

# PROSPECTUS

## DXP SCALED-SALE

GRANTS PASS RESOURCE AREA  
JOSEPHINE MASTER UNIT

Medford Sale # ORM07-TS-19-11  
January 24, 2019 (LS)

#4. Big Graves Salvage, Jackson County, O&C

BID DEPOSIT REQUIRED: \$45,400.00

All timber designated for cutting in NE¼, NW¼, SE¼ Sec 23, NW¼, N½SW¼, SW¼SW¼ Sec 27, N½NE¼, SE¼NE¼, NW¼, N½SW¼ Sec 33, T.33 S, R. 4 W, W½SE¼, SE¼SE¼ Sec 9, T. 34 S., R. 4 W., Willamette Meridian.

Approx. Number Merch. Trees	Est. Volume MBF 32' Log	Species	Est. Volume MBF 16' Log	Appr. Price Per MBF*	Est. Volume Times Appraised Price
12,287	2,774	Douglas-fir	3,500	\$115.20	\$403,200.00
818	164	incense-cedar	215	\$201.80	\$43,387.00
246	110	sugar pine	136	\$24.40*	\$3,318.40
153	76	ponderosa pine	96	\$23.90*	\$2,294.40
83	39	white fir	49	\$32.20*	\$1,577.80
13,587	3,163	<b>Totals</b>	3,996		\$453,777.60

\*Stumpage values have been determined by market value estimates and analytical appraisal methods were used to compute the appraised price. Additional information concerning the appraised price is available at the Medford District Office.

\*Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value)

**TIMBER AUCTION LOCATION** – The timber auction will be held at the Grants Pass Inter-agency Office, located at 2164 NE Spalding Avenue Grants Pass, Oregon, at 9 a.m. on Thursday, January 24th, 2019.

**Bidders will be restricted to bidding on a unit (MBF) rate of the Douglas-fir volume. All other species will be sold at appraised price per unit (MBF). The minimum bid increment will be \$0.10 per MBF.**

**CRUISE INFORMATION** – All species have been cruised using the PCMTRE cruising method. 118 plots were cruised using a 40 BAF and a sampling frequency of 1 in 6. Maps showing the location of these sample plots are available at the Grants Pass Interagency Office.

Approximately 0 trees which are considered to be non-merchantable are designated for cutting. All of the 3,996 M bd. ft sale volume is salvage material. With respect to merchantable trees of all conifer species: the average tree is 19.1 inches DBHOB; the average gross merchantable log contains 116 bd. ft.; the total gross volume is approximately 5174 M bd. ft; and 77% recovery is expected. (Average DF is 18.5 inches DBHOB; average gross merchantable log DF contains 112

bd. ft.)

LOG EXPORT AND SUBSTITUTION RESTRICTIONS - All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export under the United States in the form of unprocessed timber and is prohibited from use as a substitute for exported private timber.

The BLM has revised the log export restrictions special provision to reduce the log branding and painting requirements. The new requirements include branding of one end of all logs with a scaling diameter of over 10 inches. All loads of 11 logs or more, regardless of the diameter of the logs, will have a minimum of 10 logs branded on one end. All logs will be branded on loads of 10 logs or less. One end of all branded logs will be marked with yellow paint. At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. The Purchaser shall bear any increased costs for log branding and painting.

CUTTING AREA – Eight (8) units containing two hundred fifty (250) acres of fire salvage and/or roadside hazard tree removal.

CUTTING TIME - Contract duration will be twenty four (24) months for cutting and removal of timber.

ACCESS - Access to the sale area is available via public road through the contract area, existing BLM roads, Right-of-Way and Road Use Agreement M-2000D with Juniper Properties LLC, Right-of-Way and Road Use Agreement M-2000EA with ORM Timber Fund IV (REIT) Inc., and Right-of-Way and Road Use Agreement M-660 with AP Timber LLC. Among other conditions, agreement M-2000D with Juniper Properties LLC., requires completion of a license agreement between the Purchaser and Juniper Properties LLC., road maintenance to be performed by Juniper Properties LLC., and payment of road maintenance and surface replacement fee of **\$9,678.82**. Among other conditions, Right-of-Way and Road Use Agreement M-2000EA with ORM Timber Fund IV (REIT) Inc., requires completion of a license agreement between the Purchaser and ORM Timber Fund IV (REIT) Inc., road maintenance to be performed by BLM and a payment of a surface replacement fee of **\$182.94**. Among other conditions, Right-of-Way and Road Use Agreement M-660 with AP Timber LLC requires payment of the total value of right-of-way timber within needed skid trails and/or cable corridors on AP Timber LLC lands prior to cutting, removing, or using said skid trails and/or cable corridors.

ROAD MAINTENANCE - The Purchaser will be required to maintain all of the temporary routes he constructs plus 3.31 miles of existing road listed in Section 3001 of Exhibit D1. An allowance in the amount of **\$5,028.11** has been made for the maintenance of these roads. BLM will maintain 22.40 miles of roads listed in Section 3001 of Exhibit D1. The Purchaser will be required to pay a road maintenance obligation and rockwear fee of **\$7.73** per MBF or a total of **\$30,879.05** for the use of these roads.

ROAD CONSTRUCTION – The Purchaser will be required to construct 0.33 miles of temporary routes as shown on Exhibit A and as described in Exhibit C.

DECOMMISSIONING – An allowance in the amount of **\$3,409.71** has been made for decommissioning. Decommissioning work to be performed is described in Section 3500 of Exhibit D1.

SOIL DAMAGE PREVENTION - Pursuant to Section 26 of Form 5450-4, Timber Sale Contract, the Purchaser shall not conduct mechanical ground-based harvesting, ground-based yarding, skid trail and landing rehabilitation, temporary route construction, or temporary route decommissioning in Timber Sale Units between October 15 of one calendar year and May 15 of the following calendar year both days inclusive. Purchaser may request in writing, a conditional

waiver of this restriction. If soil moisture conditions are dry, as determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks, the Contracting Officer may approve a conditional waiver. If impacts to soil resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.

Pursuant to Section 26 of Form 5450-4, Timber Sale Contract, the Purchaser shall not conduct any haul on natural surface and rocked roads on the Contract Area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions or rain events, Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause impacts to roads or stream water quality resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.

EQUIPMENT REQUIREMENTS – A forty (40) foot tower capable of yarding one thousand (1,000) feet, with lateral yarding capability of seventy five (75) feet, with one end suspension of logs during inhaul, and capable of multi-span. Equipment anchors will be necessary at several landings. A yarding tractor will not exceed nine (9) feet in width and must be capable of bull-lining seventy five (75) feet. A piece of equipment capable of sub-soiling to a depth of eighteen (18) inches will be required for decommissioning temporary routes and skid roads. Specialized logging equipment such as a feller buncher or harvester may also be used.

SLASH DISPOSAL - Slash disposal within the harvest units will consist of lop and scatter, and pile and cover landing decks as described in SD-5 of the Special Provisions. Lop and scatter areas of high slash concentration within units. A post logging assessment shall be conducted to determine treatment needs in all units. The initial appraisal prescribed two hundred fifty (250) acres of lop and scatter and twenty five (25) acres of pile and cover landing piles.

CONTRACT TERMINATION - A Special Provision has been added to the contract which enables the Contracting Officer to suspend the contract to facilitate protection of certain plant or animal species, and/or to modify or terminate the contract when necessary to comply with the Endangered Species Act, or comply with a court order. This contract provision limits the liability of the Government to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area.

PERFORMANCE BOND - A performance bond in the amount of 20% of the total purchase price will be required.

OTHER -

1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
2. All leave trees will be selected by the Purchaser through Designation by Prescription (DxP) criteria as outlined in Exhibit F.
3. Delivered log lengths shall not exceed 41 feet.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA – From Grants Pass, take I-5 to exit 48. Turn left onto Depot Street, then left onto Pine Street and then a left onto Foothill Blvd. Travel approximately 1,000 feet and turn Right onto West Evans Creek Road. Travel approximately 7 miles to the stop sign and turn Left onto Queens Branch Road and take a Right back onto West Evans Creek Road. West Evans becomes Pleasant Creek Road. Units can

be accessed from BLM roads from Pleasant Creek Road.

ENVIRONMENTAL ASSESSMENT - A categorical exclusion # DOI-BLM-ORWA-M070-2018-0021-CX was prepared for this sale, it was determined that the proposed action is in accordance with the approved land use plan and no further environmental analysis is required. This document is available for inspection as background for this sale at the Medford District Office.

## BIG GRAVES SALVAGE TIMBER SALE

THIS IS A SALE PROSPECTUS ONLY. THESE ARE THE SPECIAL PROVISIONS AS THEY WILL BE WRITTEN IN THE CONTRACT. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT PROVISIONS. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE MEDFORD INTERAGENCY OFFICE.

Sec. 41. TIMBER RESERVED FROM CUTTING - The following timber on the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of Government.

- (A) AR-1 All timber on the Reserve Areas as shown on Exhibit A and all trees marked with a combination of orange paint, orange flagging, and/or posters which are on or mark the boundaries of the Reserve Areas.
- (B) IR-6 All green trees that need to be felled to facilitate logging in the portion of unit 1 that is District-Designated Reserve shown on Exhibit A and all of unit 7 shown on Exhibit A shall remain onsite.
- (C) IR-8 All timber except trees that meet the selection criteria outlined in the Designation by Prescription Marking Guidelines (Exhibit F) in all sale units shown on Exhibit A.
- (D) IR-13 All green hardwoods in the Harvest Areas shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer.
- (E) IR-14 All pre-existing dead and down logs in the Harvest Area shown on Exhibit A.

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Section 42

(A) LOGGING

- (1) L-1 Before beginning operations on the contract area for the first time or after a shutdown of seven (7) or more days, the Purchaser shall notify the Authorized Officer in writing of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer in writing if he intends to cease operations for any period of seven (7) or more days.
- (2) L-2 Prior to the commencement of operations the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract, which shall include measures needed to ensure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized representative and the Authorized Officer must be held at a location designated by the Authorized Officer before the logging plan will be approved. All logging shall be done in accordance with the plan.
- (3) L-4 All trees designated for cutting shall be cut so that the resulting stumps shall not be higher than twelve (12) inches measured from the ground on the uphill side of the trees unless otherwise approved by the Authorized Officer.
- (4) L-10 In units shown on Exhibit A, all trees designated for cutting shall be directionally felled away from streams, unit boundaries and resource buffers. Use of jacks, wedges, and/or tree pulling with cables or lines shall be employed when necessary to meet this requirement.
- (5) L-12 In the units shown on Exhibit A, yarding shall be done in accordance with the yarding requirements or limitations for the designated area listed below.

Designated Area	Yarding Requirements or Limitations
Ground Based Harvest & Yard Portion of Units 1, 2, 3, 4, 5, 6, 7, 8	<p>Mechanized harvesting operations are optional. All ground-based harvest units may be manually felled.</p> <p>Specialized mechanized felling operations shall be limited to slopes of fifty (50) percent or less except on preexisting skids and short steeper pitches.</p> <p>Non specialized mechanized ground based equipment must operate on slopes generally less than thirty-five (35) percent slope except on preexisting skids and short steeper pitches.</p>

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Designated Area	Yarding Requirements or Limitations
Ground Based Harvest & Yard Portions of Units 1, 2, 3, 4, 5, 6, 7, 8 Continued	<p>Mechanized felling operations are subject to seasonal operating restrictions as described in Section 42(A)(8)(L-19) of this contract.</p> <p>The harvester, feller-processor, or feller-buncher shall be approved by the Authorized Officer prior to the start of mechanized felling operations. Only purpose built carriers with boom-mounted felling heads may be approved. The boom must have a lateral reach of twenty (20) feet or more, and the machine's lateral reach must be utilized as much as possible. The purpose-built carrier may be of the articulated, rubber-tired design, or the zero-clearance tail swing leveling track-mounted design.</p> <p>The harvest equipment shall walk on existing or created slash as directed by the Authorized Officer.</p> <p>Yarding tractor width shall not be greater than nine (9) feet track width and shall be equipped with an integral arch to suspend one end of the log.</p> <p>Cull material skidded to the landing may be required to be redistributed back into the unit.</p> <p>Trees shall be limbed prior to yarding.</p> <p>Prior to October 15<sup>th</sup>, block, rehabilitate and apply erosion control measures to skid trails and landings that are hydrologically connected to streams.</p> <p>Existing skid roads shall be used when possible. Skid trails shall be pre-designated and approved by the Authorized Officer prior to use.</p> <p>Designate skid trails in locations that prevent water channeling into waterbodies, floodplains, wetlands, or unstable areas. No skid trails shall be located within or cross stream channels.</p> <p>The use of blades while ground based yarding will be limited.</p>

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Designated Area	Yarding Requirements or Limitations
Ground Based Harvest & Yard Portion of Units 1, 2, 3, 4, 5, 6, 7, 8 Continued	<p>If trenches, depressions, or excessive disturbance occurs, the Authorized Officer will suspend operations until a remedy is determined.</p> <p>Skid roads shall not exceed a width of twelve (12) feet on average per unit and new skid roads shall be placed at least one hundred fifty (150) feet apart where topography will allow, unless the Purchaser proposes an alternate logging plan that limits soil compaction to less than twelve (12) percent, limits soil productivity loss to less than five (5) percent of the harvest unit, and is approved by the Authorized Officer.</p> <p>Landing size shall not exceed one-half (½) acre, shall be located along existing roads temporary routes, and/or cable-tractor swing routes within unit boundaries where possible, and shall be approved by the Authorized Officer. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditchline of roads.</p>

Designated Area	Yarding Requirements or Limitations
Cable Yard Portion of Units 1, 2, 3, 4, 5, 6, 8	<p>Yarding will be done with a cable yarding system which will suspend one end of the log clear of the ground during inhaul on the yarding corridor. The cable yarding system shall be capable of yarding one thousand (1,000) feet slope distance.</p> <p>Prior to falling any timber in the unit, all tail/lift trees and/or intermediate support trees shall be pre-designated by the Purchaser and approved by the Authorized Officer.</p> <p>A carriage is required which will maintain a fixed position on the skyline during lateral yarding and has a minimum lateral yarding capability of seventy five (75) feet.</p> <p>Yarding corridors will be perpendicular to the contours and located outside of all buffers shown on Exhibit A.</p> <p>Existing cable corridors shall be used whenever possible.</p>



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Designated Area	Yarding Requirements or Limitations
Cable Yard Portion of Units 1, 2, 3, 4, 5, 6, 8 Continued	<p>Yarding corridors shall not exceed approximately twelve (12) feet in width.</p> <p>Yarding corridors shall be approximately one hundred fifty (150) feet apart, measured at the tailholds.</p> <p>Landing size shall not exceed one-quarter (¼) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries where possible, and shall be approved by the Authorized Officer.</p> <p>Design landings with adequate drainage so that they are not hydrologically connected to streams or the ditchline of roads.</p> <p>Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required.</p> <p>Cull material yarded to the landing may be required to be redistributed back into the unit.</p> <p>Trees shall be limbed prior to yarding</p> <p>Corridors that are hydrologically-connected to streams or waterbodies will be water-bared and have slash placed over them prior to Oct. 15 of the same operation season.</p>

- (6) L-14 No falling, yarding or loading is permitted in or through the Reserve Area as shown on Exhibit A, unless otherwise approved by the Authorized Officer.
- (7) L-14 No landings or landing pile burning is permitted within thirty five (35) feet of stream channels.
- (8) L-19 No mechanical ground based harvesting, ground based yarding, skid trail and landing rehabilitation, machine piling or non-emergency road maintenance shall be conducted in the sale area units between October 15 of one calendar year and May 15 of the following calendar year both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If soil moisture conditions are dry, as determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along

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equipment tracks, the Contracting Officer may approve a conditional waiver. If impacts to soil resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.

- (9) L-19 No haul shall be conducted in the Contract Area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions or rain events, Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause impacts to roads or stream water quality resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.
- (10) L-24 Before cutting and removing any trees necessary to facilitate logging in the Harvest Area shown on Exhibit A, the Purchaser shall identify the location of the skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding with cutting the following conditions must be met:
- (a) All skid roads and/or cable yarding roads upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the safe and expeditious removal of timber sold under this contract and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Contracting Officer, the width of each skid road, and/or cable yarding road shall be limited to twelve (12) feet.
  - (b) The Purchaser may immediately cut and remove additional timber to clear skid roads and cable yarding roads; and provide tailhold, tieback, guyline, lift and intermediate support trees; and clear danger trees when the trees have been marked with pink paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber to be sold will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Section 3.(b). of the contract or sufficient bonding has been provided in accordance with Section 3.(e). of the contract.

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- (c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Section 9 of the contract; or, the Authorized Officer determines that the species of trees are not listed in Exhibit B of this contract shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Section 8 of the contract.
- (d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.
- (e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Section 8 or Section 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.
- (f) The Government may reserve trees previously designated for cutting and removal by blacking out blue paint, and/or applying orange paint as replacements for additional trees cut and removed for skid roads and/or cable yarding roads when the Authorized Officer determines such reservation is necessary to maintain stand densities consistent with objectives set forth in the management prescriptions. This may include the replacement of trees damaged by storm events, or insects or disease. The volume of this timber to be reserved will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and the value shall be based on the unit prices shown in Exhibit B of the contract. The Purchaser agrees that the Total Purchase

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Price shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.

- (11) L-33 Purchaser's operations shall facilitate BLM's safe and practical inspection of Purchaser's operations and BLM's conduct of other official duties in the Contract Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees, contractors and subcontractors.

In the event that the Authorized Officer identifies a conflict between the requirements of this contract or agreed upon methods of proceeding hereunder and State or Federal safety requirements, the contract may be modified. If the cost of such contract modification is of a substantial nature (\$2,000.00 or more), the Purchaser may request, in writing, an adjustment in the Total Purchase Price specified in Section 2 of the timber sale contract, as amended, to compensate for the changed conditions.

Unless otherwise specified in writing, when operations are in progress adjacent to or on roads and/or trails in the Contract Area, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the road or trail user with adequate warning of and protection from hazardous or potentially hazardous conditions associated with its operations. Purchaser shall prepare a Traffic Control Plan, which the Purchaser has determined is compliant with state and local OSHA and Transportation standards no later than the pre-work meeting and prior to commencing operations. Traffic control devices shall be appropriate to current operating and/or weather conditions and shall be covered or removed when not needed., Flagmen and devices shall be as specified in state OSHA and Transportation standards for logging roads or the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) published by the U.S. Department of Transportation - Federal Highway Administration. Included in the Traffic Control Plan, Purchaser shall note traffic control device locations on a Purchaser produced copy of the contract Exhibit "A" Map.

