MATERIALS:

1. Fill materials shall be unfrozen and free of snow and ice.
2. Fill materials shall be sorted to remove large rocks over 6 inches diameter near the surface, which may interfere with surface blading.
3. Where possible all fill materials shall be applied in layers not to exceed 18 inches and each layer compacted with heavy equipment prior to application of the next layer.
4. If fill materials are too dry to allow compaction, watering of layers followed by heavy equipment compaction is required.
5. Gravel used for surfacing shall be compacted into place using loaded dump trucks or a vibratory drum roller if specified in the Road Log.

V. ROAD MAINTENANCE

A. ROAD MAINTENANCE SCHEDULE AND REQUIREMENTS:

1. Road maintenance may be required on all native material or gravel roads used for hauling purposes.
2. Road maintenance is defined to include all operations listed under this section.
3. Initial maintenance of the roads shall be completed prior to use for logging and hauling.
4. The Permittee will determine the number, type, extent and frequency of intermediate maintenance operations needed to maintain effective road drainage before, during, and after road use. Road maintenance shall be repeated as needed to facilitate traffic and proper road drainage. The Grantor may require Permittee to perform maintenance if upon inspection road drainage is not functioning properly due to rutting or other surface conditions.
5. Final maintenance of the road system is required after all logging and hauling and prior to termination of this permit. Permittee will notify Grantor that use is completed, and request inspection.

B. SURFACE BLADING:

1. Description: Surface blading is keeping a native or aggregate roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the crown or slope, shoulder, drainage dips, leadoff ditches, berms and turnouts, and provides a level of smoothness appropriate for the amount and kind of traffic served and consistent with existing surfacing.

2. Specifications:

- a. The existing roadbeds, including turnouts, shall be bladed and shaped to reasonably conform to the designed cross section, and to eliminate ruts. Existing aggregate surfacing shall be bladed to conserve material and to prevent segregation of particle sizes. Rocks or other material remaining on the traveled way surface after final blading which are 4 inches or larger in size shall be removed from the road surface.
- b. Roadside cutslopes should not be undercut when cleaning ditches or removing road sloughs. Berms shall be removed from road shoulders when blading, except where berms are located as part of road design.
- c. Cutslopes that have been undercut may require backsloping, seeding and fertilizing.
- d. At intersections, the roadbeds at side roads shall be graded for a reasonable distance to assure proper blending of the two riding surfaces.
- e. Drainage dips and leadoff ditches shall be cleaned and graded to form their previous line and grade.
- f. Crowned roads should slope towards shoulders at least 2-5% (1/4-1/2 inch per foot road width) on native and gravel roads.
- g. At intersections where side roads enter the main road and the entering side road exceeds +3%, shallow ditching across the side road may be required to divert surface runoff and protect the main road's stability.
- h. The side-casting of road material into a stream, lake, wetland, or other body of water during road maintenance operations is prohibited in the SMZ.

C. DITCH CLEANING:

1. Description: Ditch cleaning is removing and disposing of all foreign and slough material from roadside ditches to provide an unobstructed waterway conforming reasonably to previous line, grade and cross section.

2. Specifications:

- a. Slough material removed from the ditch may be blended into existing native road surface or shoulder only if it is the same material as the road surface, or of limited amounts. Slough material that is not suitable for blending should be disposed of as directed by the Forest Officer.
- b. Live vegetation and other organic material shall be removed and disposed of as directed by the Forest Officer.
- c. Unstable stumps, rocks, leaning trees or other debris shall be removed from the cutslope as directed by the Forest Officer.

D. CULVERT MAINTENANCE:

1. Description: Maintenance is work performed on inlets, outlets, catch basins, related channels, existing rip-rap, trash racks and any other facilities related to the drainage structure.

2. Specifications: Catch basins, outlets and energy dissipaters shall be kept functioning and cleaned of debris. Ends of culverts shall be kept straight and undamaged. Any washing alongside or underneath the culvert shall be repaired.

E. ROADSIDE VEGETATION MAINTENANCE:

1. Description: Maintenance of roadside vegetation includes removal of brush, tree growth, deadfall or other obstructions to passage, safety or visibility, as such obstructions are present or develop during the permit period.

2. Specifications:

- a. All trees that have fallen across the road shall be removed from the road prism unless otherwise agreed upon. Merchantable timber, if any, shall be cut in appropriate lengths and decked along the roadside in locations where traveled way width or sight distances will not be impaired.
- b. Brush and seedling trees that encroach upon the original road clear limits shall be removed when they reduce safe sight distances. Low shrubs and brush that do not restrict sight distance but provide cover and reduce erosion shall not be removed. Brush and seedling trees removed shall be lopped and scattered, or piled in openings.

F. SNOWPLOWING: If hauling occurs during the winter months, the Permittee will be required to plow snow to the following guidelines on all State and private roads.

1. Snow should be windrowed beyond the fill shoulder line.
2. To protect the road surface, a 1 to 4-inch cushion of snow may be left on the road.
3. At termination of use, the road will be prepared for spring runoff by opening drainage outlets through the plowed berms and by installing a snow-berm road closure.
4. Tracked equipment will not be used to plow snow without prior written approval from the Forest Officer.
5. The side-casting of road material into a stream, lake, wetland, or other body of water during snow plowing operations is prohibited in the SMZ.

G. NOXIOUS WEED MANAGEMENT: The Permittee may be required to perform noxious weed management on any of the roads designated as part of the haul route and on landings. Noxious weed management may include grass seeding, equipment washing and herbicide spraying.

1. Grass seeding, if required, is shown in GRASS SEEDING SPECIFICATIONS.
2. All road construction equipment and equipment used in off-road logging activity must be pressure-washed by the Permittee and inspected by the Forest Officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.
3. If spraying is required in Attachment B, it shall be done by a commercial applicator licensed by the State of Montana or by personnel under the direct supervision of the licensed applicator. All herbicide applications shall follow EPA label requirements. Any weed control must comply with the current standards of the County Weed Board and as directed by the Forest Officer.

H. DUST ABATEMENT: The Purchaser may be required to perform dust abatement on any of the roads designated as part of the haul route. Any dust abatement must conform to current standards of the owner of the road.

1. If the Purchaser applies Magnesium Chloride or Calcium Chloride for dust abatement, the following specifications will be followed:
 - a. Dust abatement will be applied prior to summer hauling of logs.
 - b. Scarify road surface and grade to final grading specifications. A minimum of two inches of loose material is required on the road surface prior to applying the abatement.
 - c. The road surface will be moist to a minimum of depth of two inches or watered uniformly to moisten the road. If the road is watered, it will be done twelve to twenty-four hours prior to application of the abatement.
 - d. The abatement will be applied at the rate of 0.25 gallons Magnesium Chloride per square yard or 0.20 gallons Calcium Chloride per square yard, followed immediately by another application at the same rate, for a total of 0.5 gallons Magnesium Chloride per square yard or 0.4 gallons Calcium Chloride per square yard.
 - e. Chemical abatement will not be applied for 50 feet on either side of any stream crossing.
 - f. Additional treatments using water may be required if deemed necessary by the Forest Officer.

I. TRAFFIC CONTROL AND WARNING SIGN SPECIFICATIONS:

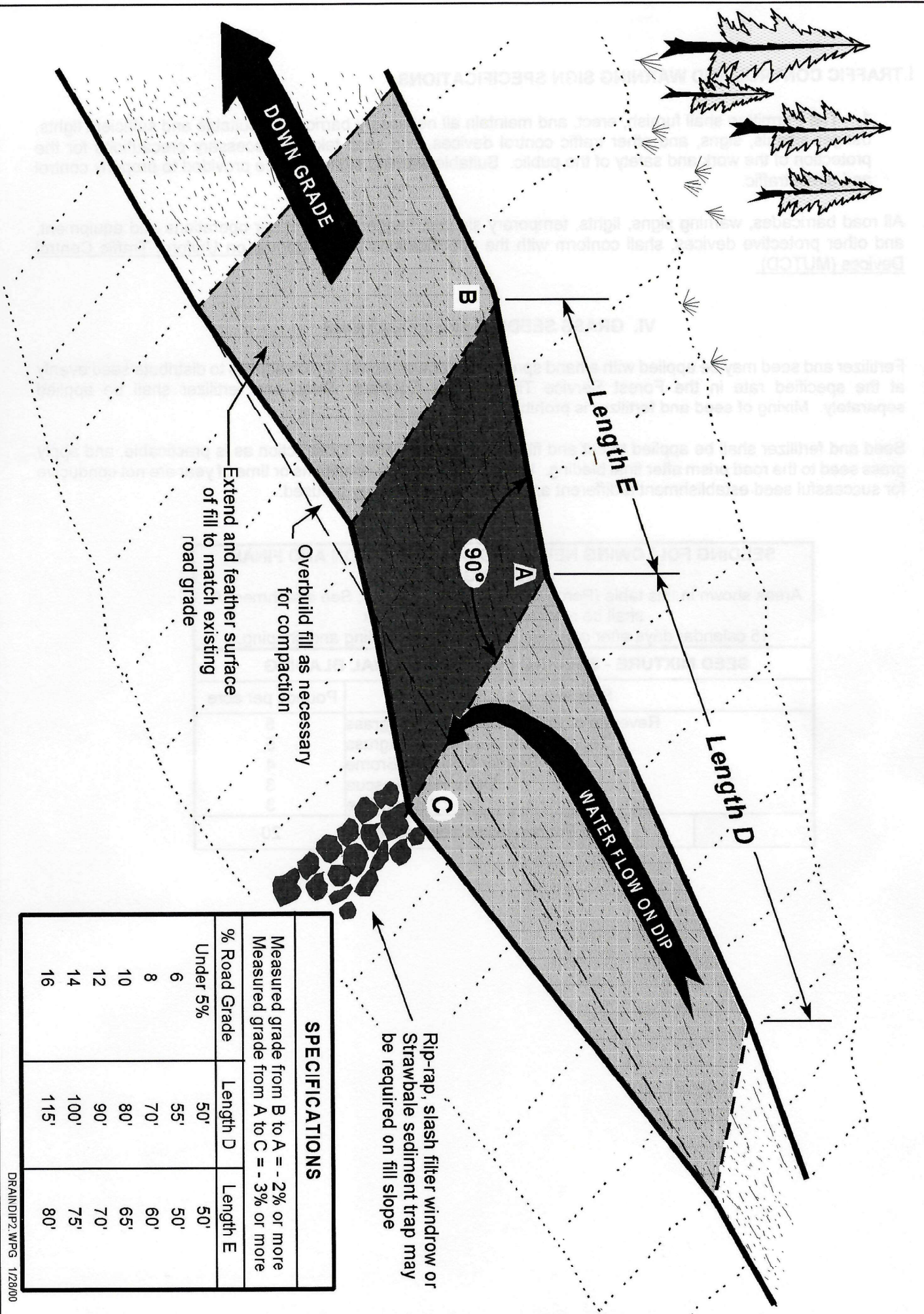
1. The Permittee shall furnish, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Suitable warning signs shall be provided to properly control and direct traffic.
2. All road barricades, warning signs, lights, temporary signals, flagger and pilot car operations and equipment, and other protective devices, shall conform with the specifications in the Manual on Uniform Traffic Control Devices (MUTCD).