(B) ROAD CONSTRUCTION, MAINTENANCE, AND USE

- (1) R-1 The Purchaser shall construct, improve, renovate, and/or decommission all roads and structures in strict accordance with the plans and specifications shown on Exhibit C and Exhibit D, which is attached hereto and made a part hereof.
- (2) R-1a Any required construction, improvement, or renovation of structures and roads shall be completed and accepted, in accordance with Section 18, prior to the removal of any timber, except right-of-way timber, over that road.
- (3) R-1b The Purchaser shall construct, use and decommission temporary routes T34 R4W Temp 5.02, T33 R4W Temp 27.02, T34 R4W Temp 33.03, T34 R4W Temp

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33.06, T34 R4W Temp 33.06A and T34 R4W Temp 33.06B by October 15<sup>th</sup> of the same respective operating season.

- (4) R-2 The Purchaser is authorized to use the roads listed below and shown on Exhibit D Section 3001 for the removal of Government timber sold under the terms of this contract and the hauling of rock as required in Exhibit C, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 42(B)(6)(R-2d). Any road listed on Exhibit D and requiring construction, improvement, or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the construction, improvement, or renovation from the Contracting Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

<b>Road No. and Segment</b>	<b>Length in Miles</b>	<b>Road Ownership</b>	<b>Surface Type</b>	<b>Maintenance Responsibility</b>
33-4W-23.00 A1	0.13	BLM	Aggregate	BLM
33-4W-23.01	0.70	BLM	Aggregate	BLM
33-4W-23.03	0.48	BLM	Aggregate	BLM
33-4W-26.01 A-C	1.87	Private	Aggregate	Third Party
33-4W-26.01 D1-D2	0.93	BLM	Aggregate	BLM
33-4W-33.06 A-B	1.65	BLM	Aggregate	BLM
34-4W-2.03 A-E	4.85	BLM	Aggregate	BLM
34-4W-5.02 A-B	2.44	BLM	Aggregate	BLM
34-4W-10.00 A-B	1.04	BLM	Aggregate	BLM
34-4W-15.00 A-D	1.40	BLM	Aggregate	BLM
34-4W-15.00 E	0.10	Private	Aggregate	BLM
34-4W-15.00 F1-H3	3.19	Private	Aggregate	Third Party
34-4W-15.00 I-J1	1.99	BLM	Aggregate	BLM
34-4W-28.00 A-B	1.39	BLM	Bituminous	BLM
34-4W-28.00 C-J	5.03	BLM	Aggregate	BLM
33-4W-33.00	0.97	BLM	Aggregate	Purchaser
33-4W-33.01	0.22	BLM	Aggregate	Purchaser
33-4W-33.03	0.13	BLM	Aggregate	Purchaser
33-4W-33.06 C	0.45	BLM	Natural	Purchaser
34-4W-9.00	0.62	BLM	Aggregate	Purchaser
34-4W-9.01	0.25	BLM	Natural	Purchaser

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Road No. and Segment	Length in Miles	Road Ownership	Surface Type	Maintenance Responsibility
NS 33S 4W 27.02	0.13	BLM	Natural	Purchaser
NS 33S 4W 33.06	0.54	BLM	Natural	Purchaser
<b>Total</b>	<b>30.50</b>			

- (5) R-2a With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of roads included in Section 42(B)(8)(R-2f) of this contract; provided, that such cooperative arrangement shall not relieve the Purchaser of his liability for the maintenance and repair of such roads resulting from wear or damage, in accordance with this contract. The Purchaser shall furnish the Authorized Officer a copy of any cooperative maintenance agreements entered into with other users on these roads.
- (6) R-2d The Purchaser shall pay a road maintenance and rockwear fee of \$1.55 per thousand board feet log scale per mile for the use of roads 33-4-23.00 A1, 33-4-23.01, 33-4-23.03, 33-4-26.01 D1-D2, 33-4-33.06 A-B, 34-4-2.03 A-E, 34-4-5.02 B, 34-4-10.00A-B, AND 34-4-15.00 I-J2. The Purchaser shall pay a road maintenance and rockwear fee of \$1.35 per thousand board feet log scale per mile for the use of roads 34-4-5.02 A, 34-4-15.00 A-D, and 34-4-28.00 C-J. The Purchaser shall pay a road maintenance and rockwear fee of \$0.95 per thousand board feet log scale per mile for the use of road 34-4-15.00 E. The Purchaser shall pay a road maintenance and rockwear fee of \$0.92 per thousand board feet log scale per mile for the use of road 34-4-28.00 A-B. The total maintenance fee due shall be based upon volumes determined pursuant to Exhibit B of this contract and mileage of roads used as determined by the Authorized Officer. Prior to the use of such roads, the Purchaser shall give written notice to the Authorized Officer of the roads intended for use in the removal of timber purchased under this contract, together with an estimate of the volume to be hauled over such roads. **The Purchaser will be required to label, with a permanent ink marker, each load ticket with the corresponding unit number as directed by the Authorized Officer.** The Authorized Officer shall establish an installment schedule of payment of the maintenance obligation. If it is determined by the Authorized Officer, after all merchantable timber has been cut and scaled, that the total maintenance payments made under this contract exceed the total maintenance payment due, such excess shall be returned to the Purchaser after such determination is made.
- (7) R-2e The Contracting Officer may at any time, by written notice, terminate the Purchaser's operator road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance and rockwear fees for the particular surface type of the roads involved. These fees will be applied to the remaining contract volume on the sale area, as determined by the Authorized

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Officer, to be transported over the roads listed in Section 42(B)(4)(R-2). If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.

- (8) R-2f The Purchaser shall perform any required road repair and maintenance work on roads identified as Purchaser maintenance, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.
- (9) R-3 In the use of Road No(s) 33-4-26.01 A, 33-4-26.01 B, 33-4-26.01 C, 34-4-15.00 F1, 34-4-15.00 F2, 34-4-15.00 G, 34-4-15.00 H1, 34-4-15.00 H2, and 34-4-15.00 H3 the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-2000D, between the United States of America and Juniper Properties LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road maintenance and rockwear obligation of **nine thousand six hundred seventy eight and 82/100 dollars (\$9,678.82)** to Juniper Properties LLC, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (10) R-3 In the construction and use of the skid road and yarding corridor in the SE¼SE¼ of Section 28, T.33S., R.4W., the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-660, between the United States of America and AP Timber LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Prior to cutting or removing any timber within the right of way of the skid road or yarding corridor in the SE¼SE¼ of Section 28, T.33S., R.4W., the

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Purchaser shall pay to AP Timber LLC, the owner of the right-of-way timber, the total value of that timber based upon the indicated estimated volume and species price per unit used in the Government's contract as set forth on the Exhibit B.

- (b) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (11) R-3c The Purchaser agrees that if they elect to use any other private road, which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, Purchaser shall request and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.
- (12) R-4: The Purchaser shall be required to secure written approval to use vehicles or haul forest products and equipment over Government owned or controlled roads when such vehicles or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit or if vehicles meet allowable non-permitted State vehicle weights, but the haul route crosses a structure or segment of road that is posted for reduced weights. The Purchaser agrees to abide by any special requirements included in said written approval.

Details of such equipment shall be furnished to the Authorized Officer for evaluation of load characteristics at least fifteen (15) days prior to proposed move in.

Details shall include:

- A. Axle weights when fully loaded.
- B. Axle spacing.
- C. Transverse wheel spacing.
- D. Tire size.
- E. Outside width of vehicle.
- F. Operating speed.
- G. Frequency of use.
- H. Special features (e.g., running tracks, overhang loads, etc.).

The Purchaser shall be responsible for repair of any damage to roads or structures caused by the use of overweight or over-dimension vehicles or equipment: (1)



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without written approval; (2) in violation of the conditions of a written approval; or, (3) in a negligent manner.

The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

- (5) **R-5: Tracked type equipment shall not be allowed to cross over concrete bridge decks, other concrete surfaced structures, or asphalt surfaced roads without the proper protection of that surface.** Prior approval shall be obtained from the Authorized Officer when crossing with protective devices.

The Purchaser shall be responsible for the repair of any damage to roads or structures caused by the use tracked vehicles or equipment: (1) without written approval; (2) in violation of the conditions of a written approval; or, (3) in a negligent manner. The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

(C) ENVIRONMENTAL PROTECTION

- (1) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures:
- (a) In order to prevent the potential spread of noxious weeds into the Medford District BLM, the operator would be required to clean all logging, construction, chipping, grinding, shredding, rock crushing, and transportation equipment prior to entry on BLM lands.
  - (b) Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands. Cleaning prior to entry onto BLM lands may be accomplished by using a pressure hose.
  - (c) Only equipment inspected by the BLM would be allowed to operate within the Analysis Area. All subsequent move-ins of equipment as described above shall be treated the same as the initial move-in.
  - (d) Prior to initial move-in of any equipment, and all subsequent move-ins, the operator shall make the equipment available for BLM inspection at an agreed upon location off Federal lands.
  - (e) Equipment would be visually inspected by the Authorized Officer to verify that the equipment has been reasonably cleaned.

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- (2) E-1 In addition to the requirements set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures:

Upon decommissioning and prior to fall rains, the Purchaser shall scarify and contour landings and temporary routes to provide for adequate drainage, then stabilize and revegetate all bare soil with certified weed free straw mulch and a native seed mixture approved by the Authorized Officer. Landings on roads and rocky areas that lack soil for seed germination need not be scarified, seeded or mulched, as determined by the Authorized Officer. The BLM may provide the seed mixture and straw mulch if the purchaser is unable to locate and buy the approved materials from a commercial source. The Purchaser shall reimburse the government for the cost of seed and straw, if provided by the government. The Purchaser shall furnish the specific seed mixture prescribed by the Authorized Officer, which will include up to 3 grasses and 2 forbs from the following list, but may include substitutions approved by the Authorized Officer:

Grasses: *Achnatherum lemmonii*, *Bromus carinatus*, *Brumus vulgaris*, *Elymus glaucus*, *Festuca californica*, *Festuca roemerii*, *Koeleria macrantha*, *Poa secunda*, *Vulpia microstachys*  
Forbs: *Achillea millefolium*, *Clarkia purpurea*, *Clarkia homboidea*, *Collinsia grandiflora*, *Eriophyllum lanatum*, *Lupinus bicolor*, *Madia elegans*, *Madia gracilis*

The proportion of each species in the mixture shall be prescribed by the Authorized Officer. The Purchaser shall apply prescribed seed and straw mulch to acres designated for treatment, as directed by the Authorized Officer, at the following rates of application:

Grass seed	20 to 25 lbs/acre (cumulative, all species)
Forb seed	0.5 to 2 lbs/acre (cumulative, all species)
Straw mulch	1000 lbs/acre

The Purchaser shall apply seed and straw mulch between August 1 and October 15. Deviations from that timing must be approved by the Authorized Officer. The Purchaser shall notify the Authorized Officer at least 5 days in advance of the date that he/she intends to commence revegetation and soil stabilization work.

If the Purchaser furnishes seed from any source other than the BLM, that seed shall meet the following minimum test standards:

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<u>Test</u>	<u>Grasses (%)</u>	<u>Forbs (%)</u>
Purity:	95	80
Germination:	85	70
Other species/weed content (max):	0.2	0.2
Noxious weed content:	Prohibited	Prohibited

Furnished seed shall meet the minimum requirements for either Yellow Tag Source Identified Seed or Blue Tag Certified Class Seed, as defined by the Association of Official Seed Certifying Agencies. Seed source shall be approved by the Authorized Officer and shall be from the EPA Level III Ecoregion in which the project occurs. For each lot of seed, the Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (e.g., Oregon State University), which shall include: test date; lot number; seed source; and results of test for purity, germination, and weed content. All seed lots must have been tested within the previous 12 months to be accepted. Seed that has become wet, moldy, or otherwise damaged shall not be accepted. Seed must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work. If the Purchaser furnishes straw mulch from any source other than the BLM, the material must be from native grass or other approved sterile grain crops that are certified weed free and free of mold or other objectionable materials. Straw mulch shall be in an air-dry condition and suitable for spreading in a uniform manner. Straw mulch must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work.

- (3) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser would be required to be in compliance with OAR 629-605-0130 of the Forest Practices Act. Notification, removal, transport, and disposal of oil, hazardous substances, and hazardous wastes would be accomplished in accordance with OAR 340-142 (OARD, 2018), and the operator will have a Spill Prevention, Control and Countermeasure Plan (SPCC) in place. the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements.
- (4) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not refuel equipment, store, or cause to have stored, any fuel or other petroleum products within one hundred (100) feet of all riparian management or wet areas. All Petroleum products shall be stored in durable containers and located so that any accidental releases will be contained and not

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drain into any stream system. Hydraulic fluid and fuel lines on heavy mechanized equipment would be in proper working condition in order to minimize potential for leakage into streams. Absorbent materials shall be onsite to allow for immediate containment of any accidental spills. Spilled fuel and oil shall be cleaned up and disposed of at an approved disposal site.

- (5) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not locate new cable corridors, skid trails, or landings in areas that contribute eroded fines to streams, wet areas, dry draws and swales. If these locations cannot be avoided, ensure that properly installed sediment control measures are placed and maintained, as needed, to keep eroded material onsite.
- (6) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not resume hauling on natural surface or rocked roads with insufficient rock depth for 48 hours following any storm event that results in ½ inch or more precipitation within a 24 hour period and until road surface is sufficiently dry to prevent sediment transport to nearby streams.
- (7) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall ensure that silt fencing or other sediment control measures are properly placed and maintained during use and periods of non-use when utilizing landings, skid tails, cable-tractor swing routes or temp routes that have the potential to release eroded fines into a stream or wet area, directly or via draws or ditchlines. Any project-related activity would be suspended if conditions develop that cause a potential for sediment laden runoff to enter a wetland, floodplain or waters of the state. Operations can resume when sediment control devices are in place and conditions allow turbidity standards to be met.
- (8) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, prior to October 15 of the same operating season, winterize temporary routes, landings, hydrologically connected corridors, skid trails and other areas of exposed soils by properly installing and/or using water bars, berms, sediment basins, gravel pads, hay bales, small dense woody debris, seeding and/or mulching, to reduce sediment runoff and divert runoff water away from stream channels, headwalls, slide areas, high landslide hazard locations or steep erodible fill slopes as directed by the Authorized Officer. Water bar spacing on skid trails shall be constructed using the guidelines below:

Gradient (Percent)	Water Bar Spacing*
	High Erosion Risk (Feet)
2-5%	200
6-10%	150
11-15%	100

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16-20%	75
21+%	50

*\* Spacing is determined by slope distance and is the maximum allowed for the grade.*

- (9) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall as directed by the Authorized Officer rehabilitate all ground based skid trails utilized within two hundred (200) feet of streams, all temporary routes, cable-tractor swing routes, and all landings outside of the road prism by the following method:
- (a) If the Authorized Officer deems subsoiling will not cause unacceptable damage to the root systems of residual trees the Purchaser shall discontinuously subsoil, simultaneously water bar, seed, mulch, and barricade. Subsoil to a depth of twelve (12) inches, and no further than thirty six (36) inches apart. If the Authorized Officer deems subsoiling to this depth will cause an unacceptable amount of damage to the root system of residual trees, the Purchaser shall scarify to a depth of up to six (6) inches and simultaneously water bar, seed, mulch, and barricade.
  - (b) Subsoiling will occur prior to the end of the operating season.
  - (c) Any step landings shall be re-contoured following use, prior to the end of the operating season.
- (10) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall place material removed during excavation in locations where it cannot enter streams or other water bodies.
- (11) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, upon completion of skidding, pull vegetation over and block skid trails if unauthorized off-highway vehicles (OHV) are identified utilizing the skid trails.
- (12) E-2 The water bars to be constructed as required by Sec. 26 shall be constructed in accordance with the specifications shown on Exhibit D-5 which is attached hereto and made a part hereof.
- (13) E-3 The Purchaser shall immediately discontinue specified construction or harvesting operations upon written notice from the Contracting Officer that:
- (a) threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, may be affected by the

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operation, and a determination is made that consultation or reinitiation of consultation is required concerning the species prior to continuing operation, or;

- (b) when, in order to comply with the Endangered Species Act, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (c) federal proposed, federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 - Special Status Species Management - have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
- (d) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;
- (e) when, in order to comply with a court order, which enjoins operations on the sale or otherwise requires the Bureau of Land Management to suspend operations, or;
- (f) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
  - 1. species have been discovered which were identified for protection through protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;
  - 2. when, in order to protect species which were identified for protection through protection buffer standards and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

Those operations necessary for a safe removal of personnel and equipment from the contract area and those directed by the Contracting Officer, which are required in order to leave the contract area in an acceptable condition will be permitted. Discontinued operations may be resumed upon receipt of written instructions and authorization by the Contracting Officer.

During any period of suspension, the Purchaser may withdraw performance and payment bond coverage aside from that deemed necessary by the Authorized Officer to secure cut and/or removed timber for which the Bureau of Land Management has not received payment, and/or unfulfilled contract requirements

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associated with harvest operations that have already occurred and associated post-harvest requirements.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five (5) percent of the First Installment amount listed in Section 3.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, et seq.). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Section 3.b. of the contract within 15 days after the bill for collection is issued, subject to Section 3.j. of the contract. The Purchaser shall not resume contract operations until the First Installment amount is fully restored.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the unamortized Out-of-Pocket Expenses for road or other construction required pursuant to Exhibit C of the contract shall be refunded or transferred to another BLM contract at the request of the Purchaser. Upon written notice from the Contracting Officer lifting the suspension, the Purchaser shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

In the event that operating time is lost as a result of the incorporation of additional contract requirements, or delays due to Endangered Species Act consultation with the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service, or court-ordered injunctions, the Purchaser agrees that an extension of time, without reappraisal, will constitute a full and complete remedy for any claim that delays due to the suspension hindered performance of the contract or resulted in damages of any kind to the Purchaser.

The Contracting Officer may determine that it is necessary to terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, protect species that have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or comply with a court

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order. Following the issuance of a written notice that cutting and removal rights will be terminated, the Purchaser will be permitted to remove timber cut under the contract, if allowed by the Endangered Species Act, survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or court order requirements necessitating the modification or termination.

In the event cutting and removal rights are terminated under this subsection, the Purchaser agrees that the liability of the United States shall be limited to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area. This calculation of liability shall utilize actual Purchaser costs and Government estimates of timber volumes. At the Authorized Officer's request, the Purchaser agrees to provide documentation of the actual costs incurred in the performance of the contract. In addition, the Purchaser shall be released from the obligation to pay the contract price for any timber which is not authorized to be removed from the contract area.

The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraphs, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures Act cannot be interpreted, in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

(D) MISCELLANEOUS PROVISIONS

- (1) M-2 The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows: If the entire sale is check scaled, the purchase price of this contract shall be reduced by three thousand and no/100 (\$3,000.00) dollars. In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of three thousand and no/100 (\$3,000.00) dollars which is



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equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling. Scaling shall be conducted in accordance with the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale, by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

(E) FIRE PREVENTION

- (1) F-1 Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall, prior to the operation of power driven equipment in construction or logging operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer.
- (2) F-1a Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:
  - (a) At least three (3) days prior to the operation of power-driven equipment during any operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer and the State of Oregon Department of Forestry.
  - (b) Provide and maintain on the contract area in good working order, and immediately available, the following equipment for use during closed fire season or periods of fire danger:
    1. F-2a Fire fighting tools shall be kept at each landing or at such other place as the Authorized Officer shall designate whenever employees are working on the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters, "For Fire Only." The box shall have a hinged lid and a hasp by which the lid can be sealed. One box may serve two landings not over six hundred (600) feet apart. When filled, the box shall not weigh over two hundred (200) pounds. The fire tools shall be in good condition, be tight on strong handles, and have sharp cutting edges. There shall be not less than four (4) tools in each box nor less than one (1) tool for each employee working on the contract area. Three-fourths

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(3/4) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

2. F-2b At each landing or such other place as the Authorized Officer shall designate during periods of operation one (1) tank truck of three hundred (300) gallons or more capacity with a minimum of five hundred (500) feet of 1½ inch hose (must be adequate length to reach 200 feet beyond active work sites), six (6) 1½ inch wyes, six (6) 1½ inch to 1 inch reducers, three (3) 1½ inch nozzles and three (3) 1 inch nozzles. One (1) three hundred (300) gallon fire engine may be substituted for each required 300 gallon tank truck, provided that the total capability to pump and deliver water remains unchanged. Each fire engine / tank truck shall be equipped with a pump capable of delivering a minimum of forty (40) gallons per minute (gpm) water flow at one hundred fifty (150) pounds per square inch (psi) engine pressure through fifty (50) feet of 1½ inch fire hose. The pump may be either power take off driven or truck-mounted auxiliary engine driven, or portable. All equipment shall be acceptable to and approved by the Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670. All hose couplings shall have the standard thread adopted by the BLM (1 ½ inches National Hose Thread (NH), 1 inch National Pipe Straight Hose Thread (NPSH) or be provided with suitable adapters. At the close of each working day, all bulldozers and fire/tank trucks shall be filled with fuel and made ready for immediate use. All fire/tank trucks shall be filled with water and made available for immediate use.
3. F-2c Serviceable cell phone or radio equipment able to provide prompt and reliable communication between the contract area, Medford BLM District Office, and Oregon Department of Forestry. Such communication shall be available during periods of operation including the time watchman service is required.
4. F-2d A pair of headlights capable of being quickly attached to each bulldozer used on the contract area. The headlights shall be adequate to provide illumination sufficient to allow use of the bulldozers for fire fighting and construction of fire lines at night.
5. F-2f A headlamp for each employee in the woods crew adequate to provide sufficient illumination for night firefighting. A headlight shall be of the type that can be fastened to the head so as to allow

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independent use of the hands. At least one extra set of batteries shall be provided for each such headlight.

6. F-2f Two (2) back-pack pumps at each landing and one (1) at each tail block, all to be kept full of water and in good operating condition.

7. F-2g A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Authorized Officer and a size 0 or larger shovel shall be carried during the closed fire season or periods of fire danger by each falling crew and each buckner using a power saw on the contract area. Such fire extinguisher shall be filled and in effective operating condition and shall at all times be immediately available to the operator when the saw is being fueled or the motor of the saw is running. Any fueling of a power saw shall be done in an area which has first been cleared of all flammable material. Power saws shall be moved at least twenty (20) feet from the place of fueling before the engine is started. Each power saw shall be equipped with an exhaust system and a spark arresting device which are of types approved by the Authorized Officer.

(c) F-5 Where blocks and cables are used on the contract area during periods of fire danger, the Purchaser shall remove all flammable material at least ten (10) feet from the place where the tail or any other block will hang when the cable is tight. Such clearings shall be inspected periodically by the Purchaser and shall be kept free of flammable material.

(3) F-9 During Oregon Department of Forestry regulated use closure, no smoking shall be permitted outside of closed vehicles.

(F) SLASH DISPOSAL

(1) SD-1 Fire Hazard Reduction. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction measures required by this contract:

(a) SD-1a LOP AND SCATTER Lop and scatter all slash in all the harvest units as shown on Exhibit A. All top and side branches must be free of the central stem so that such stem is reduced to the extent that it is within

BIG GRAVES SALVAGE TIMBER SALE  
SPECIAL PROVISIONS

eighteen (18) inches of the ground at all points. Slash includes all woody material (brush, limbs, tops, unmerchantable stems, or chunks) severed, uprooted, or broken from live plants as a result of Purchaser's operations under the terms of this contract. Lop and scatter shall be completed in accordance with Exhibit S as directed by the Authorized Officer.

1. All slash shall be arranged in a discontinuous pattern across the forest floor.
2. All slash shall be loped to no more than eight (8) feet in length.

- (b) SD-1f LANDINGS Within twenty (20) feet of the edge of each landing pile, all tops, broken pieces, limbs and debris more than one (1) inch in diameter at the large end and longer than two (2) feet in length shall be piled within fourteen (14) days of completion of hauling logs from that landing. Landing piles shall be kept free of dirt and located off of the driving surface of roads and at least fifteen feet (15) from any Reserve Tree and/or as directed by the Authorized Officer.

Upon completion of landing piling, the Purchaser shall prepare the landing piles for burning by constructing a fireline by hand or machine approximately eighteen (18) inches wide and down to mineral soil around each pile to prevent escaped fire. Landing piles shall be less than sixteen (16) feet in height and width. Cover piles with large enough piece of four (4) millimeter thick black plastic to ensure a dry ignition spot, generally ten (10) foot by ten (10) foot. The Purchaser is required to furnish the covering materials. The timing of this covering work shall be in accordance with instructions from the Authorized Officer. If the structure of the landing piles will not permit adequate consumption of piled debris by burning, the Purchaser shall re-pile them at the direction of the Authorized Officer.

1. Cull material greater than 12" in diameter at the small end shall be yarded back into the unit.
- (2) SD-5 The Purchaser shall perform logging residue reduction and site preparation work on approximately two hundred fifty (250) acres of harvest area located in Harvest Units as shown on Exhibit A.
- (a) The required work shall consist of any treatment or combination of treatments listed in the table below, as determined by the Authorized Officer and specified in writing by the Contracting Officer. The number of acres of each treatment shall be determined by the Authorized Officer.

**BIG GRAVES SALVAGE TIMBER SALE**  
**SPECIAL PROVISIONS**

Treatment	Cost/Acre
Lop and Scatter	\$42.00
Machine Pile Landing Decks	\$100.00/hour
Cover & Fireline Landing Decks	\$30.00

- (b) The following treatments were assumed for appraisal purposes on this contract:

Appraised Treatment	Acres	Cost/Acre	Total Cost Per Treatment
Lop and Scatter	250	\$42.00	\$10,500.00
Machine Pile Landing Decks	33 hrs	\$100 /hr	\$3,300.00
Cover & Fireline Landing Decks	25	\$30.00	\$750.00
<b>Total Appraised Cost</b>			<b>\$14,550.00</b>

- (c) The Total Purchase Price set forth in Section 2 shall be adjusted in a unilateral modification executed by the Contracting Officer by the amount that the total cost of the site preparation treatments designated pursuant to Section 42(F)(4)(SD-5)(a) differs from fourteen thousand five hundred fifty and no/100 (\$14,550.00) dollars, as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 42(F)(3)(SD-5)(a).
- (d) Lop and Scatter shall be done in accordance with Section 42(F)(1)(a)(SD-1a), Machine Pile, Fireline and Cover Landing Decks shall be done in accordance with Section 42(F)(1)(b)(SD-1f).

**(G) LOG EXPORTS**

- (1) LE-1 All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export from the United States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8¾) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and

BIG GRAVES SALVAGE TIMBER SALE  
SPECIAL PROVISIONS

construction timber, regardless of size, manufactured to standards and specifications suitable for end-product uses; (2) chips, pulp, and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacturing of eight and three quarters ( $8\frac{3}{4}$ ) inches in thickness or less; (6) shakes and shingles.

Substitution will be determined under the definition found in 43 CFR 5400.0-5(n).

The Purchaser is required to maintain and upon request to furnish the following information:

- (a) Date of last export sale.
- (b) Volume of timber contained in last export sale.
- (c) Volume of timber exported in the past twelve (12) months from the date of last export sale.
- (d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
- (e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.
- (f) Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

In the event the Purchaser elects to sell any or all of the timber sold under this contract in the form of unprocessed timber, the Purchaser shall require each party buying, exchanging, or receiving such timber to execute a Form 5460-16 (Certificate as to Nonsubstitution and the Domestic Processing of Timber). The original of such certification shall be filed with the Authorized Officer. Additionally, when the other party is an affiliate of the Purchaser, the Purchaser will be required to update information under item (2) of Form 5450-17 (Export Determination) and file the form with the Authorized Officer.

In the event an affiliate of the Purchaser has exported private timber within twelve (12) months prior to purchasing or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in a form specified by the Authorized Officer and furnish the information to the Authorized Officer.

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber

BIG GRAVES SALVAGE TIMBER SALE  
SPECIAL PROVISIONS

Removed Report) which shall be executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

Unless otherwise authorized in writing by the Contracting Officer, the Purchaser shall brand clearly and legibly one end of all logs with a scaling diameter (small end inside bark) of over 10 inches, prior to the removal of timber from the contract area. All loads of 11 logs or more will have a minimum of 10 logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of 10 logs or less. One end of all branded logs to be processed domestically will be marked with a 3 square inch spot of highway yellow paint. The purchaser will stop trucks for accountability monitoring at mutually agreed upon locations when notified by the Authorized Officer.

If multiple trailers (mule trains) are used, each bunked load shall be considered an individual load, and these guidelines will apply to each bunked load. If a flatbed stake trailer is used, each bundle will be treated as a separate load.

At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. Any increased costs for log branding and painting shall be the responsibility of the Purchaser.

In the event of the Purchaser's noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in Section 10 of this contract. In addition, the Purchaser may be declared ineligible to receive future awards of Government timber for a period of one year.





## Big Graves Salvage T.S. Seasonal Restriction Matrix ORM07-TS-19-11

	Unrestricted Period
	Restricted To Dry Condition
	Restricted To Dry Condition, Waiver Required

\* Operations will be suspended if unacceptable damage to residual trees occur.

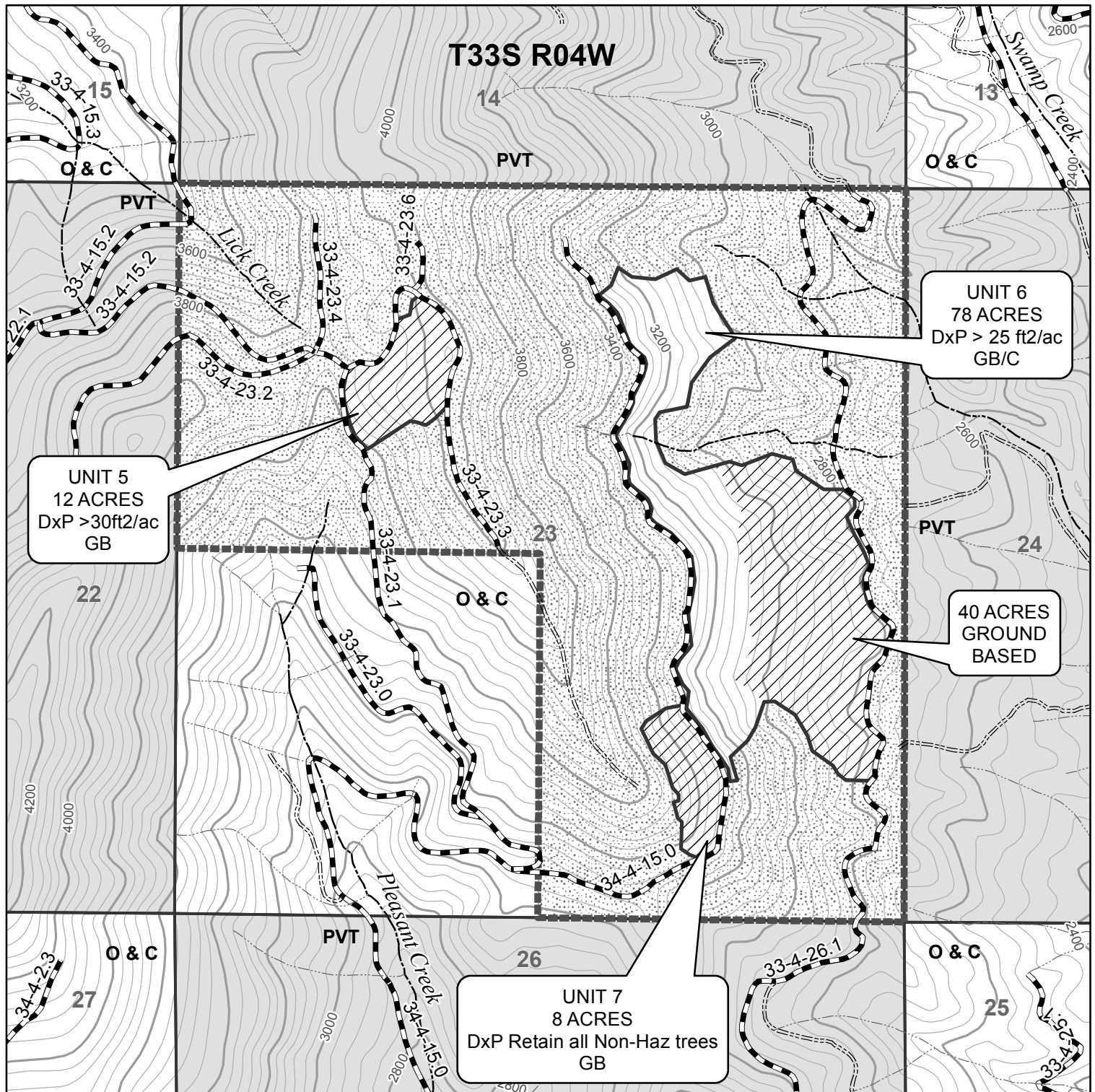
\*\* In-stream work periods for culvert cleaning are June 15th- September 15th

Dry Condition Haul = Loading, hauling, and certain non-emergency road maintenance activities (including blading of aggregate roads, rocking, and cross drain installation) would not occur on hydrologically-connected rocky or natural surface roads when water is flowing in the ditchlines or during any conditions that would result in any of the following: surface displacement such as rutting or ripples; continuous mud splash or tire slide; fines being pumped through road surfacing from the subgrade and resulting in a layer of surface sludge; road drainage causing a visible increase in stream turbidities; or any condition that would result in water being chronically routed into tire tracks or away from designed road drainage during precipitation events. Hauling on natural surface or hydrologically-connected rocky roads would not resume for a minimum of 48 hours following any storm event that results in ½ inch or more precipitation within a 24 hour period, and until road surface is sufficiently dry to prevent any of the above conditions from reoccurring.

Dry Condition Ground-based harvesting and Temporary Route work = Ground-based harvesting & yarding, temporary route work, and rehabilitation activities would not occur when soil moisture at a depth of 4-6 inches is wet enough to maintain form when compressed, or when soil moisture at the surface would readily displace, causing ripples and ruts along equipment tracks. These conditions are generally found when soil moisture at a depth of 4-10 inches is between 15-25% depending on soil type.

Sale Area	Activity	Jan 1 15	Jan 15 1	Feb 1 15	Feb 15 1	Mar 1 15	Mar 15 1	Apr 1 15	Apr 15 1	May 1 15	May 15 1	Jun 1 15	Jun 15 1	Jul 1 15	Jul 15 1	Aug 1 5	Aug 5 15	Sep 1 15	Sep 15 1	Oct 1 15	Oct 15 1	Nov 1 15	Nov 15 1	Dec 1 15	Dec 15 1
<u>Ground-based Yard Units: 5, 7</u>	Manual Felling and Bucking*																								
	Ground-based Harvesting & Yarding																								
	Loading and Hauling																								
	Road Maintenance**																								
<u>Ground-based and Cable Yard Units: 2, 6, 8</u>	Manual Felling and Bucking*																								
	Ground-based Harvesting & Yarding																								
	Cable Yarding*																								
	Loading and Hauling																								
<u>Ground-based &amp; Cable Yard Units with Temporary Routes: 1, 3, 4</u>	All Rehabilitation Activities & Road Maintenance**																								
	Manual Felling and Bucking*																								
	Ground-based Harvesting & Yarding																								
	Cable Yarding*																								
	Loading and Hauling																								
	Temp Route Const., All Rehabilitation Activities & Road Maintenance**																								





0 375 750 1,500 2,250 3,000 Feet

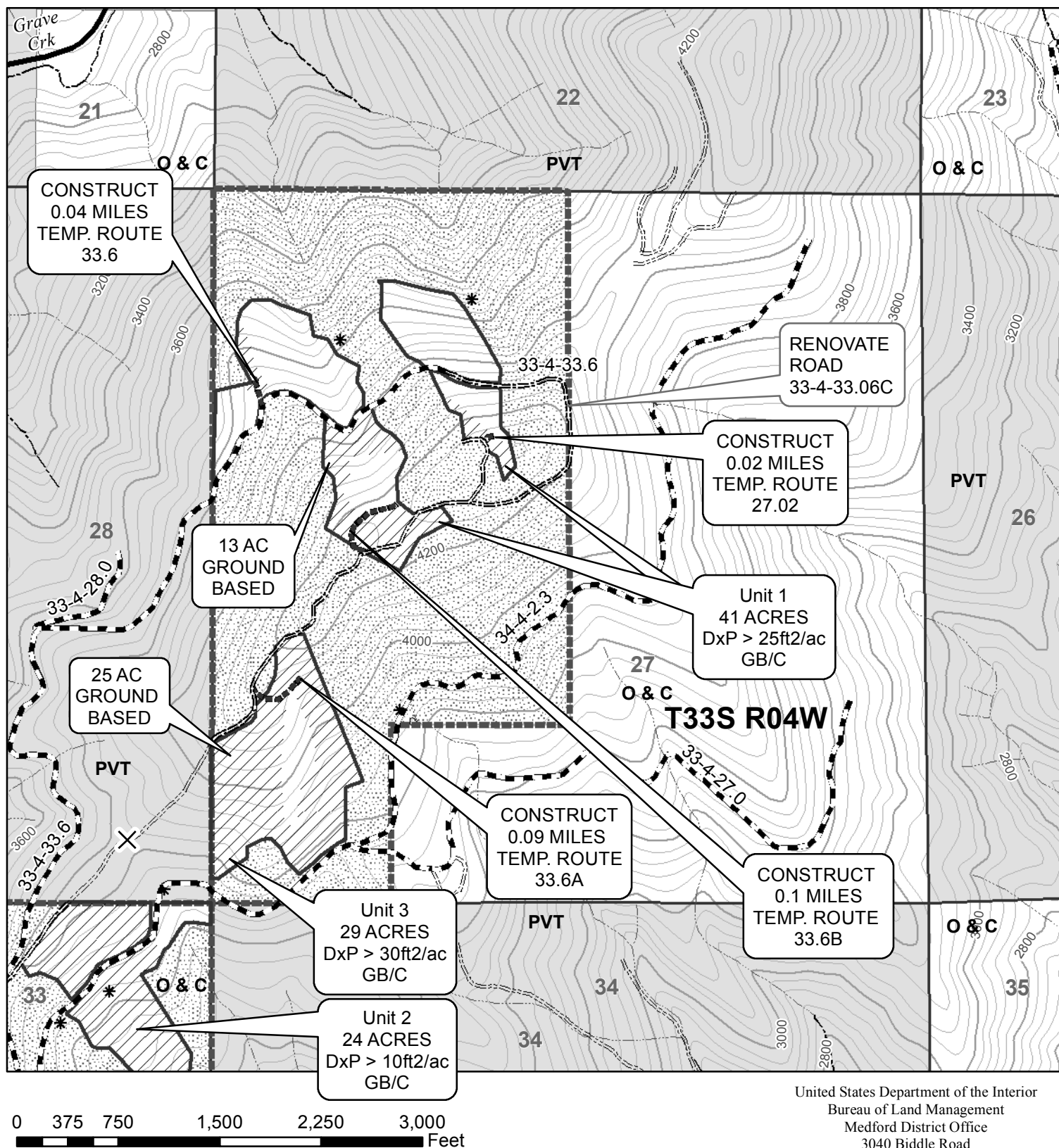
United States Department of the Interior  
Bureau of Land Management  
Medford District Office  
3040 Biddle Road  
Medford, OR 97504  
(541) 618-2200