VI. GRASS SEEDING SPECIFICATIONS

1. Fertilizer and seed may be applied with a hand spreader or power blower, which adjusts to distribute seed evenly at the specified rate in the Forest Service Timber Sale Contract. Seed and fertilizer shall be applied separately. Mixing of seed and fertilizer is prohibited.
2. Seed and fertilizer shall be applied to cut and fill slopes as soon after construction as is practicable, and apply grass seed to the road prism after final blading. In the event weather conditions or time of year are not conducive for successful seed establishment a different application schedule may be used.

SEEDING FOLLOWING NEW ROAD CONSTRUCTION AND FINAL BLADING	
Areas shown in this table (Permitted roads on state land; See attachment A) shall be seeded and fertilized within 15 calendar days after completion of final road blading and shaping.	
SEED MIXTURE - SEEDING FOLLOWING FINAL BLADING	
Species	Pounds per acre
Revenue or Primar Slender Wheatgrass	5
Tegmar Intermediate Wheatgrass	5
Bromar Mountain Brome	4
Durar Hard Fescue	3
Annual Rye	3
Total Pounds mixed seed per acre	20

STANDARD DRAIN DIP FOR SINGLE LANE ROAD



Rip-rap, slash filter windrow or Strawbale sediment trap may be required on fill slope

Overbuild fill as necessary for compaction
 Extend and feather surface of fill to match existing road grade

SPECIFICATIONS			
Measured grade from B to A = -2% or more			
Measured grade from A to C = -3% or more			
% Road Grade	Length D	Length E	Length F
Under 5%	50'	50'	50'
6	55'	50'	50'
8	70'	60'	60'
10	80'	65'	65'
12	90'	70'	70'
14	100'	75'	75'
16	115'	80'	80'

Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Waterbodies

CD/Agency Use Only

Application Number: _____ Date Received: _____
 Stream or Waterbody: _____
 Date Accepted: _____ Initials: _____ Date Forwarded to FWP: _____

This section is for all Department of Transportation and SPA 124 Permits (government projects)

Project Name: _____
 Control Number: _____ Contract Letting Date: _____
 MEPA/NEPA Compliance: Yes No If yes, #C5 of this application does not apply.

Applicant Use

This is a standardized application to apply for one or all local, state, or federal permits listed below. Check the box(s) for each permit being applied for.

- Refer to the instructions to determine which permits apply to your project and submit an application to each applicable agency.
- Incomplete applications will result in a delay of application processing.
- The applicant is responsible for obtaining all necessary permits and landowner permission before beginning work.
- Other laws may apply.