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

Map created 11/1/18 SDT







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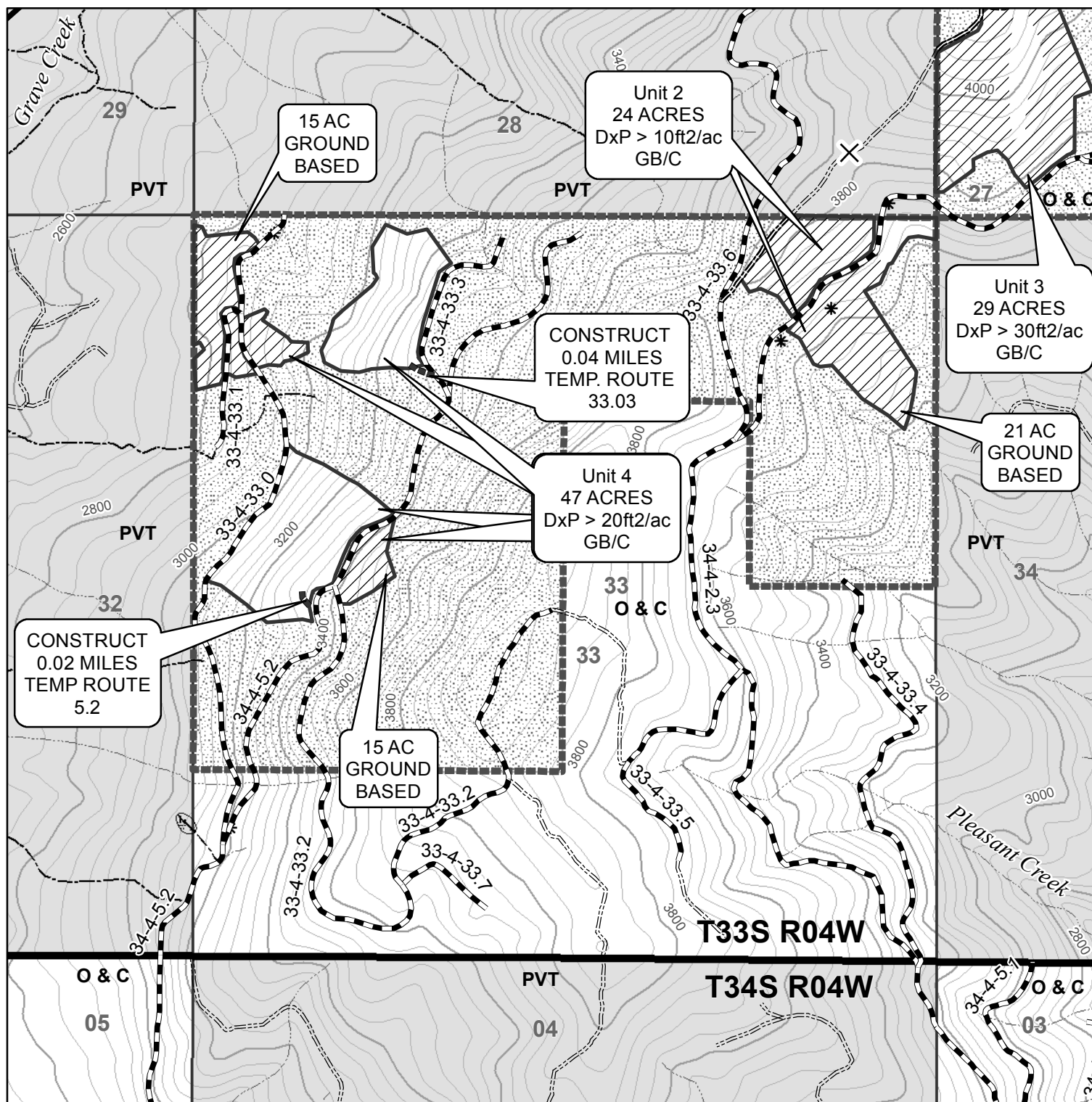
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40 FOOT CONTOUR INTERVAL

Map created 11/1/18 SDT







0 375 750 1,500 2,250 3,000 Feet

1 inch = 1,000 feet

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40 FOOT CONTOUR INTERVAL

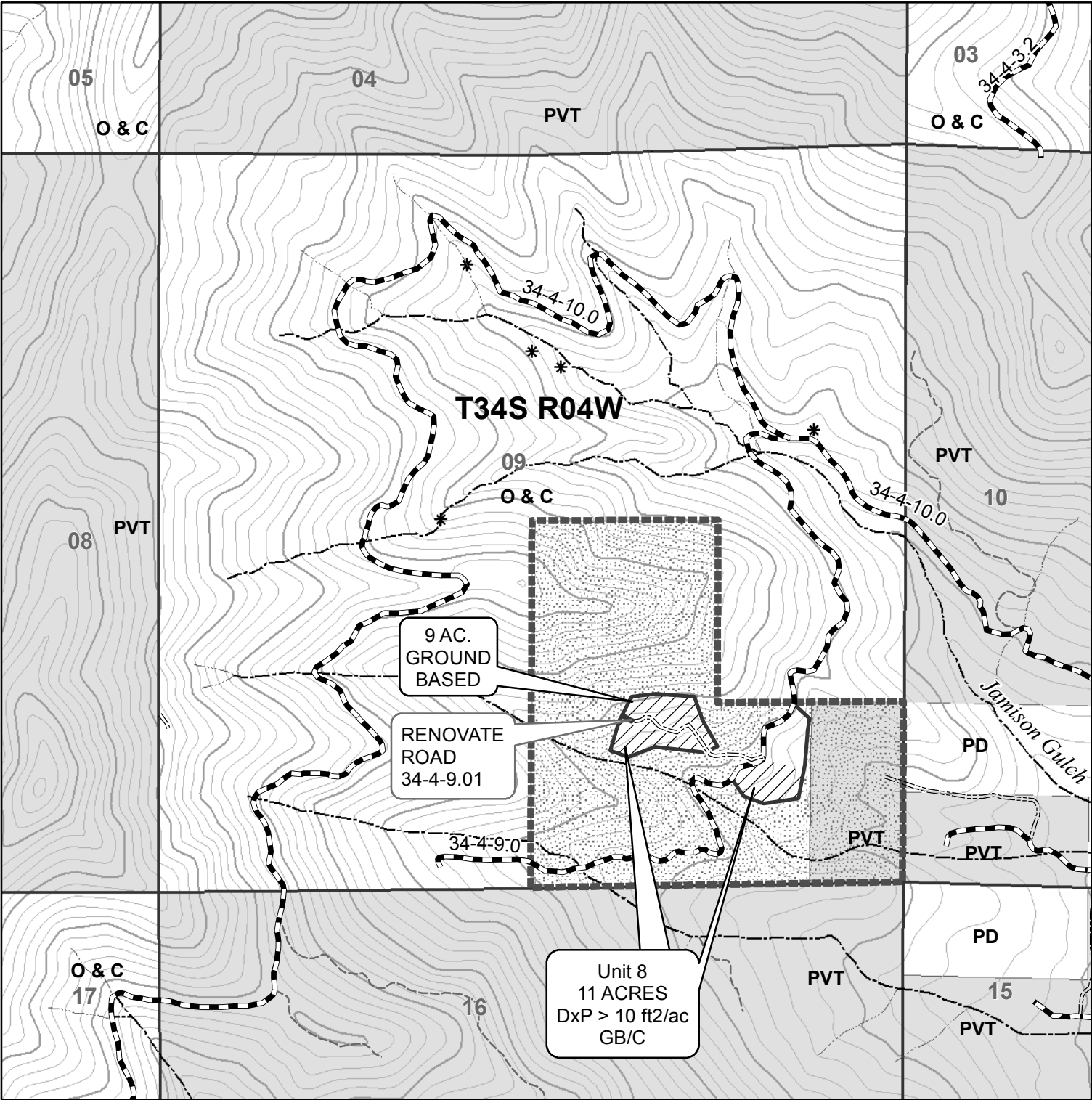
Map created 11/1/18 SDT

United States Department of the Interior  
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40 FOOT CONTOUR INTERVAL

Map created 11/1/18 SDT










United States Department of the Interior  
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## Legend

### Big Graves Salvage Units

-  Cable Yard
-  Ground Based Harvest and Yard
-  Contract Area Boundary
-  Reserve Area
-  Rocked Road
-  Natural Surface Road
-  County route (paved)
-  Temp Routes
-  Road\_Blocked

\* Springs



Waterbody

----- Perennial Stream

----- Intermittent Stream

----- Index 200-ft contour

----- Intermediate 40-ft contour



Township and Range



Sections

### Ownership


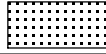



Bureau of Land Management



Other

### SUMMARY

DxP >25 ft <sup>2</sup> /ac -GB/C	DESIGNATION BY PRESCRIPTION > 25 SQ. FT. OF BASAL AREA PER ACRE RETENTION-GROUND BASED AND CABLE YARD (UNIT 1 AND 6)	119 ACRES
DxP >10 ft <sup>2</sup> /ac-GB/C	DESIGNATION BY PRESCRIPTION > 10 SQ. FT. OF BASAL AREA PER ACRE RETENTION-GROUND BASED AND CABLE YARD (UNITS 2 AND 8)	35 ACRES
DxP >30 ft <sup>2</sup> /ac-GB/C	DESIGNATION BY PRESCRIPTION >30 SQ. FT. OF BASAL AREA PER ACRE RETENTION - GROUND BASED AND CABLE YARD (UNIT 3)	29 ACRES
DxP >20 ft <sup>2</sup> /ac-GB/C	DESIGNATION BY PRESCRIPTION > 20 SQ. FT. OF BASAL AREA PER ACRE RETENTION - GROUND BASED AND CABLE YARD (UNIT 4)	47 ACRES
DxP >30 ft <sup>2</sup> /ac-GB	DESIGNATION BY PRESCRIPTION > 30 SQ. FT. OF BASAL AREA PER ACRE RETENTION - GROUND BASED YARD (UNIT 5)	12 ACRES
DxP All non-hazardous trees-GB	DESIGNATION BY PRESCRIPTION ALL NON-HAZARDOUS TREES RETAINED - GROUND BASED YARD (UNIT 7)	8 ACRES
	TOTAL TIMBER SALE UNIT AREA	250 ACRES
	RESERVE AREA	990 ACRES
	TOTAL CONTRACT AREA	1240 ACRES

ALL ACRES COMPUTED BY GPS TRAVERSE  
BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE



## Legend

UNIT	ACRES	PRESCRIPTION-LOGGING SYSTEM
1	41	DxP >25 ft <sup>2</sup> /ac -GB/C
2	24	DxP >10 ft <sup>2</sup> /ac-GB/C
3	29	DxP >30 ft <sup>2</sup> /ac-GB/C
4	47	DxP >20 ft <sup>2</sup> /ac-GB/C
5	12	DxP >30 ft <sup>2</sup> /ac-GB
6	78	DxP >25 ft <sup>2</sup> /ac-GB/C
7	8	DxP All non-hazardous trees-GB
8	11	DxP >10 ft <sup>2</sup> /ac-GB/C
<b>TOTAL</b>	<b>250</b>	

ALL ACRES COMPUTED BY GPS TRAVERSE  
BOUNDARIES OF HARVEST UNITS ARE POSTED  
AND PAINTED IN ORANGE

DxP = DESIGNATION BY PRESCRIPTION

GB = GROUND BASED YARD

C = CABLE YARD

GB/C = GROUND BASED AND CABLE YARD





**United States  
Department of the Interior  
Bureau of Land Management**

**Timber Appraisal**

---

<b>Sale Name:</b> Big Graves	<b>Sale Date:</b> Thursday, January 24, 2019
<b>BLM District:</b> Medford DO	<b>Unit of Measure:</b> 16' MBF
<b>Contract #:</b> ORM07-TS-2019.0011	<b>Contract Term:</b> 24 months
<b>Sale Type:</b> Advertised	<b>Contract Mechanism:</b> 5450-4
	Sale of Timber - Scale Sale

---

**Content**

**Timber Appraisal Summary  
Stumpage Summary  
Unit Summary  
Stump to Truck  
Transportation  
Engineering Allowances  
Other Allowances**

**Prepared By:** Caulfield, David J - 12/10/2018

**Approved By:** Rentz, George C - 12/10/2018

## Legal Description of Contract Area

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Jackson	33S	4W	23	NE1/4, NW1/4, SE1/4	Willamette
O&C	Jackson	33S	4W	27	NW1/4, N1/2SW1/4, SW1/4SW1/4	Willamette
O&C	Jackson	33S	4W	33	N1/2NE1/4, SE1/4NE1/4, NW1/4, N1/2SW1/4	Willamette
PD	Jackson	34S	4W	09	NW1/4SE1/4, S1/2SE1/4	Willamette

## Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	3,500.0	4,127.0	4,493.0	36,765	15,448	12,287
Incense-cedar	215.0	271.0	306.0	2,226	778	818
Sugar Pine	136.0	174.0	186.0	857	338	246
Ponderosa Pine	96.0	120.0	127.0	548	198	153
White Fir	49.0	60.0	62.0	374	83	83
<b>Totals</b>	<b>3,996.0</b>	<b>4,752.0</b>	<b>5,174.0</b>	<b>40,770</b>	<b>16,845</b>	<b>13,587</b>

## Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
250.0	0.0	0.0	250.0	16.0



## Logging Costs

Stump to Truck	\$716,834.04
Transportation	\$222,583.68
Road Construction	\$43,561.60
Maintenance/Rockwear	\$49,178.62
Road Use	\$0.00
Other Allowances	\$28,587.20
<b>Total:</b>	<b>\$1,060,745.14</b>
<b>Total Logging Cost per MBF:</b>	<b>\$265.45</b>

## Utilization Centers

Location	Distance	% of Net Volume
White City, OR	40.0 miles	100 %

## Profit &amp; Risk

Profit	9 %
Risk	3 %
<b>Total Profit &amp; Risk</b>	<b>12 %</b>

## Tract Features

<b>Quadratic Mean DBH</b>	19.1 in
<b>Average GM Log</b>	116 bf
<b>Average Volume per Acre</b>	16.0 mbf
<b>Recovery</b>	77 %
<b><u>Net MBF volume:</u></b>	
<b>Green</b>	0.0 mbf
<b>Salvage</b>	3,996 mbf
<b>Export</b>	0 mbf
<b><u>Ground Base Logging:</u></b>	
<b>Percent of Sale Volume</b>	57 %
<b>Average Yarding Slope</b>	0 %
<b>Average Yarding Distance</b>	145 ft
<b><u>Cable Logging:</u></b>	
<b>Percent of Sale Volume</b>	43 %
<b>Average Yarding Slope</b>	0 %
<b>Average Yarding Distance</b>	128 ft
<b><u>Aerial Logging:</u></b>	
<b>Percent of Sale Volume</b>	0 %
<b>Average Yarding Slope</b>	0 %
<b>Average Yarding Distance</b>	0 ft

## Cruise

<b>Cruise Completed</b>	October 2018
<b>Cruised By</b>	Caulfield, Cannon, Parks, Darner, Worman, Rentz
<b>Cruise Method</b>	
PCMTRE 118 plots with a 1 in 6 sampling frequency using a 40 BAF.	

## Stumpage Computation

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF	Appraised Value
Douglas Fir	12,287	3,500.0	\$425.58	\$51.07	\$265.45	\$6.10	\$115.20	\$403,200.00
Incense-cedar	818	215.0	\$530.91	\$63.71	\$265.45	\$0.00	\$201.80	\$43,387.00
Sugar Pine	246	136.0	\$243.61	\$29.23	\$265.45	\$0.00	\$24.40 *	\$3,318.40
Ponderosa Pine	153	96.0	\$238.30	\$28.60	\$265.45	\$0.00	\$23.90 *	\$2,294.40
White Fir	83	49.0	\$321.18	\$38.54	\$265.45	\$0.00	\$32.20 *	\$1,577.80
<b>Totals</b>	<b>13,587</b>	<b>3,996.0</b>						<b>\$453,777.60</b>

\* Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value)

### Percent of Volume By Log Grade

Species	No. 1 & 2 Peeler	No. 3 Peeler	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Douglas Fir		4.0 %	4.0 %	58.0 %	34.0 %		

**Comments:** Price reduced \$100/mbf because of burnt timber.

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar				47.0 %	52.0 %	1.0 %	

**Comments:** Price reduced \$100/mbf because of burnt timber

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine			6.0 %	76.0 %	18.0 %		

**Comments:** Salvage pine prices.

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine			7.0 %	61.0 %	31.0 %	1.0 %	

**Comments:** Salvage pine prices

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir				51.0 %	49.0 %		

**Comments:** Price reduced \$100/mbf because of burnt timber.

### Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull
Douglas Fir	42	71

**Big Graves****Unit Summary****ORM07-TS-2019.0011****Unit: 1**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	496.0	585.0	637.0	1,741
Incense-cedar	35.0	44.0	50.0	134
Sugar Pine	22.0	28.0	31.0	40
Ponderosa Pine	16.0	20.0	21.0	25
White Fir	8.0	10.0	10.0	14
<b>Totals:</b>	<b>577.0</b>	<b>687.0</b>	<b>749.0</b>	<b>1,954</b>

**Net Volume/Acre: 14.1 MBF**

Regeneration Harvest	41.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>41.0</b>

**Unit: 2**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	345.0	407.0	443.0	1,211
Incense-cedar	21.0	26.0	29.0	79
Sugar Pine	13.0	17.0	18.0	24
Ponderosa Pine	9.0	11.0	12.0	15
White Fir	5.0	6.0	6.0	8
<b>Totals:</b>	<b>393.0</b>	<b>467.0</b>	<b>508.0</b>	<b>1,337</b>

**Net Volume/Acre: 16.4 MBF**

Regeneration Harvest	24.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>24.0</b>

**Unit: 3**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	417.0	492.0	535.0	1,463
Incense-cedar	25.0	31.0	35.0	95
Sugar Pine	16.0	20.0	22.0	29
Ponderosa Pine	11.0	14.0	15.0	18
White Fir	6.0	7.0	7.0	10
<b>Totals:</b>	<b>475.0</b>	<b>564.0</b>	<b>614.0</b>	<b>1,615</b>

**Net Volume/Acre: 16.4 MBF**

Regeneration Harvest	29.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>29.0</b>

**Unit: 4**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	675.0	797.0	867.0	2,372
Incense-cedar	40.0	51.0	58.0	154
Sugar Pine	26.0	33.0	35.0	46
Ponderosa Pine	18.0	22.0	24.0	29
White Fir	9.0	11.0	12.0	16
<b>Totals:</b>	<b>768.0</b>	<b>914.0</b>	<b>996.0</b>	<b>2,617</b>

**Net Volume/Acre: 16.3 MBF**

Regeneration Harvest	47.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>47.0</b>

**Unit: 5**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	172.0	203.0	221.0	606
Incense-cedar	10.0	13.0	15.0	39
Sugar Pine	7.0	8.0	9.0	12
Ponderosa Pine	5.0	6.0	6.0	7
White Fir	2.0	3.0	3.0	4
<b>Totals:</b>	<b>196.0</b>	<b>233.0</b>	<b>254.0</b>	<b>668</b>

**Net Volume/Acre: 16.3 MBF**

Regeneration Harvest	12.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>12.0</b>

**Unit: 6**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	1,122.0	1,321.0	1,439.0	3,935
Incense-cedar	68.0	85.0	96.0	255
Sugar Pine	42.0	54.0	57.0	76
Ponderosa Pine	30.0	38.0	39.0	47
White Fir	15.0	18.0	19.0	24
<b>Totals:</b>	<b>1,277.0</b>	<b>1,516.0</b>	<b>1,650.0</b>	<b>4,337</b>

**Net Volume/Acre: 16.4 MBF**

Regeneration Harvest	78.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>78.0</b>

**Unit: 7**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	115.0	136.0	148.0	404
Incense-cedar	7.0	9.0	10.0	26
Sugar Pine	4.0	6.0	6.0	8
Ponderosa Pine	3.0	4.0	4.0	5
White Fir	2.0	2.0	2.0	3
<b>Totals:</b>	<b>131.0</b>	<b>157.0</b>	<b>170.0</b>	<b>446</b>

**Net Volume/Acre: 16.4 MBF**

Regeneration Harvest	8.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>8.0</b>

**Unit: 8**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	158.0	186.0	203.0	555
Incense-cedar	9.0	12.0	13.0	36
Sugar Pine	6.0	8.0	8.0	11
Ponderosa Pine	4.0	5.0	6.0	7
White Fir	2.0	3.0	3.0	4
<b>Totals:</b>	<b>179.0</b>	<b>214.0</b>	<b>233.0</b>	<b>613</b>

**Net Volume/Acre: 16.3 MBF**

Regeneration Harvest	11.0
Partial Cut	0.0
Right of Way	0.0
<b>Total Acres:</b>	<b>11.0</b>

Total Stump To Truck	Net Volume	\$/MBF
\$716,834.04	3,996.0	\$179.39

### Stump to Truck: Falling, Bucking, Yarding, & Loading

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable: Medium Yarder	GM MBF	2,034.0	\$160.77	\$327,006.18	
Track Skidder	GM MBF	2,718.0	\$135.27	\$367,663.86	
<b>Subtotal</b>				<b>\$694,670.04</b>	

### Additional Costs

Item	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Deadman Anchor	Each	33.0	\$450.00	\$14,850.00	
Lift Tree	Each	9.0	\$150.00	\$1,350.00	
<b>Subtotal</b>				<b>\$16,200.00</b>	

### Additional Moves

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Loader	Hour	14.0	\$134.00	\$1,876.00	
Cable: Medium Yarder	Hour	6.0	\$134.00	\$804.00	
Harvester/Forwarder	Hour	14.0	\$134.00	\$1,876.00	
Track Skidder	Hour	22.0	\$64.00	\$1,408.00	
<b>Subtotal</b>				<b>\$5,964.00</b>	

Total	Net Volume	\$/MBF
\$222,583.68	3,996.0	\$55.70

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
White City, OR	40.0	White City, OR	GM MBF	4,752.0	\$46.84	\$222,583.68	100 %

### Engineering Allowances

Total	Net Volume	\$/MBF
\$92,740.22	3,996.0	\$23.21

Cost Item	Total Cost
Road Construction:	\$43,561.60
Road Maintenance/Rockwear:	\$49,178.62
Road Use Fees:	\$0.00



Total	Net Volume	\$/MBF
\$28,587.20	3,996.0	\$7.15

**Environmental Protection**

Cost item	Total Cost
Barricades	\$375.00
Seeding and Mulching	\$3,018.72
Equipment Washing	\$1,000.00
Equipment Washing	\$900.00
Ripping	\$1,128.80
<b>Subtotal</b>	<b>\$6,422.52</b>

**Logging**

Cost item	Total Cost
Skid Location	\$1,458.40
Waterbar Skyline Corridors	\$291.68
Waterbar Skids	\$3,000.00
Landing Construction	\$2,500.00
<b>Subtotal</b>	<b>\$7,250.08</b>

**Road Construction, Maintenance, Use, & Decommissioning**

Cost item	Total Cost
Stream and Culver Cleaning	\$364.60
<b>Subtotal</b>	<b>\$364.60</b>

**Slash Disposal & Site Prep**

Cost item	Total Cost
Cover & Fireline Landing Decks	\$750.00
Lop and Scatter	\$10,500.00
Machine Pile Landing Decks	\$3,300.00
<b>Subtotal</b>	<b>\$14,550.00</b>

**Comments:**

Landing clean up is included in machine pile landing decks.

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT (BLM)**

<b>Contract No.:</b> ORM07-TS19-11
<b>Sale Name:</b> Big Graves
<b>Issuing Office:</b> Medford District

**EXHIBIT B  
SCALE SALE**

**PURCHASE PRICE SCHEDULE AND MEASUREMENT SPECIFICATIONS**

I. **Total Actual Purchase Price** - In accordance with Section 3.(d). of the contract, the Purchaser agrees to pay the Government for the timber sold under the contract in accordance with the following schedule and measurement requirements. Timber sold is comprised of Merchantable Timber, Merchantable Timber Remaining, and Other Timber as defined below. In the event an Extension of Time is approved, the prices per measurement unit are subject to readjustment (refer to Section 9 of the contract).

Schedule of Species, Measurement Units, and Prices		
Species	Measurement Unit	Price Per Measurement Unit
Douglas-fir	MBF	
Incense-cedar	MBF	
Sugar Pine	MBF	
Ponderosa Pine	MBF	
White Fir	MBF	

II. **Merchantable Timber** - All timber which can be cut into logs, which equal or exceed the following specifications, shall be considered merchantable timber. Purchaser shall pay for same in accordance with Sec. 3 of the contract at the unit prices shown in Section I of this Exhibit.

Schedule of Minimum Material Specifications			
Species and Products	Length	Diameter (inside bark at small end)	Net Scale
All Species	8 feet	8 inches	33 1/3% of gross volume of any log segment or 10 bf.

III. **Merchantable Timber Remaining - Measurement Requirements** - The remaining volume of any merchantable sold timber on the contract area shall be determined as provided in Section 3.(e). of the contract. Purchaser shall pay for same in accordance with Sec. 3 of the contract at the unit prices shown in Section I of this Exhibit.

IV. **Scaling**

A. **Log Rule and Measurement** - All logs shall be scaled according to the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale. A Scaling Authorization Form (OR 5300-18) must be completed prior to beginning of operations. If sample log scaling is agreeable to

Purchaser and the Contracting Officer, the procedures will be agreed upon in writing regarding sample design, number of log sorts, expansion of sample volumes for computation of Merchantable Timber volume, etc.

**B. Scaling Service** - Log scaling services shall be provided and performed by BLM personnel or parties under contract to BLM.

1. All logs shall be scaled and volumes determined by BLM or a certified contract scaler.
2. The BLM scaler or contract scaler is designated to collect Eastside MBF scale data from all loads.

**C. Other Timber** - If any timber is of a species or size not listed in Section II of this Exhibit (above) or is of a quality different from merchantable timber described herein, the Authorized Officer shall establish volumes and values in accord with Standard BLM methods.

**D. Defect Caused by Abnormal Delay** - Scaling deductions made for rot, check or other defect resulting from abnormal delay in scaling caused by Purchaser shall be recorded separately and charged to the Purchaser in accordance with Section 3. of the contract.

**E. Log Presentation** - Purchaser shall present logs so that they may be scaled in an economical and safe manner in accordance with the Memorandum(s) of Agreement for Yard Scaling required in Section IV.G.5. of this Exhibit.

**F. Check Scale** - The Government will conduct check scales as set forth in the following section.

Normally a check scale includes at least 200 short logs (20 feet or less) or at least 100 multiple-segment logs. Sample the species and defect situation as fairly as possible. Individually analyze more complex scaling situations and increase the number of logs check scaled if necessary.

The following standards will be used to determine the proficiency of individual scalers.

Gross Scale. A variance of one percent in gross scale is the standard unless otherwise justified.

Net scale. The allowable variance is as follows:

Check scaler's percent defect in logs	Scalers allowable variance
0-10 percent	2 percent
over 10 percent	.2 x percent defect to a maximum of 5 percent

Determinations as to volume of timber made by a government check scaler in conformance with the standards as set forth herein shall be final. All loads check scaled by BLM will be identified with the check scaler's initials legibly marked or painted in the face of the first log in each load. When such checks show a variance in scale in excess of acceptable standards, in two or more consecutive check scales, an

adjustment to the volume reported as scaled will be made by BLM. Such adjustments will be made based on the difference between available BLM check scales and the original scale during the period covered by the unsatisfactory check scales. Unless otherwise approved in writing by the Authorized Officer, the volume to which this difference will be applied will be 50 percent of the volume scaled between the last satisfactory check and the first unsatisfactory check, 100 percent of the volume scaled during the unsatisfactory check, and 50 percent of the volume between the last unsatisfactory check scale and the next satisfactory check scale.

#### **G. Accountability**

1. Purchaser shall notify the Authorized Officer three (3) days prior to starting or stopping of hauling operations performed under the contract.

2. All logs will be painted and branded at the landing and accounted for in accordance with Sec. 42(A)(1) of the contract. Each truck driver shall obtain a load receipt and a BLM scaler receipt from the Log Truck Ticket Book issued by the Authorized Officer and comply with the instructions specified on the cover of said book. While products are in transit, the truck driver shall display the load receipt and BLM scaler receipt on the bunk or wing log at the front of the load on the driver's side. All logs on each load shall be delivered to the destination listed on the woods receipt. The BLM scaler receipt shall be surrendered at the location of BLM scaling, the unloading location, or as requested by BLM.

3. The Purchaser shall not haul logs from the contract area on weekends; Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas, and New Year's holidays; or outside the hours of 4:00 a.m. to 8:00 p.m. daily, unless otherwise approved in writing by the Authorized Officer or designated in the Approved Logging Plan (Refer to Section 42 (B) of the contract).

4. The Purchaser shall furnish BLM a map showing the route which shall be used to haul logs from the timber sale area to the scaling location. Such route shall be the most direct haul route between the two points, unless another route is approved by BLM. The route of haul may be changed only with advance notice to and approval by BLM. The haul route map shall be attached to the Approved Logging Plan.

5. All loads will be scaled at scale locations listed on the Scaling Authorization (Form OR 5300-18) as approved by the Authorized Officer. The Purchaser shall ensure that all scale site owners listed on the Scaling Authorization enter into a Memorandum of Agreement for Yard Scaling before requesting BLM approval of the Scaling Authorization. Areas for scaling BLM logs will be designated on the ground and identified on the yard map as required in the Memorandum(s) of Agreement for Yard Scaling.

6. Any removal of logs from loaded trucks before being accounted for and/or scaled as required by the contract shall be considered a willful trespass and render the Purchaser liable for damages under applicable law. Any payment made for purchase of such logs shall be deducted from amount due because of trespass.

H. **Scaling Lost Products** - The value of lost loads shall be equal to the highest value load for the month in which the lost load is hauled regardless of where the highest value load is scaled. If no loads have been scaled in that month, value will be determined from the closest month in which loads were scaled.

V. **Estimated Volumes and Values** - The following volume estimates and calculations of value of timber sold are made solely as an administrative aid for determining payment amounts, when payments are due, the value of timber subject to any special bonding provisions, and other purposes specified in various portions of the contract. The cutting areas are shown on Exhibit A of the contract.

A. **Merchantable Timber Volume Removed from Contract Area** - The total volume of removed timber shall be determined using the Government's records of scaled volumes of timber skidded or yarded monthly, or a shorter period if agreed to by the Purchaser and Government, to loading points or removed from the contract area.

B. **Merchantable Timber Not Yet Removed from Contract Area** - The value of merchantable timber which has not been removed will be determined by multiplying the value per acre as shown below times the amount of acreage subject to the purpose of the value determination, as determined by the Authorized Officer:

Total Estimated Purchase Price And/Or Schedule of Volumes and Values for Merchantable Timber Not Yet Removed from Contract Area					
Cutting Area		Total Estimated Volume (MBF)		Total Estimated Purchase Price	
Cutting Area Number	Approximate Number of Acres	Volume per Acre	Total Volume	Value per Acre	Total Value
1	41	16	577		
2	24	16	393		
3	29	16	475		
4	47	16	768		
5	12	16	196		
6	78	16	1277		
7	8	16	131		
8	11	16	179		
Sale Total	250		3996		

OVERNIGHT LOAD CONTROL RECORD	
Log Delivery Location	
Timber Sale	
1	Time and Date Load Delivered
2	Truck Name
3	Load Receipt No.
4	Number of Logs
5	Signature of Person Receiving the Load
6	Date and Time Load Released
7	Signature of Person Releasing the Load

Instructions:

1. Designated individual fills out the heading and lines 1 through 5 (including FULL SIGNATURE in ink on line 5.)
2. Contractor or BLM scaler will fill out lines 6 and 7 (including FULL SIGNATURE in ink) when loads are released for scaling, otherwise the BLM and/or yard owner will be required to sign.
3. Unless otherwise agreed, scaler will attach this form to the Load Receipt.

OVERNIGHT LOAD CONTROL RECORD	
Log Delivery Location	
Timber Sale	
1	Time and Date Load Delivered
2	Truck Name
3	Load Receipt No.
4	Number of Logs
5	Signature of Person Receiving the Load
6	Date and Time Load Released
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Instructions:

1. Designated individual fills out the heading and lines 1 through 5 (including FULL SIGNATURE in ink on line 5.)
2. Contractor or BLM scaler will fill out lines 6 and 7 (including FULL SIGNATURE in ink) when loads are released for scaling, otherwise the BLM and/or yard owner will be required to sign.
3. Unless otherwise agreed, scaler will attach this form to the Load Receipt.







UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT

EXHIBIT C-1  
SHEET 1 OF 1

BIG GRAVE SALVAGE SALE  
TRACT NO. 19-11

PROJECT LOCATION

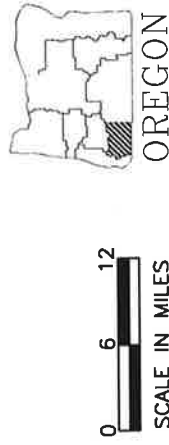
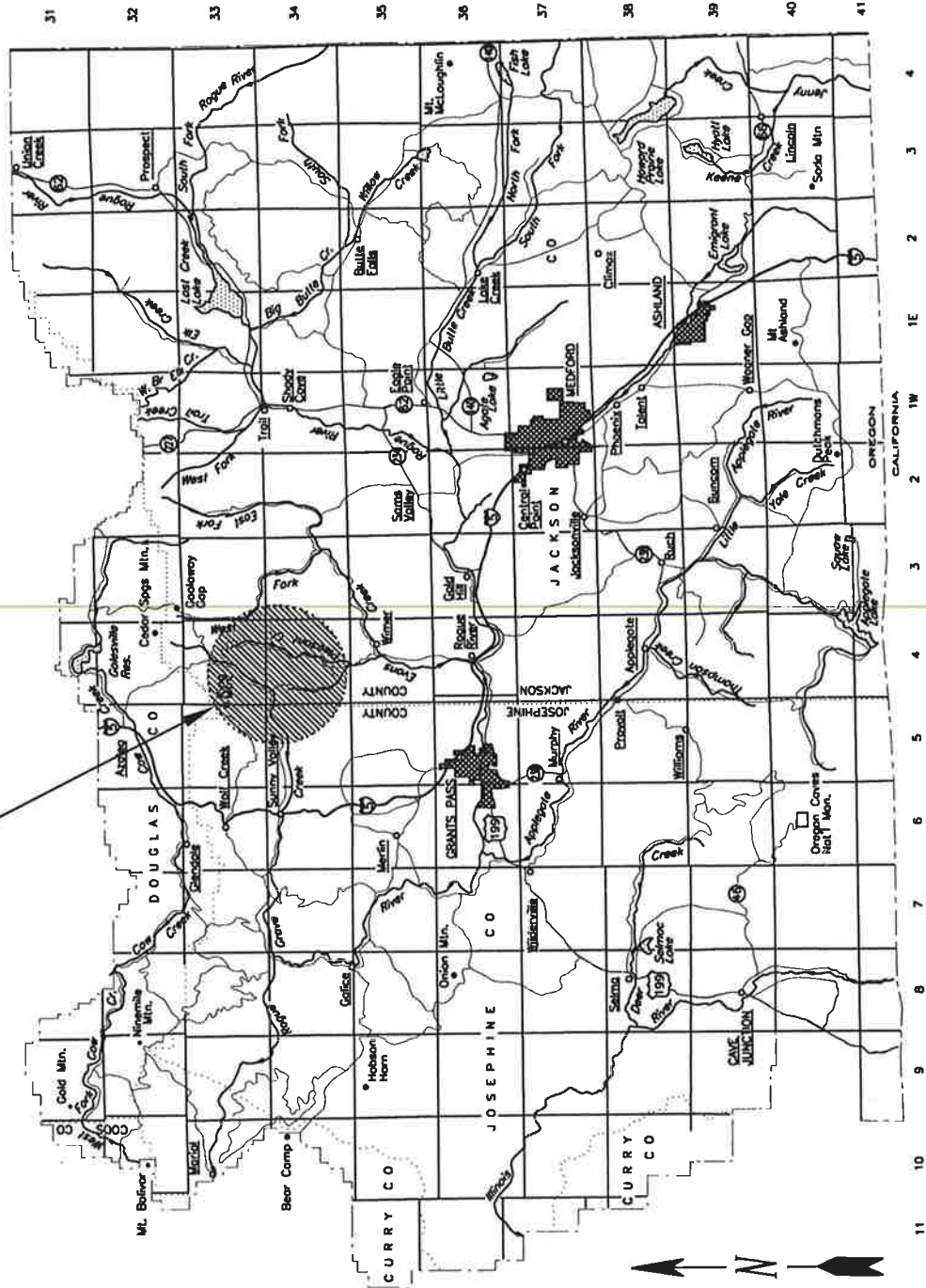


Exhibit No.	Description
C 1	TITLE SHEET
C 2	ROAD LOCATION MAP
C 3	ESTIMATE OF QUANTITIES
C 4	ROADSIDE BRUSHING DETAIL
C 5	TYPICAL ROAD RENOVATION DETAIL
C 6	ROAD RENOVATION WORKLIST
C 7	SPECIAL PROVISIONS
C 8	TIMBER SALE ROAD SPECIFICATIONS
D 1	ROAD MAINTENANCE SPECIFICATIONS
D 2	ROAD MAINTENANCE MAP
D 3	TYPICAL FULL DECOMMISSION
D 4	TYPICAL ROAD CAMOUFLAG
D 5	DRAINAGE AND EROSION CONTROL
D 6	ROAD DECOMMISSION WORKLIST

REV. NO.	DESCRIPTION	DATE	APPROV.
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON		
	TITLE SHEET		
MEDFORD	DESIGNED		
	REVIEWED		
	APPROVED		
	DRAWN: JMR		SCALE: AS SHOWN
	DATE: November 2018		SHEET 1 OF 1
	DRAWING NO. OR 117-1S19-11-C1		



BIG GRAVES SALVAGE SALE  
ROAD LOCATION MAP  
EXHIBIT C-2; PAGE 1 OF 1

U.S.D.I. BLM MEDFORD DISTRICT

T.33S., R.4W. WILL. MER.  
T.34S., R.4W. WILL. MER.