	Permit	Agency	Required Application Sections:	Fee
<input type="checkbox"/>	NSLPA 310 Permit	Local Conservation District	A-E and G	No fee
<input checked="" type="checkbox"/>	SPA 124 Permit	Department of Fish, Wildlife & Parks (FWP)	A-E and G	No fee
<input type="checkbox"/>	318 Authorization 401 Certification	Department of Environmental Quality (DEQ)	A-E and G	\$250 (318); \$400-\$20,000 (401)
<input type="checkbox"/>	Navigable Rivers Land Use License, Lease, or Easement	Department of Natural Resources and Conservation (DNRC), Trust Lands Management Division	A-E and G	\$50, plus additional fee
<input type="checkbox"/>	Section 404 Permit, Section 10 Permit	U.S. Army Corps of Engineers (USACE)	A-G and F1-10	Varied (\$0-\$100)
<input type="checkbox"/>	Floodplain Permit	Local Floodplain Administrator	A-G	Varied (\$25-\$500+)

Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Waterbodies

A. APPLICANT INFORMATION

APPLICANT (*party responsible for project*) Jordyn A. Yarid

Has the landowner consented to the project? Yes No

Mailing Address: 177 State Lands Office Road City, State: Libby, MT Zip: 59923

Physical Address: 177 State Lands Office Road City, State: Libby, MT Zip: 59923

Daytime Phone: 253-561-1200 Email: Jordyn.yarid@mt.gov

LANDOWNER NAME (*if different from applicant*) Nate Gassmann (USFS)

Mailing Address: 12557 Hwy 37 City, State: Libby, MT Zip: 59923

Physical Address: 12557 Hwy 37 City, State: Libby, MT Zip: 59923

Daytime Phone: 406-293-7773 Email: Nathan.gassmann@usda.gov

CONTRACTOR/COMPANY NAME (*if applicable*) Not applicable, contract not yet awarded

Mailing Address: _____ City, State: _____ Zip: _____

Physical Address: _____ City, State: _____ Zip: _____

Daytime Phone: _____ Email: _____

B. PROJECT SITE INFORMATION

Refer to section B1 of the instructions

1. NAME OF STREAM OR WATERBODY at project location: Warland Creek

Project Address/Location: Warland drainage, approximately 25 miles northeast of Libby Nearest Town: Libby, MT

County: Lincoln Geocode: _____

Township: 32N Range: 28W, 29W Section: _____ ¼ Section: N/A ¼ Section: N/A

Latitude: _____ Longitude: _____

Driving directions or other instructions needed for finding the site: All project sites are located within the Warland Creek drainage which is located 25 miles northeast of Libby and are located throughout the drainage on the Warland road system. See the georeferenced map attached for specific project locations.

Refer to section B2 of the instructions

2. Is the proposed activity within **SAGE GROUSE** areas designated as general, connected, or core habitat?

Yes No Attach consultation letter if required.

Refer to section B3 of the instructions

3. Is this a **STATE NAVIGABLE WATERWAY**? The state owns the beds of certain navigable waterways.

Yes No If yes, send a copy of this application to the appropriate DNRC land office.

Refer to section B4 of the instructions

4. **WHAT IS THE CURRENT CONDITION** of the proposed project site? What vegetation is present? Describe the existing bank condition, bank slope, height, nearby structures, and wetlands.

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The Warland Creek drainage road system is located in the Kootenai National Forest. The existing cut and fill slopes are moderately to heavily vegetated with grasses, Oregon grape, and sapling sized coniferous trees. Cut slopes vary in gradient but are all generally stable.

C. PROJECT ACTIVITY INFORMATION

Refer to section C1 of the instructions

1. **TYPE OF PROJECT** (check all that apply)

- Agricultural and Irrigation Projects:** Diversions, Headgates, Flumes, Riparian Fencing, Ditches, etc.
- Buildings/Structures:** Accessory Structures, Manufactured Homes, Residential or Commercial Buildings, etc.
- Channel/Bank Projects:** Stabilization, Restoration, Alteration, Dredging, Fish Habitat, Vegetation or Tree Removal, or any other work that modifies existing channels or banks.
- Crossing/Roads:** Bridge, Culvert, Fords, Road Work, Temporary Access, or any project that crosses over or under a stream or channel.
- Mining Projects:** All mining related activities including, Placer Mining, Aggregate Mining, etc.
- Recreation Related Projects:** Boat Ramps, Docks, Marinas, etc.
- Other Projects:** Cisterns, Debris Removal, Excavation/Pit/Pond, Placement of Fill, Drilling or Directional Boring, Utilities, Wetland Alteration. Any other project type not listed here.

Refer to section C2 of the instructions

2. Is this application for an **ANNUAL MAINTENANCE PERMIT**? Yes No

If yes, attach an annual plan of operations to this application

Refer to section C3 of the instructions

3. Why is this project necessary? State the **PURPOSE OR GOAL** of the proposed project.

To bring existing crossing structures in the Warland drainage road system up to BMP's and to better access harvest units with the GNA Baird-Harper Timber Sale to meet fuels reduction objectives within the Warland wildland urban interface.

Refer to section C4 of the Instructions

4. Provide a brief description of the **PROPOSED PROJECT PLAN** and how it will be accomplished.

All projects will cross existing stream channels on road prisms and impact approximately 30-80 feet of the channel length and the full width.

Refer to section C5 of the instructions

5. What **OTHER ALTERNATIVES** were considered to accomplish the stated purpose of the objective? Why was the proposed alternative selected?

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Due to this road system being used yearround to access private and federal land, the only alternative was no action for existing roads which currently result in BMP violations. For new culvert installations on temporary roads, the only alternative would be no action, which would result in no timber harvesting to meet county and federal fuels reduction objectives. Loggers would not have a way to remove timber without temporary roads as streams isolate many harvest units.

Refer to section C6 of the instructions

6. What are the **NATURAL RESOURCE BENEFITS** or **POTENTIAL IMPACTS**? Please complete the information requested below to the best of your ability:

6a. Explain any temporary or permanent changes in erosion, sedimentation, turbidity, or increases of potential contaminants. What will be done to minimize impacts?

There is possible temporary increases of sediment delivery to these streams immediately after work is completed and cut slopes are bare. The inlets and outlets will be rock armored with rock from weed free sites and grass seed will be spread immediately after project completion in order to prevent further erosion and decrease sediment.

6b. Will the project cause temporary or permanent impacts to fish and/or aquatic habitat? What will be done to protect the fisheries and habitat?

None of these channels within the project are fish bearing but are all tributaries to Warland Creek. There is potential for temporary increases in sediment delivery to Warland Creek as material will be excavated at inlets and outlets during culvert installations after work is completed. To prevent sediment delivery, culvert installs will be completed during the dry season with non-existent flows.

6c. What will be done to minimize temporary or permanent impacts to the floodplain, wetlands, or riparian habitat?

Only work that is necessary to correct BMP's will be occurring in floodplains and riparian habitat which will only occur in the dry season to minimize impacts and complete when stream flow is non-existent. Sites will be immediately grass seeded with certified weed free Kootenai native seed mix to reduce runoff and prevent invasive species from establishing.

6d. What efforts will be made to decrease flooding potential upstream and downstream of the project?

All existing culverts will be installed and upsized to allow water to flow freely and prevent flooding. All work will be completed during the dry season where flooding is unlikely to occur.

6e. Explain any potential temporary or permanent changes to the water flow or to the bed and banks of the waterbody. What will be done to minimize those changes?

These projects will be temporarily increasing sediment delivery to Warland Creek due to excavation of soils at inlets and outlets and through the road prism at new culvert installations. Work will be completed during the dry season while flow is non-existent and grass seed will be spread immediately after install to reestablish native vegetation and minimize long term erosion.

6f. How will existing vegetation be protected and its removal minimized? Explain how the site will be revegetated, including weed control plans.

Streamside vegetation would be removed only for what is practical and necessary for culvert removal and installation. All areas of disturbance will be immediately seeded and rock armoring on inlets and outlets to minimize erosion.

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D. CONSTRUCTION DETAILS

Refer to section D1 of the instructions

1. Proposed **CONSTRUCTION DATES:** Start: 7/1/2026 End: 7/1/2028

Is any portion of the work already completed? Yes No If yes, please describe previously completed work:

Refer to section D2 of the instructions

2. **PROJECT DIMENSIONS.** Describe the length and width of the project.

Project lengths and widths will be limited to the minimum area necessary to install each culvert. Each culvert was measured and sized according to the need of the road width and stream gradient.

Refer to section D3 of the instructions

3. **MATERIALS.** Provide the total quantity and source of materials proposed to be used or removed. Note: this may be modified during the permitting process, therefore it is recommended that you do not purchase materials until all permits are issued. List soil/fill type, cubic yards and source, culvert size, rip-rap size, and any other materials to be used or removed on the project.

Cubic yards/ Linear Feet	Size and Type	Source
50', 35', 60', 50', 34', 27', 24'	24" CMP	
75'	36" CMP	
105 cubic yards	¾" crush gravel	Unknown at this time
26 cubic yards	Rip rap	
10 cubic yard	Large boulders	

Refer to section D4 of the Instructions

4. **EQUIPMENT.** List all equipment that will be used for this project. How will the equipment be used on the bank and/or in the water? Note: all equipment used in the water must be **CLEANED, DRAINED, AND DRY.**

Equipment used for these projects are currently unknown, but will likely be and excavator with bucket and thumb, a "wacker packer" or other compactor, and a dump truck to inhaul rock. All equipment is required to be pressure washed and inspected to be verified weed free prior to entering the sale area.