●—●

EXISTING GATE

⋈

EXISTING BARRICADE

⊠

APPROVED STOCKPILE

⊕

DESIGNATED DISPOSAL SITE

—

ROAD PROJECTS

▬

EXISTING ROAD

▬

EXISTING PAVED ROAD

▬

EXISTING PRIMITIVE ROAD

○—○

ROAD RENOVATION AND ROADSIDE BRUSHING

▲—▲

ROAD TO BE RENOVATED, BRUSHED, AND SPOT ROCKED

- - -

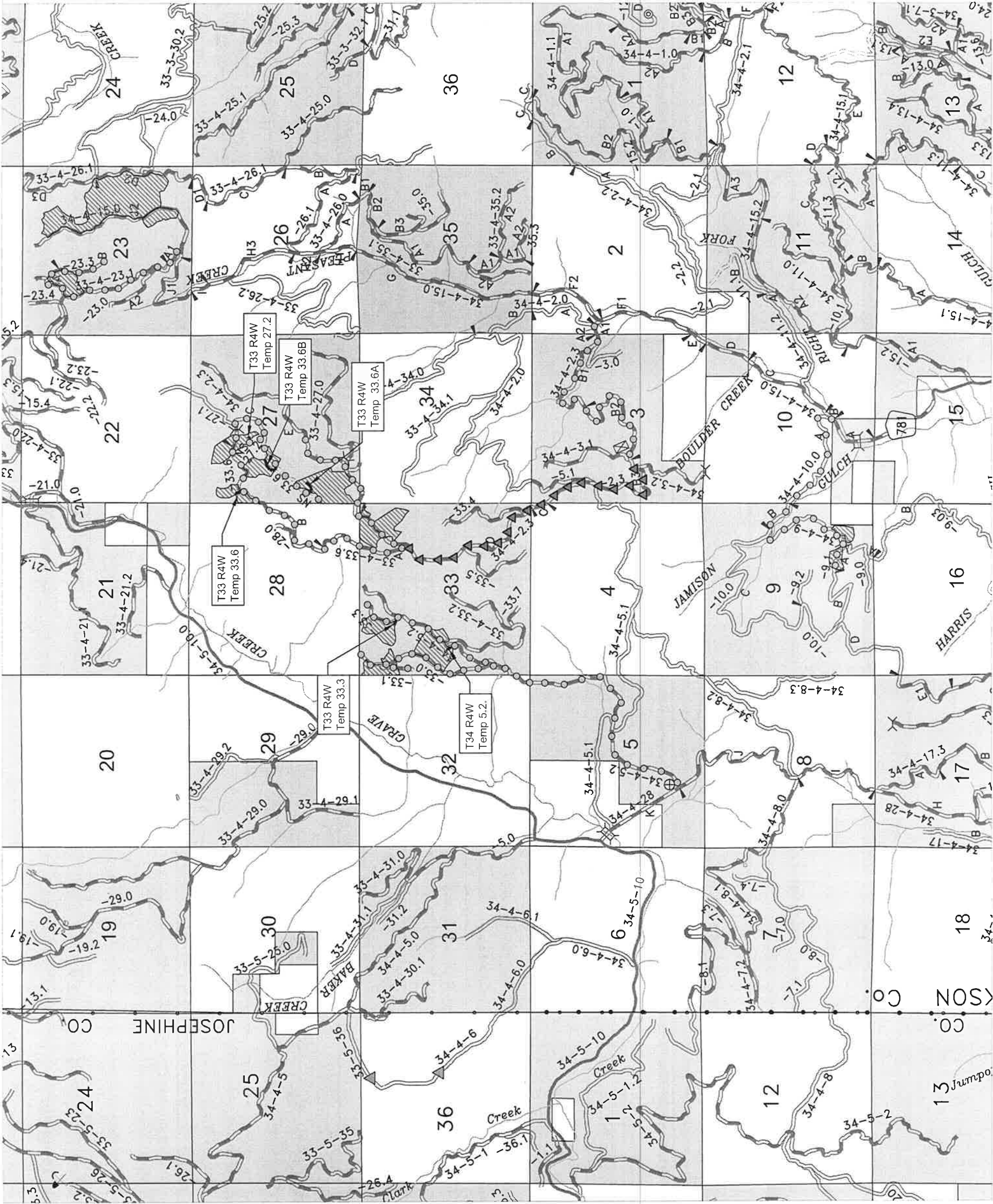
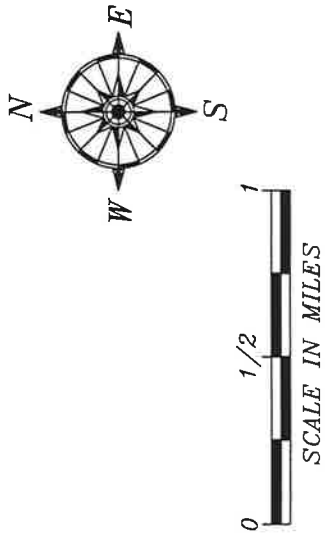
TEMPORARY ROAD TO BE CONSTRUCTED

■

BLM LAND

▨

TS UNITS







ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE				RENOVATION (Clean Culverts and Catch Basins)	RENOVATION MILE	SLIDE REMOVAL C.Y.	AGGREGATE**						SOIL STABILIZATION ACRE	ROADSIDE BRUSHING MILE	SLOPE STAKING STA	CONSTRUCT ARMORED WATERDIPS***	CONSTRUCT TEMPORARY ROAD MILE	EARTH /LOG BARRIER	INSTALL WATERBARS	CAMOUFLAGE ROAD ENTRANCE 100 FEET	SEED AND MULCH AC	PULLBACK MATERIAL CY	DE-COMPACT SOIL MILE	
					ROCK C.Y.	COMMON C.Y.	SIZE			CRUSHED SURFACE GRADE C-1				CRUSHED SURFACE GRADE D	CRUSHED SURFACE STOCKPILE	RIPRAP FOR SPLASH PADS CLASS 3															
							18"	24"	36"																						
SPECIFICATION NO.	UNIT	MP/STA	MP/STA	MILE/STA	200	300	300	400	400	400	400	500	500	500	900	1200	1200	1200	1400	1800	2100	2300	EA	MILE	EA	EA	EA	EA	CY	MILE	
33-4W-23.00		0.00	0.13	0.13								0.13									0.13										
33-4W-23.01		0.00	0.70	0.70								0.70									0.70										
33-4W-23.03		0.00	0.48	0.48								0.48									0.48										
33-4W-33.00		0.00	0.97	0.97								0.97									0.97										
33-4W-33.01		0.00	0.22	0.22								0.22			40						0.22										
33-4W-33.03		0.00	0.31	0.31								0.31									0.31										
33-4W-33.06		0.00	2.10	2.10								1.65									2.10					1	12				
34-4W-2.03		0.00	4.85	4.85								4.85									4.85										
34-4W-5.02		0.00	2.44	2.44								2.44									2.44										
34-4W-9.00		0.00	0.62	0.62								0.62									0.62										
34-4W-9.01		0.00	0.25	0.25								0.25									0.25					1	7				
34-4W-10.00		0.00	1.04	1.04								1.04									1.04										
NS 33S 4W 27.02		0.00	0.13	0.13								0.13									0.13										
NS 33S 4W 33.06		0.00	0.54	0.54								0.54									0.54										
T34 R4W Temp 5.02		0.00	0.02	0.02	0.04																		0.02					1	0.03		0.02
T33 R4W Temp 27.02		0.00	0.02	0.02	0.04																		0.02					1	0.03		0.02
T33 R4W Temp 33.03		0.00	0.04	0.04	0.08																		0.04					1	0.07		0.04
T33 R4W Temp 33.06		0.00	0.04	0.04	0.08																		0.04					1	0.07		0.04
T33 R4W Temp 33.06A		0.00	0.09	0.09	0.18																		0.09					1	0.15		0.09
T33 R4W Temp 33.06B		0.00	0.12	0.12	0.24																		0.12					1	0.20		0.12
TOTAL Page 1					0.66							13.04	1.74	40						260	14.78			0.33	2	36	6	0.55			0.33

\* For informational use only. quantities shown are not pay items.

**\*\* Indicate gradation.**

\*\*\* Armored water dip aggregate quantities calculated at 40 CY per AWD and are accounted for in aggregate column under 4" minus grade A.

\*\*\*\* Work to be completed under Exhibit D.

ITEM 900		ITEM 1200	
SIZE	GRADE	SIZE	GRADE
4 inch	(A)	1 1/2 inch	(C)
3 inch	(B)	1 inch	(D)
2 inch	(C)	3/4 inch	(E)
1 1/2 inch	(D)		

ALWAYS  
THINK  
SAFETY

U. S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT  
MEDFORD, OREGON

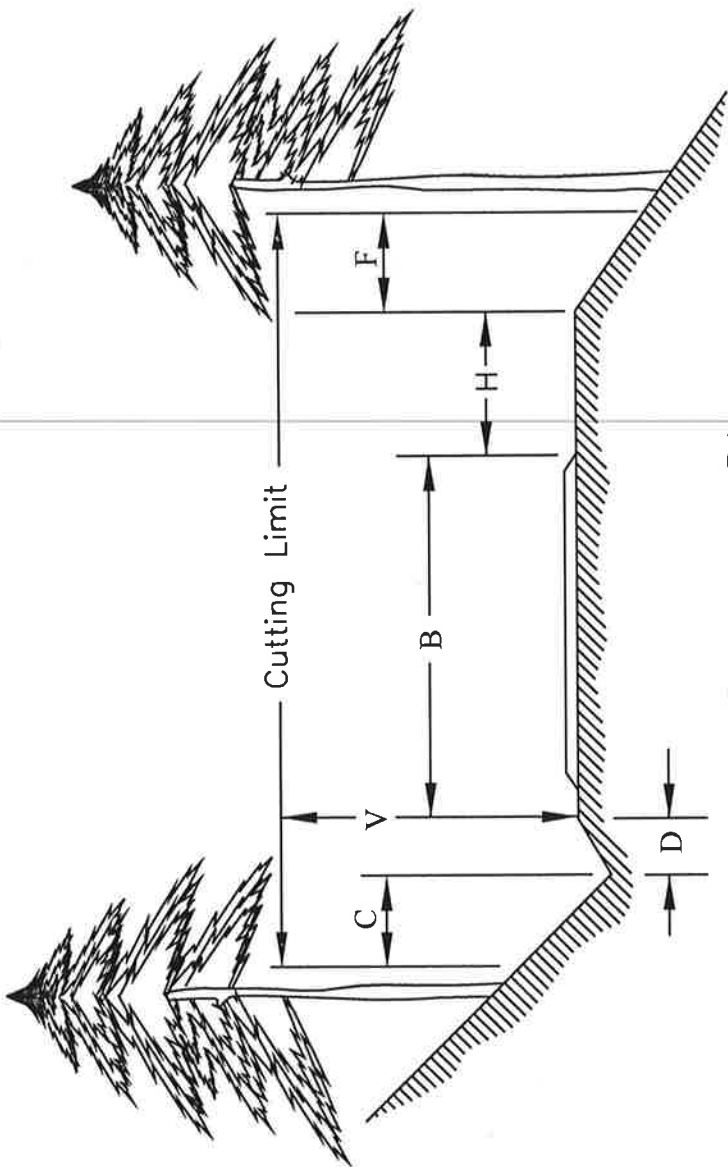
# ESTIMATE OF QUANTITIES\*

DRAWN: JWR	SCALE NONE
DATE: November 2018	SHEET 1 OF 1
DRAWING NO. OR 117-TS'9-11-C3pg	

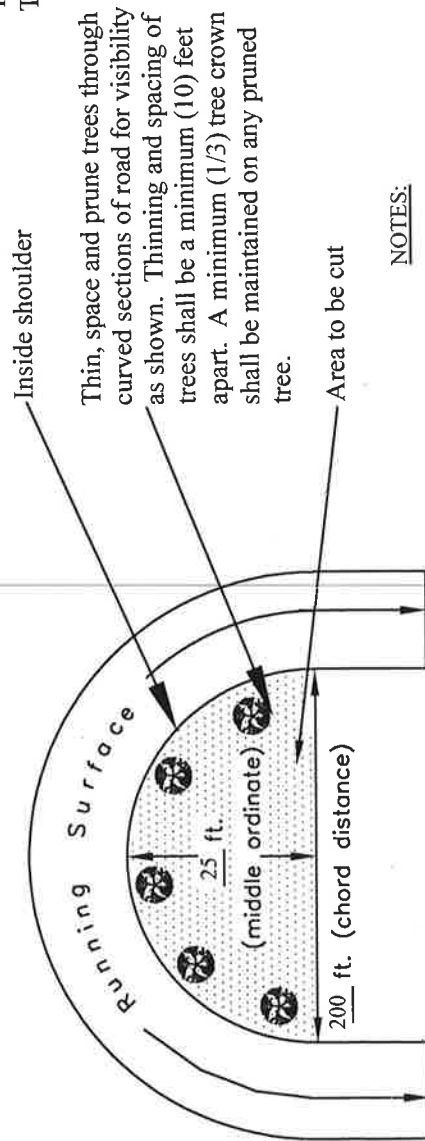


# Exhibit C-4

SHEET 1 OF 1



Brushing Diagram



Sight Distance Diagram

Cutting Limit =  $C + D + B + H + F$

$B$  = Basic lane width (includes turnouts)  
Width shall be determined by the PI

$C = 4$  ft - Distance to be brushed on cut slope beyond centerline of ditch

$D$  = Centerline of ditch to inside shoulder

$H$  = Variable distance between edge of basic lane and outside shoulder (does not include turnout widths)

$F$  = Distance to be brushed on fill slope beyond outside shoulder  
( $F = 4$  when  $H$  is 4 ft or less)  
( $F = 0$  when  $H$  is greater than 4 ft)

$V = 14$  ft - Height of vertical cutting limit

## Typical Basic lane widths

One lane low traffic volume ..... 12 to 16 ft  
One lane medium traffic volume .. 16 to 20 ft  
Two lane high volume traffic ..... 20 to 40 ft  
Turnouts ..... 10 ft

## NOTES:

Cutting and Removal of vegetation from ditches and roadway is incidental to brushing within cutting limits.

All distances shown are horizontal except for  $V$

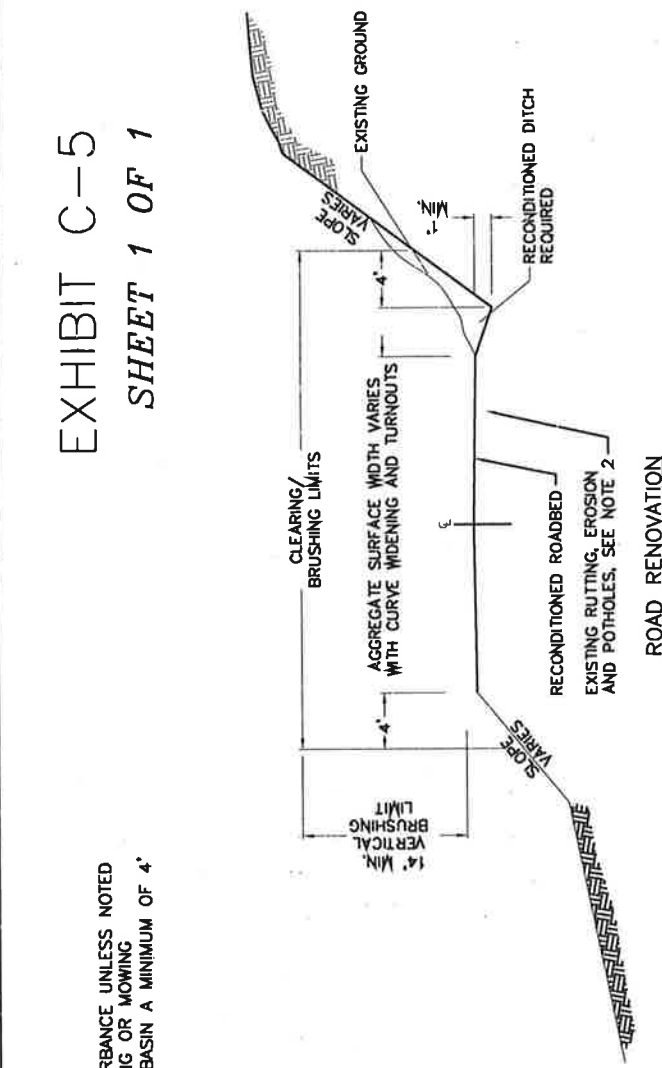
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
ROADSIDE BRUSHING DETAIL	DRAWN JWR	SCALE NONE	
	DATE November 2018	SHEET 1 OF 1	
	DRAWING NO.		OR 117-TS19-11-C4





# EXHIBIT C-5 SHEET 1 OF 1

CLEARING:  
1. NO GRUBBING OR ROOT DISTURBANCE UNLESS NOTED  
2. REMOVE VEGETATION BY CUTTING OR MOWING  
3. RECONITION CULVERT CATCH BASIN A MINIMUM OF 4' FROM CULVERT INLET

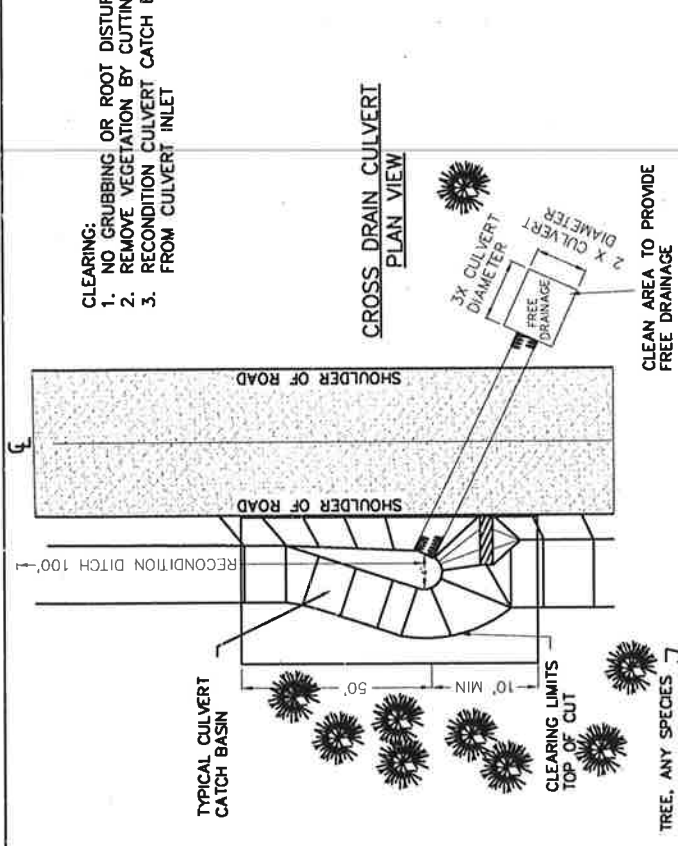


## ROAD RENOVATION

### NOTES:

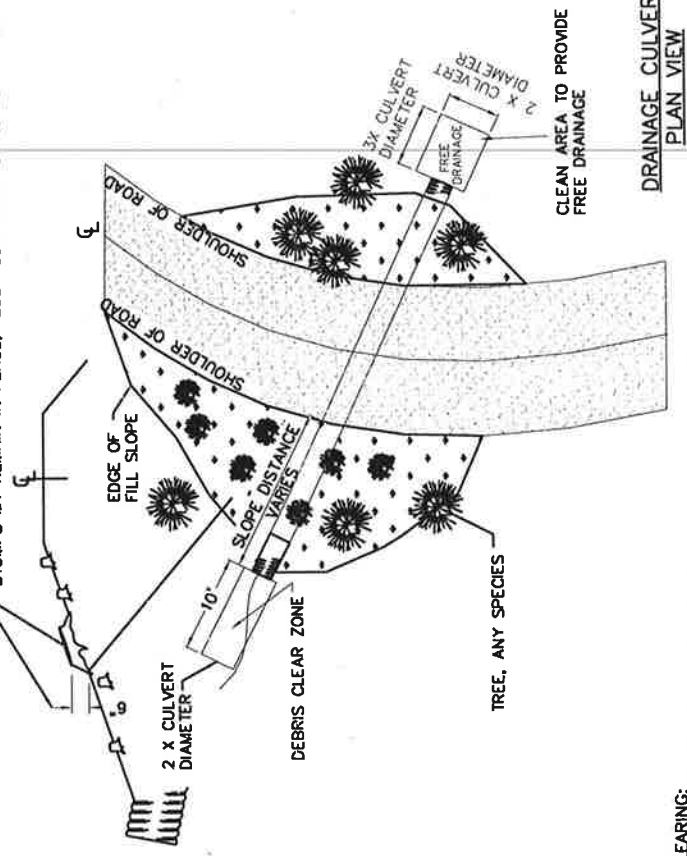
1. RECONITION ROADS AS SHOWN AND IN ACCORDANCE WITH SECTION 500 OF THE SPECIFICATIONS. REQUIRED RECONITIONING INCLUDES CURVE WIDENING AND TURNOUTS. DITCH RECONITIONING INCLUDES CLEANING CULVERT INLETS AND OUTLETS.
2. WHERE RUTTING, EROSION AND POTHOLES EXIST, SCARIFY TO DEPTH OF RUT/EROSION/POT HOLE, BLADE, SHAPE AND COMPACT EXISTING AGGREGATE OR NATIVE SURFACE MATERIAL.
3. REMOVE AND DISPOSE OF SLIDE, DITCH, AND CATCH BASIN MATERIAL. DISPOSAL SITE LOCATIONS AS STAKED ON THE GROUND. DISPOSAL/WASTE SITES SHALL BE APPROVED BY THE AUTHORIZED OFFICER PRIOR TO USE. SEE VICINITY MAP FOR DISPOSAL SITE LOCATIONS/ OR AS STAKED ON GROUND.
4. MATCH EXISTING TRAVEL WAY CROSS SLOPE. THE TRAVELED WAY SHALL BE SHAPED TO THE EXISTING CROSS SLOPE. EXISTING ROADS WHICH ARE CROWNED SHALL BE AT 3% FROM CENTERLINE ROAD, INSLOPED AS IS, OUTSLOPED AS IS.

## CROSS DRAIN CULVERT PLAN VIEW



INLET OF CULVERT FILL SLOPE. REMOVE ALL TREES, BRUSH AND DEBRIS FROM SHOULDER OF ROAD TO TOE OF FILL. STUMPS MAY REMAIN IN PLACE, FLUSH CUT WITHIN 6-INCHES PARALLEL TO THE SLOPE

## DRAINAGE CULVERT PLAN VIEW



CLEARING:  
1. NO GRUBBING OR ROOT DISTURBANCE UNLESS NOTED  
2. REMOVE VEGETATION BY CUTTING OR MOWING  
3. RECONITION INLET CHANNEL, REMOVE ALL DEBRIS AND OBSTRUCTION A MINIMUM OF 2 x CULVERT DIAMETER & 10 FEET LONG

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT - MEDFORD, OREGON

## TYPICAL ROAD RENOVATION DETAIL

DRAWN BY JWR	SCALE NONE
DATE November 2018	SHEET 1 OF 1
DRAWING NO. OR 117-TS19-11-C5	



## BIG GRAVE SALVAGE SALE Road Renovation Worklist

Renovation: This consists of road work to be performed on the road prior to its use. The work includes, but not limited to blading the road surface, brushing, cleaning catch basins, cleaning ditches, removing and installing culverts, reconstructing and constructing armored water dips, and placing crushed aggregate on approved road bed. Ditch cleaning shall only be done where ravel and other debris blocks the flow and causes erosion of the running surface.

Temporary roads constructed shall be fully decommissioned at the completion of timber harvest activities. See Exhibit D for decommissioning.

Road barricades removed during timber operations shall be replaced immediately after use. For activities that are not finished in one dry season, barricades shall be re-installed before the wet season, October 15<sup>th</sup>.

Jct.– Junction  
CY – Cubic Yards

### Road 33-4W-23.00

Aggregate

14' Width

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 34-4W-15.00. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.13	Jct. with 33-4W-23.01 to right. End Brushing. End Blading. End cleaning catch basins.

### Road 33-4W-23.01

Aggregate

14' Width

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 33-4W-23.00. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.70	Jct. with 33-4W-23.03 to right. End Brushing. End Blading. End cleaning catch basins.

### Road 33-4W-23.03

Aggregate

14' Width

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 33-4W-23.01. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.48	Turn Around. End brushing. End blading. End cleaning catch basins.

**Road NS 33S 4W 27.02**

**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.06. Begin Brushing. Begin Blading.
0.09	Jct. Temporary road 27.02 to right.
0.13	End Brushing. End Blading.

**Road 33-4W-33.00**

**Aggregate 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 34-4W-5.02. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.33	Begin outsloping road to drain.
0.36	End outsloping road to drain.
0.78	Jct. 33-4W-33.01 to left.
0.97	End Brushing. End Blading. End cleaning catch basins.

**Road 33-4W-33.01**

**Aggregate 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.00. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.06	Remove 40 CY of slide material and re-establish ditchline. Dispose of material at designated disposal area at milepost 0.03 on BLM road 34-4-5.02.
0.22	End Brushing. End Blading. End cleaning catch basins.

**Road 33-4W-33.03**

**Aggregate 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 34-4W-5.02. Begin Brushing. Begin Blading. Begin cleaning catch basins.
0.04	Jct. Temporary road 33.03 to left.
0.31	End Brushing. End Blading. End cleaning catch basins.

**Road 33-4W-33.06**

**Aggregate/Natural**

**14'-16' Width**

**MP**

**Remarks**

0.00	Jct. with 34-4W-2.03. Begin Brushing. Begin Blading.
1.33	Jct. Temporary road 33.06 to left.
1.65	End aggregate surface. Begin natural surface.
1.79	Remove existing barricade.
2.10	Jct. with NS 33S 4W 27.02 to right and NS 33S 4W 33.06. End Brushing. End Blading.

**Road NS 33S 4W 33.06**

**Natural**

**14' Width**

**MP**

**Remarks**

0.00	Jct. with 33-4W-33.06. Begin Brushing. Begin Blading.
0.18	Jct. Temporary road 33.06B to right.
0.43	Jct. Temporary road 33.06A to left.
0.54	End Brushing. End Blading.

**Road 34-4W-2.03**

**Aggregate**

**16' Width**

**MP**

**Remarks**

0.00	Jct. with 34-4W-15.00. Begin Brushing. Begin Blading.
1.69	Jct. 34-4W-3.01 to right. Stockpile to be used for spot rocking located 350 feet above road.
1.94	Begin spot rocking for 300 feet as staked on the ground. Place rock from designated stockpile at 4" depth matching existing road width.
2.80	Begin spot rocking for 300 feet as staked on the ground. Place rock from designated stockpile at 4" depth matching existing road width.
2.86	Begin spot rocking for 200 feet as staked on the ground. Place rock from designated stockpile at 4" depth matching existing road width.
2.99	Begin spot rocking for 200 feet as staked on the ground. Place rock from designated stockpile at 4" depth matching existing road width.

- 3.12 Begin spot rocking for 300 feet as staked on the ground. Place rock from designated stockpile at 4" depth matching existing road width.
- 3.68 Jct. 33-4W-33.06 to left.
- 4.85 End Brushing. End Blading.

**Road 34-4W-5.02**

**Aggregate**

**15' Width**

**MP**

**Remarks**

- 0.00 Jct. with 34-4W-15.00. Begin Brushing. Begin Blading.
- 1.62 Jct. 33-4W-33.00 to left.
- 2.00 Jct. Temporary road 5.02 to left.
- 2.44 Jct. 33-4W-33.03 to left. End Brushing. End Blading.

**Road 34-4W-9.00**

**Aggregate**

**15' Width**

**MP**

**Remarks**

- 0.00 Jct. with 34-4W-10.00. Begin Brushing. Begin Blading.
- 0.62 Jct. 33-4W-9.01 to right. End Brushing. End Blading.

**Road 34-4W-9.01**

**Natural**

**14' Width**

**MP**

**Remarks**

- 0.00 Jct. with 34-4W-9.00. Begin Brushing. Begin Blading.
- 0.01 Remove existing barricade.
- 0.25 End Brushing. End Blading.

**Road 34-4W-10.00**

**Aggregate**

**17' Width**

**MP**

**Remarks**

- 0.00 Jct. with 34-4W-15.00. Begin Brushing. Begin Blading.
- 1.04 Jct. 33-4W-9.00 to left. End Brushing. End Blading.

**Temporary Road T33 R4W Temp 5.02**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 34-4W-5.02. Begin Construction.
0.02	End Construction.

**Temporary Road T33 R4W Temp 27.02**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with NS 33S 4W 27.02. Begin Construction.
0.02	End Construction.

**Temporary Road T33 R4W Temp 33.03**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.03. Begin Construction.
0.04	End Construction.

**Temporary Road T33 R4W Temp 33.06**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.06. Begin Construction.
0.04	End Construction.

**Temporary Road T33 R4W Temp 33.06A**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with NS 33S 4W 33.06. Begin Construction.
0.09	End Construction.

**Temporary Road T33 R4W Temp 33.06B**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with NS 33S 4W 33.06. Begin Construction.
0.12	End Construction.

## SPECIAL PROVISIONS

1. Before beginning road construction operations for the first time or after a shutdown of seven or more days, the Purchaser shall notify the Authorized Officer of the date he plans to begin operations. The Purchaser shall also notify the Authorized Officer if he intends to cease operations for any period of 30 or more days.
2. DAMAGE:
  - The contractor shall protect and is responsible for any damage to existing telephone lines, transmission lines, fiber optic lines, fences, ditches, and other existing improvements as required in Section 14. Damage to utilities and existing improvements shall be promptly paid for or repaired to a condition which is, in the opinion of the Authorized Officer and the governing utility company, at least as good as the condition just prior to such damage.
3. DUST ABATEMENT:
  - The application of dust abatement materials such as Lignin, Mag-chloride, or approved petroleum based dust abatement products shall be restricted from application just after severely wet weather, at stream crossings, or other locations that could result in direct delivery to a water body.
  - All dust abatement applications shall be approved by the Authorized Officer prior to application.
4. PERMITS:
  - All permits required are the responsibility of the Purchaser.
5. WATER SOURCE:
  - The Purchaser is responsible for obtaining water, water sources shall be approved by the Authorized Officer prior to use. The Purchaser is responsible for all permits and fees from water sources on private or commercial sources.
6. EQUIPMENT
  - Construction equipment shall be washed prior to entering BLM lands. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required. Equipment shall be inspected the Authorized Officer prior to entering BLM lands. Provide 48 hours' notice of inspection to BLM prior to mobilization.
7. SOIL STABILIZATION:
  - All disturbed soil shall be seeded and mulched. Purchaser shall apply native grass seed and certified weed free straw mulch for soil stabilization operations. The Purchaser shall supply native grass seed and certified weed free straw. Native grass seed may be purchased from the BLM, if available.



8. ROAD RENOVATION:

- Road renovation shall generally take place between May 15<sup>th</sup> and October 15<sup>th</sup> of the same year. Waivers may be granted from the Authorized Officer for working outside of this time period. Seasonal restrictions for stream work and wildlife may still apply.
- Loose material cleaned from ditch lines and/or slide material shall not be sidecast or placed where it can enter wetlands, riparian reserves, floodplains, and waters of the State.

9. TEMPORARY ROUTES

- All temp routes and native surfaced roads (that were previously closed before timber sale activities began) shall be winterized if access is needed over two dry seasons by October 15<sup>th</sup>. Winterization includes water barring, seeding, mulching, and barricading. All temp routes shall be ripped, water barred, barricaded, seeded, and mulched after use unless otherwise specified.
- Clearing, grubbing, and excavation activities of temporary spur routes shown on Exhibit C shall be performed in accordance with Exhibit C-8.
- Construction of temporary routes shall be to minimum width.

12. COMMERCIAL AGGREGATE

- Aggregate furnished for this work shall be from an accredited weed free quarry or shall have been stockpiled in the period between November 1<sup>st</sup> and June 15<sup>th</sup> immediately prior to application. Aggregate which has been stockpiled between June 16<sup>th</sup> and October 31<sup>st</sup> of prior years will not be accepted. Aggregate crushed between June 16<sup>th</sup> and October 31<sup>st</sup> of the same application year shall not be stockpiled for more than two weeks before application.

13. WILDLIFE RESTRICTIONS

- Seasonally restrict mechanical roadside brushing activities (including chainsaws) and heavy equipment use to avoid disturbance to nesting NSOs and raptors from March 1st through September 30th within 200 feet of known NSO and raptor nests. This seasonal restriction could be waived if non-nesting status is determined.

14. WET SEASON HAUL

- The Purchaser may wet season haul, with the Authorized Officer's approval, on roads with durable rock surfacing and sufficient rock depth to resist rutting or development of sediment on road surfaces that drain directly to wetlands, floodplains, and waters of the State.
- If hauling activities during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul. Any costs for rocking and installation of additional drainage features will be at the Purchaser's expense and shall be completed in accordance with the plans and specifications shown in Exhibit C of this contract.

- No hauling shall occur on native surface roads during the wet season (generally Oct. 15 – May 15); exceptions may be made during dry conditions of the wet season pending approval from a BLM Authorized Officer.

## **TIMBER SALE ROAD SPECIFICATIONS**

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### **TABLE OF CONTENTS**

<b>SECTION</b>	<b>DESCRIPTION</b>
100	General
200	Clearing and Grubbing
500	Renovation and Improvement of Existing Roads
600	Watering
1200	Aggregate Surface Course - Crushed Rock
1700	Erosion Control
1800	Soil Stabilization
2100	Roadside Brushing

## **TIMBER SALE ROAD SPECIFICATIONS**

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### **GENERAL – 100**

101 - Pework Conference(s):

A prework conference will be held prior to the start of new construction, improvement, and renovation operations. The Purchaser shall request the conference at least 72 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representative(s), subcontractor(s) and/or his or their representative(s) and the Authorized Officer and/or his representative(s).

The purpose of the prework conference will be to review the required work, exhibits and specifications, and to establish a work schedule and a list of the Purchaser's representatives and subcontractor(s).

102 - Definitions:

AASHTO - American Association of State Highway and Transportation Officials. Current editions of tests and specifications.

Abrasion Resistance - The ability of a fabric surface to resist wear by friction.

ACI - American Concrete Institute

Apparent Opening Size (AOS) - Number of the U.S. Bureau of Standard sieve (or its opening size in millimeters or inches) having openings closest in size to the diameter of uniform particles which will allow 5 percent by weight to pass through the geotextile material when shaken in a prescribed manner. This is also referred to as Equivalent Opening Size (EOS).

ASTM - American Society for Testing and Materials.

Base Course - Surfacing structure consisting of crushed gravel or stone, crushed sandstone, pitrun rock, bank or river-run gravels, etc., to provide support and, in the event no surface course is placed, the running surface for traffic load.

BLM - Bureau of Land Management

Borrow - Excavated material required for embankments and other portions of the work.

## **TIMBER SALE ROAD SPECIFICATIONS**

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**Burst Strength** - The resistance of a geotextile material to rupture from pressure applied at right angles to the plane of the geotextile material under specified conditions, usually expressed as the amount of pressure causing failure. Rupture or burst results from tensile failure of the geotextile material.

**Culvert** - A pipe, pipe-arch, arch, or box structure constructed of metal, concrete, plastic or wood which provides an opening under the roadway primarily for the conveyance of liquids, pedestrians or livestock.

**Curve Widening** - Widening required on inside of curves to accommodate long log and equipment hauling trucks.

**Embankment** - A structure of soil, aggregate, or rock material placed on a prepared ground surface and constructed to subgrade.

**End Haul** - Excavated material moved, other than by dozer, to an embankment or waste area to prevent sidecasting material outside of the road prism.

**Excess Excavation** - Material from the roadway in excess of that needed for construction of the designed roadway (waste).