Will equipment from out of state be used? Yes No Unknown

Will the equipment cross west over the Continental Divide to the project site? Yes No Unknown

Will equipment enter the Flathead Basin? Yes No Unknown

E. REQUIRED ATTACHMENTS

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1. Plans and/or drawings of the proposed project should include:
 - a. Plan/Aerial View
 - b. An elevation or cross-section view
 - c. Dimensions of the project (height, width, depth in linear feet)
 - d. Location of storage stockpile materials and location of fill or excavation sites
 - e. Drainage facilities
 - f. Location of existing/proposed structures, such as buildings, utilities, roads or, bridges
 - g. An arrow indicating north
 - h. Site photos
2. Attach a vicinity map or a sketch, which includes: The water body where the project is located, roads, tributaries, and other landmarks. Plan an "X" on the project location. Provide written directions to the site. This is a plan view (looking at the project from above).
3. If requesting a Maintenance 310 Permit, attach an Annual Plan of Operation.
4. Attach an Aquatic Resource Map, which documents the location and boundary of all waters of the U.S. in the project vicinity and includes wetlands and other special aquatic sites. Show the location of the ordinary high-water mark of streams or waterbodies if requesting a Section 404 or Section 10 Permit. Include the ordinary high-water mark delineation on plans or drawings and/or a separate wetland delineation.

F. ADDITIONAL INFORMATION FOR US ARMY CORPS OF ENGINEERS (USACE) SECTION 404, SECTION 10, AND FLOODPLAIN PERMITS

Refer to section F of the instructions

Section F should only be filled out by those needing Section 404, Section 10, and/or Floodplain permits.

Applicants applying for Section 404 and/or Section 10 permits must complete questions F1-10. For questions on Section 404 and/or Section 10 permits, contact the USACE by telephone at 406-441-1375 or by email at montana.reg@usace.army.mil.

Applicants applying for Floodplain permits must complete all of Section F.

Refer to section F1 of the instructions

1. Does the proposed activity and/or property have permitting history with USACE? If yes, and available, provide the USACE project number(s) associated with the previous permits, including no permit required letters and approved jurisdictional determinations.

Refer to section F2 of the instructions

2. Identify the specific **Nationwide Permit(s)** that you want to use to authorize the proposed activity.

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Refer to section F3 of the instructions

3. Provide the footprint of impacts and the quantity of materials proposed to be placed in wetlands and/or below the ordinary high-water mark in waters of the United States. Delineations are required of wetland and other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

3a. What is the length and width (or square footage/acreage) for each impact occurring within the waters of the United States, including wetlands?

3b. How many cubic yards of fill material will be placed below the ordinary high-water mark, in a wetland, stream, or other waters of the United States?

Refer to section F4 of the instructions

4. How will the proposed project avoid or minimize **impacts to waters of the United States**? Attach additional sheets if necessary.

Refer to section F5 of the instructions

5. Will the project impact(s) be equal to or greater than 0.10 acre of wetland and/or 0.03 acre of stream or other waters? If yes, describe how the applicant is going to **compensate (mitigation bank, in-lieu fee program, or permittee responsible)** for these unavoidable impacts to waters of the United States.

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Refer to section F6 of the instructions

6. Is the proposed activity within any component of the **National Wild and Scenic Rivers System**, or a river that has been officially designated by Congress as a “**study river?**” Yes No

Refer to section F7 of the instructions

7. Does this activity require permission from the **USACE because it will alter or temporarily or permanently occupy or use a USACE authorized civil works project?** (Examples include USACE owned levees, Fort Peck Dam, and others). Yes No

Refer to section F8 of the instructions

8. List the **ENDANGERED AND THREATENED SPECIES** and **CRITICAL HABITAT(S)** that might be present in the project location.

Refer to section F9 of the instructions

9. List any **HISTORIC PROPERTY(S)** that are listed, determined to be eligible or are potentially eligible (over 50 years old) for listing on the National Register of Historic Places.

Refer to section F10 of the instructions

10. List all **APPLICABLE LOCAL, STATE, AND FEDERAL PERMITS** and indicate whether they were issued, waived, denied, or pending. Note: all required local, state, and federal, or proof of waiver must be issued prior to the issuance of a floodplain permit.

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Refer to section F10 of the instructions

11. List the **NAMES AND ADDRESS OF LANDOWNERS** adjacent to the project site. This includes properties to and across from the project site. Note: Some floodplain communities require certified adjoining landowner lists.

NAME/ADDRESS OF **Adjacent Landowner**:

NAME/ADDRESS OF **Adjacent Landowner**:

NAME/ADDRESS OF **Adjacent Landowner**:

NAME/ADDRESS OF **Adjacent Landowner**:

Refer to section F11 of the instructions

12. **Floodplain Map Number**:

Refer to section F11 of the instructions

13. **Does this project comply with local planning or zoning regulations?** Yes No

Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Waterbodies

G. SIGNATURE REQUIREMENTS

Refer to section G of the instructions

Some agencies require original signatures for an application to be considered complete. After completing the application form, make the required number of copies and sign each copy. Send the copies with original signatures and additional information required directly to each applicable agency.

The statements contained in this application are true and correct. The applicant possesses the authority to undertake the work described herein or is acting as the duly authorized agent of the landowner. The applicant understands that the granting of a permit does not include landowner permission to access land or construct a project. Inspections of the project site after notice by inspection authorities are hereby authorized.

**By signing or typing my name on the signature line below, I hereby swear and affirm that I am the applicant for this project and am responsible for all information contained in this application.*

*APPLICANT (party responsible for project)

LANDOWNER (If different from applicant)

Jordyn A. Yarid

[Redacted]

Print Name

Print Name

Jordyn A. Yarid [Redacted]

[Redacted] [Redacted]

Signature of Applicant

Date

Signature of Landowner

CONTRACTOR (If applicable. Contact agency to determine if contractor signature is required)

[Redacted]

[Redacted]

Print Name of Primary Contract

Company/Entity Name (If applicable)

[Redacted]

[Redacted]

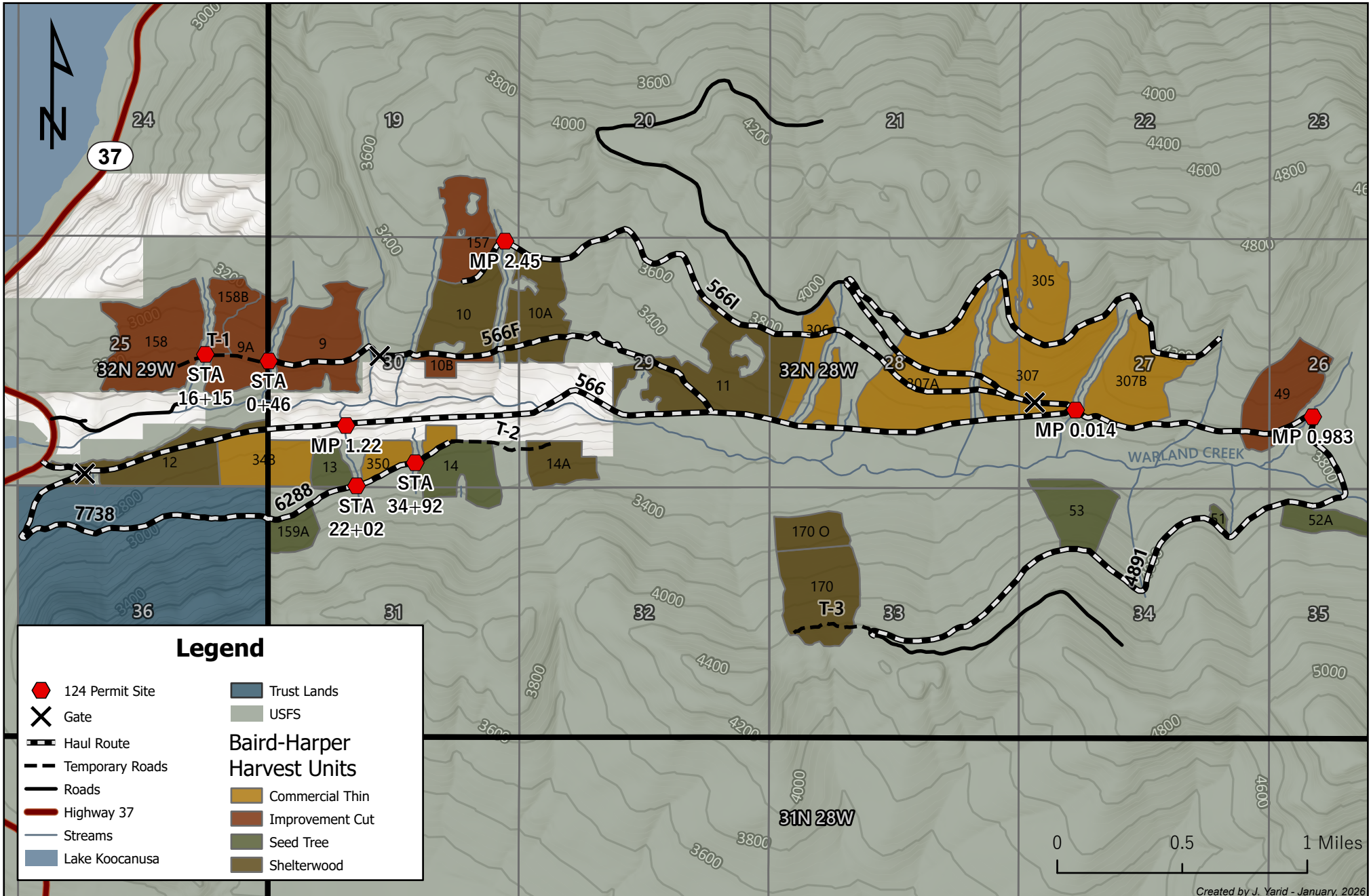
Signature of Contractor

Date



Baird-Harper 124 Permit Application Map

Sections 19-22, 26-35 T32N 28W & Section 25 T32N R29W



Station	Work Description	Materials or Type of Work	Type or Size	Length or Amount	Units
Miles	Forest Road 566/Warland-Five Mile Road				
1.22	Existing 18" CMP not functional. Remove existing culvert and install a new 50' x 24" CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Purchaser dispose of CMP. Rock armor inlet and outlet with 4 cubic yards of rip rap. 124 Permit	CMP	50' x 24"	50	Feet
		CMP Band	24"	1	Each
		Rock	3/4" Crush	10	Cu. Yards
		Rock	Rip Rap	4	Cu. Yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	8	Hours
		Laborer		8	Hours
		CMP Removal		2	Hours
Miles	Forest Road 566I				
2.45	Existing draw overflowing on road during high water events - Install a new 35' x 24" CMP. Inhaul 10 cubic yards of 3/4" crush gravel. Bed the culvert in the gravel and use remaining gravel to cap the road surface. Rock armor inlet and outlet with local borrow. 124 Permit	CMP	35' x 24"	35	Feet
		CMP Band	24"	1	Each
		Rock	3/4" Crush	10	Cu. yards
		Earthwork	Dump truck	2	Hours
		Earthwork	Excavator	5	Hours
		Laborer		5	Hours
Miles	Forest Road 4891/Warland Basin Road				
0.014	Existing 18" CMP - Remove existing culvert and bring to Canoe Gulch Ranger Station. Install 60' x 24" CMP. Inhaul 15 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 4 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	15	Cu. Yards
		Rock	Rip Rap	4	Cu. Yards
		CMP	60' x 24"	60	Feet
		CMP Bands	24"	1	Band
		CMP Removal		2	Hours
0.983	Existing 24" CMP - Remove existing culvert and bring to Canoe Gulch Ranger Station. Install 75' x 36" CMP. Inhaul 30 cubic yards of 3/4" crush gravel to bed the culvert, fill, and use remaining to create a rollover. Inhaul 10 cubic yards of rip rap for fill. Inhaul 10 cubic yards of large boulders to armor inlet and outlet. Rebuild sump holes in ditchline and rock armor bottoms with rip rap. Add energy dissipators in ditchline. FO and FS hydrologist will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	30	Cu. Yards
		Rock	Rip Rap	10	Cu. Yards
		Rock	Large boulders	10	Cu. Yards
		CMP	75' x 36"	75	Feet
		CMP Bands	36"	2	Bands
		CMP Removal		2	Hours
Feet	Forest Road 6288				
22+02	Existing stream - Install 50' x 24" CMP, inhaul 10 cubic yards of 3/4" crush to bed culvert. Inhaul 2 cubic yards of rip rap to rock armor inlet and outlet. 124 Permit	Earthwork	Excavator	5	Hours
		Earthwork	Dump Truck	4	Hours
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	50' x 24"	50	Feet
		CMP Band	24"	1	Band

34+92	Existing stream - Install 34' x 24" CMP, inhaul 10 cubic yards of 3/4" crush to bed culvert. Inhaul 2 cubic yards of rip rap to rock armor inlet and outlet. 124 Permit	Earthwork	Excavator	5	Hours
		Earthwork	Dump Truck	4	Hours
		Rock	3/4" Crush	10	Cubic Yards
		Rock	Rip Rap	2	Cubic Yards
		CMP	34' x 24"	34	Feet
		CMP Band	24"	1	Band
Feet	Temporary Road T-1				
0+46	Existing stream - Install 27' x 24" CMP. Inhaul 10 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 2 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	10	Cu. Yards
		Rock	Rip Rap	2	Cu. Yards
		CMP	27' x 24"	27	Feet
		CMP Bands	24"	1	Band
16+15	Existing stream - Install 24' x 24" CMP. Inhaul 10 cubic yards of 3/4" crush gravel to bed the culvert and use remaining to create a rollover. Inhaul 2 cubic yards of rip rap to armor inlet and outlet. FO will be onsite during installation. 124 Permit	Earthwork	Excavator	8	Hours
		Earthwork	Dump truck	2	Hours
		Laborer		8	Hours
		Rock	3/4" crush	10	Cu. Yards
		Rock	Rip Rap	2	Cu. Yards
		CMP	24' x 24"	24	Feet
		CMP Bands	24"	1	Each
0+00-28+85	Scarify and rehabilitate temporary road following haul. New construction shall be recontoured; existing prisms must be placed in a stable condition. Add available slash, large woody material, and drainage features to the temporary road. Construct earth berm to restrict vehicular traffic. Seed all disturbed areas.	Road obliteration		0.47	Miles
		Kootenai Blend Grass Seed		0.88	25 lb bags