**Grab Tensile Strength** - A modified tensile strength of a geotextile material. The strength of a specific width of geotextile material together with the additional strength contributed by adjacent areas. Typically, grab strength is determined on a 12-inch-wide strip of geotextile material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

**Grading** - Leveling to grade, shaping and smoothing of a road subgrade; the shaping of roadside ditches as to grade and contour. In some instances includes smoothing of the cut bank.

**Nonwoven Geotextile Material** - A textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical or chemical means.

**Overhaul** - Distance excavated material is transported in excess of the distance included in the cost for excavation.

**Penetration Resistance** - The geotextile material property determined by the force required to penetrate a geotextile material with a sharp pointed object. Initial

## **TIMBER SALE ROAD SPECIFICATIONS**

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penetration is by separating the fibers. Further penetration is essentially a tearing process.

Percent Open Area - The net area of a geotextile material that is not occupied by geotextile material filaments, normally determinable only for woven and nonwoven geotextile material having distinct, visible, and measurable openings that continue directly through the geotextile material.

Permeability - The geotextile material property which permits water to be transmitted in the longitudinal or transverse planes of the geotextile material.

Pioneer Road - Temporary construction access built along the route of the project.

Piping - The process by which soil particles are washed in or through pore spaces in drains and filters or poorly compacted fill/backfill material.

Plans - The approved drawings, or exact reproductions thereof which show the locations, character, dimensions, and details of the work to be done.

Pore Size - The size of an opening between geotextile material filaments; apparent opening size (AOS) is used to quantify this geotextile material property.

Puncture Resistance - The geotextile material property determined by the force required to penetrate a geotextile material with a blunt object. Failure results in a tearing of the geotextile material.

Purchaser - The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through their, or its agents, employees, or contractors.

Reasonably Close Conformity - Compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified.

Reinforcement - Strengthening of concrete with iron bars or mesh: geotextile with geotextile material inclusion: subgrade with aggregate: etc.

Roadbed - The graded portion of the road within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

## **TIMBER SALE ROAD SPECIFICATIONS**

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Road Centerline - The longitudinal center of a roadbed.

Road Improvement - Work done to an existing road which improves it over its original design standard.

Road Renovation - Work done to an existing road which restores it to its original design.

Roadway - The portion of a road within limits of construction. Usually from the toe of the fill slope to a point where the cut slope intersects natural ground line.  
Synonym - road prism.

Scale - In quarrying, consists of the removal of loose or overhanging rock adhering to the solid face after a shot or a round of shots has been fired.

Scarification - The process of loosening or breaking up of the surface layer of soil or road, usually to a specified depth.

Separation - Function of geotextile material as a partition between adjacent materials to prevent mixing of those materials.

Shoulder - The portion of the roadbed contiguous with the traveled way designed for accommodation of stopped vehicles, safety, and lateral support of base and surface courses.

Spalls - Flakes or chips of stone.

Specifications - A general term applied to all directions, provisions, and requirements pertaining to performance of the work.

Specific Gravity - The ratio of the density of a material to the density of water obtained by weighing known volumes of both items in air. A specific gravity less than one implies that the material will float.

Structures - Bridges, culverts, catch basins, retaining walls, underdrains, flumes, splash pads, downspouts, and other project features which may be involved in the work and not otherwise classified in these specifications.

Subbase - Reinforcement of the subgrade with large particles of pitrun rock or

## **TIMBER SALE ROAD SPECIFICATIONS**

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crushed stone. Usually confined to roads having wet subgrades or subgrades with weak support characteristics.

Surface Course - Top layer of a road structure consisting of finely crushed gravels or asphalt designed to provide a smooth running surface for traffic load.

Subgrade - The top surface of a roadbed upon which the traveled way and shoulders are constructed.

Tensile Strength - The strength shown by a geotextile material subjected to tension as distinct from torsion, compression, or shear.

Tensile Stress - Strain Modulus - A measure of the resistance to elongation under stress. The ratio of the change in tensile stress to the corresponding change in strain.

Tensile Test - A test which subjects geotextile material to tensile forces and measures resultant stresses and strains.

Timber - Standing trees, downed trees, or logs which can be measured in board feet.

Traveled Way - The portion of the roadbed used for the movement of vehicles, exclusive of shoulders.

Typical Cross Sections - Cross-sectional plane of a typical roadway; showing natural ground line and designed roadway in relation to cut and fill, through cut, and through fill.

Turnout - Extra widening of the roadbed at appropriate intervals on single-lane roads for passing purposes.

Ultraviolet (UV) Radiation Stability - The ability of geotextile material to resist deterioration from exposure to sunlight.

Unaged Cloth - Cloth in condition received from the manufacturer or distributor.

Woven Geotextile Material - A textile structure comprising two or more sets of filaments of yarns interlaced in such a way that the elements pass each other at essentially right angles with one set of elements parallel to the geotextile material axis.



## **TIMBER SALE ROAD SPECIFICATIONS**

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102a - Tests Used in These Specifications:

AASHTO T 11 Quantity of rock finer than No. 200 sieve.

AASHTO T 27 Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.

AASHTO T 89 Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.

AASHTO T 90 Plastic limits and plasticity index of soil.

- a. Plastic limit - lowest water content at which the soil remains plastic.
- b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.

AASHTO T 96 Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.

AASHTO T 99 Relationship between soil moisture and density of soil.

Method A - 4" mold, soil passing a No. 4 sieve

25 blows/layer & 3 layers.

Method C - 4" mold, soil passing a 3/4 inch sieve

25 blows/layer & 3 layers.

Method D - 6" mold, soil passing a 3/4 inch sieve. 56 blows/layer & 3 layers.

AASHTO T 119 Slump of hydraulic cement concrete.

AASHTO T 152 Air content of freshly mixed concrete.

AASHTO T 166 Specific Gravity of compacted Bituminous Mixtures.

AASHTO T 176 Shows relative portions of fine dust or claylike materials in soil or graded aggregate.

AASHTO T 180 (OSHD 106-71) moisture density relationship of soil same as AASHTO T 99 proctor but uses a 10-lb rammer & 18-in drop height.

AASHTO T 191 Sand Cone. Density of soil in place: For subgrade use 6-inch or 12-inch cone. For rock surfacing for 1-1/2-inch minus to 3-inch minus use 12-inch cone.

## **TIMBER SALE ROAD SPECIFICATIONS**

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AASHTO T 205 Rubber balloon. Density of soil in place. Use for compacted or firmly bonded soil.

AASHTO T 209 Maximum Specific Gravity of Bituminous Paving Mixtures.

AASHTO T 210 Durability of aggregates based on resistance to produce fines.

AASHTO T 224 Correction for coarse particles in the soil.

AASHTO T 238 Density of Soil and Soil-Aggregate in place by nuclear methods.

AASHTO T 248 Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.

ASTM D 4564 Determination of relative density of cohesionless soils.

DMSO (dimethyl sulfide) Determines volume of expanding clays in aggregates. Usually associated with marine basalts.

- 103 - Compaction equipment shall meet the following requirements:
- 103f - Vibratory roller. The drum diameter shall be not less than 48 inches, the drum width not less than 58 inches, and have a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 vibrations per minute (VPM), corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 RPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled or drawn by a vehicle of sufficient horsepower to enable the unit to travel through a loose layer of material at a speed ranging from 0.9 mile to 1.8 miles per hour, as directed by the Authorized Officer.

The towing vehicle and roller or self-propelled unit meeting the above requirements shall be considered a vibratory roller unit.

- 103g - Vibratory compactor. Vibratory compactors shall consist of multiple or gang-type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.

- 103h - Drum drive self-propelled vibratory grid roller. The unit shall consist of one

## **TIMBER SALE ROAD SPECIFICATIONS**

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cylindrical drum with a drum diameter of not less than 56 inches, nor more than 66 inches and the drum width shall be 84 inches. Vibratory frequency shall be regulated in seeps from 1200 to 1800 vibrations per minute (VPM), and the centrifugal force developed shall be at least 40,000 pounds at 1800 RPM. The vibratory grid roller shall be self-propelled and have a power unit of not less than 112 horsepower. The "grid" design shall be a herringbone or z-bar pattern around the circumference of the drum. The grid bars shall be 1 inch in height and spaced not more than 8-1/2 inches apart.

- 103i - Other. Compaction equipment approved by the Authorized Officer.

### **CLEARING AND GRUBBING - 200**

- 201 - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans and as staked on the ground.
- 202 - Where clearing limits have not been staked, established by these specifications or shown on the plans, the limits shall extend 2 feet back of the top of the cut slope and 2 feet out from the toe of the fill slope.
- 203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202 as shown on the plans and as posted.
- 203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.
- 204 - Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground and protruding obstacles remaining as a result of the clearing operation in accordance with Subsections 204a, 204c, and 204d between the top of the cut slope and the toe of the fill slope.
- 204a - Stumps including those overhanging cut banks, shall be removed within the required excavation limits.

### **TIMBER SALE ROAD SPECIFICATIONS**

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- 204c - On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 204d - On areas to be occupied by embankments having heights greater than 4 feet, no stump or portion thereof shall remain within 3 feet of embankment subgrades or slope surfaces after grubbing is completed.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.
- 206 - Clearing and grubbing debris shall be disposed of by chipping in accordance with Subsection 209 and/or scattering in accordance with Subsection 210 and/or piling in accordance with Subsection 211 at the following road locations.

Road No.	From M.P.	To M.P.	Disposal Method
T34 R4W Temp 5.02	0.00	0.02	Scatter
T33 R4W Temp 27.02	0.00	0.02	Scatter
T33 R4W Temp 33.03	0.00	0.04	Scatter
T33 R4W Temp 33.06	0.00	0.04	Scatter
T33 R4W Temp 33.06A	0.00	0.09	Scatter
T33 R4W Temp 33.06B	0.00	0.12	Scatter

- 206a - Notwithstanding Subsections 204, 204a, 204d, and 205, clearing and grubbing debris resulting from landing construction shall be placed at disposal sites and shall not be covered with excavated material. Location of disposal sites will be determined by the Authorized Officer.
- 208b - Trees, firm logs, and other firm large pieces, (4) inches in diameter and (8) feet in length and larger and not removed from the contract area by the Purchaser, shall be piled at locations determined by the Authorized Officer.
- 209 - Clearing and grubbing debris shall be reduced to chips of an acceptable size and disposed of by scattering.
- 210 - Disposal of clearing and grubbing debris shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.

### **TIMBER SALE ROAD SPECIFICATIONS**

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- 210b - Clearing and grubbing debris and stumps and cull logs resulting from road construction on non-Government property shall be loaded and hauled to designated areas, as shown on the plan. Disposal shall be by scattering in accordance with Subsection 210 or piling in accordance with Subsection 211.
- 211 - Disposal of clearing and grubbing debris and stumps and cull logs shall be by piling on government lands outside of established clearing limits in an area and in a manner acceptable to the Authorized Officer.
- 212 - No grading will be permitted prior to completion and approval by the Authorized Officer of the required clearing and grubbing work, except that stump grubbing may proceed with the excavation of the road prism.
- 213 - No clearing or grubbing debris shall be left lodged against standing trees.

### **RENOVATION AND IMPROVEMENT OF EXISTING ROADS - 500**

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, minor excavation and/or embankment, cleaning and shaping drainage ditches, trimming vegetation from cut and embankment slopes, and cleaning and repairing drainage structures of existing roads in accordance with these specifications, as shown on the plans, and as marked on the ground with stakes.
- 502 - The existing road surface shall be bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes and as specified in the worklist.
- 502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 503a - Debris from the slide at the following location:

Road No.	M.P.
33-4W-33.01	0.06

shall be hauled to a designated disposal site at the following location:

## **TIMBER SALE ROAD SPECIFICATIONS**

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Road No.	M.P.
34-4-5.02	0.03

as shown on the plans and marked on the ground.

- 504 - Existing road surface shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i and as specified in the worklist.
- 504a - Minimum compaction required shall be 1 hour of continuous rolling for each 3 stations of road, or fraction thereof, as measured along the centerline per layer of material.
- 506 - The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- 508 - Vegetation encroaching on the roadbed and the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Subsection 2100 of these specifications.
- 509 - The finished grading shall be approved in writing by the Authorized Officer 3 days prior to surfacing operations. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations.

### **WATERING - 600**

- 601 - This work shall consist of furnishing and applying water required for the compaction of embankments, roadbeds, backfills, base courses, surface courses, finishing and reconditioning of existing roadbeds, laying dust, or for other uses in accordance with these specifications.

## **TIMBER SALE ROAD SPECIFICATIONS**

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- 602 - Water, when needed for compaction or laying dust, shall be applied at the locations, in the amounts, and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods.
- 603 - Water trucks used in this work shall be equipped with a distributing device of ample capacity and of such design as to ensure uniform application of water on the road bed.
- 605 - The Purchaser shall secure the necessary water permits and pay all required water fees for use of water sources selected by the Purchaser and approved by the Authorized Officer.

### **AGGREGATE SURFACE COURSE - 1200** **CRUSHED ROCK MATERIAL**

- 1201 - This work shall consist of loading, hauling and placing one or more layers of crushed rock material on roadbeds and base courses approved for placing crushed rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road at the purchaser's expense.
- 1202 - Crushed rock materials used in this work shall consist of quarry rock, stone, gravel, or other approved materials obtained from source(s) shown on the plans.
- 1202a - Crushed rock materials used in this work may be obtained from commercial source(s) selected by the Purchaser, providing the rock materials furnished comply with these specifications.
- 1203 - When crushed rock material is produced from gravel, not less than 65 percent by weight of the particles retained on the No. 4 sieve will have 2 manufactured fractured faces.

## **TIMBER SALE ROAD SPECIFICATIONS**

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- 1204 - Crushed rock material shall consist of hard durable rock fragments conforming to the following gradation requirements:

TABLE 1204

AGGREGATE SURFACE  
COURSE CRUSHED ROCK  
MATERIAL

Percentage by weight passing square mesh sieves  
AASHTO T 11 & T 27

GRADATION

Sieve Designation	C	C-1	D	D-1	E	E-1
1-1/2-inch	100	<b>100</b>	-	-	-	-
1-inch	-	-	100	100	-	-
3/4-inch	50-90	<b>60-90</b>	-	70-98	100	100
1/2-inch	-	-	-	-	-	70-98
No. 4	25-50	<b>30-55</b>	30-60	36-60	40-75	44-70
No. 8	-	<b>22-43</b>	-	25-47	-	30-54
No. 30	-	<b>11-27</b>	-	12-31	-	15-34
No. 40	5-25	-	5-30	-	5-35	-
No. 200	2-15	<b>3-15</b>	3-15	3-15	2-15	3-15

- 1205 - Crushed rock material retained on the No. 4 sieve shall have a percentage of loss of not more than 35 at 500 revolutions, as determined by AASHTO T 96.
- 1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T210.



## **TIMBER SALE ROAD SPECIFICATIONS**

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- 1207a - That portion of crushed rock material passing No. 4 sieve, including blending filler, shall have a sand equivalent of not less than 35, as determined by AASHTO T 176, except where that portion exhibits a sand equivalence of less than 35, the aggregate will be accepted if it complies with the additional requirement as follows:

TABLE 1207a

Sand Equivalent	Percent Passing #200 Sieve AASHTO T 27
34	9
33	8
32	7
31	6
30	5
29 or less	4

- 1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be obtained from sources approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.
- 1208a - Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.
- 1209 - Shaping and compacting of roadbed and/or base course shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsection 500 for placing on the roadbed and Subsections 900 for placing on the base course.
- 1210 - Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed and base course in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and staked on the ground. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved in writing by the Authorized Officer

### **TIMBER SALE ROAD SPECIFICATIONS**

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before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.

- 1210a - Crushed rock material used to repair or reinforce soft, muddy, frozen, yielding, or rutted roadbed shall not be construed as surfacing required by this specification.
- 1212 - Each layer of crushed rock material placed, processed, and shaped as specified shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted to full width by compacting equipment conforming to the requirements of Subsections 103f, 103g, 103h, or 103i. Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.
- 1215 - The Purchaser is authorized to remove crushed rock material, stockpile measure, from BLM stockpile(s) for placement on the road(s) in accordance with the requirements and details shown on the plans and as follows:

Stockpile No.	Willamette Meridian			Approx. Cu. Yds.	Grad.	Road No.
	Sec.	T.	R.			
1	3	34 S.	4 W.	260	3/4	34-4W-3.01

Approximately (0) cubic yards of additional crushed rock material required to complete the surfacing shall be furnished by the Purchaser in accordance with these specifications and as shown on the plans.

## **TIMBER SALE ROAD SPECIFICATIONS**

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### **EROSION CONTROL - 1700**

- 1701 - This work shall consist of measures to control soil erosion or water pollution during the construction operation through the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans.
- 1704 - The erosion control provisions specified under this Subsection shall be coordinated with the Soil Stabilization requirements of Section 1800.
- 1705 - The surface area of erodible earth material exposed at any one time by clearing and grubbing shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 1706 - The surface area of erodible earth material exposed at one time by excavation, borrow, or fill within the right-of-way shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 1707 - Completed and partially completed segments of the road at the following location:

Road No.	From M.P.	To M.P.
T34 R4W Temp 5.02	0.00	0.02
T33 R4W Temp 27.02	0.00	0.02
T33 R4W Temp 33.03	0.00	0.04
T33 R4W Temp 33.06	0.00	0.04
T33 R4W Temp 33.06A	0.00	0.09
T33 R4W Temp 33.06B	0.00	0.12

to be carried over the winter and early spring periods shall be stabilized by seeding and mulching in accordance with Section 1800.

- 1708 - Newly constructed roads to be carried over the winter period, shall be blocked to vehicular traffic.
- 1708a - Road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway using water bars, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to

## **TIMBER SALE ROAD SPECIFICATIONS**

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the roadway, as directed by the Authorized Officer. Portions of roads not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.

- 1711 - The Purchaser shall construct energy dissipators (splash pads) for pipe culverts conforming to the requirements and details shown on the respective exhibits and on the plans.

### **SOIL STABILIZATION – 1800**

- 1801 - This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications. This work is required for road acceptance under Section 18 of this contract.
- 1802 - Soil stabilization work consisting of seeding and mulching shall be performed on existing roads and designated locations (culvert replacements and installations) in accordance with these specifications at the locations specified in the worklist.
- 1802a - Soil stabilization work consisting of seeding and mulching shall be performed on new road construction, landings, disturbed areas, and disposal sites in accordance with these specifications and as shown on the plans.
- 1803 - Soil stabilization work as specified under Subsections 1802 and 1802a shall be performed during the following seasonal periods:

From: August 1	To: October 15 (of the same year )
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If soil stabilization of disturbed areas is not completed by the specified fall date, the Purchaser shall treat disturbed areas in accordance with Subsection 1707 and then complete the requirements of Section 1800 the next construction season. The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

- 1803a - The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.
- 1806a - Additional soil stabilization work consisting of seeding and mulching, may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in Sec. 12 of the contract,

## **TIMBER SALE ROAD SPECIFICATIONS**

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a reduction in the total purchased price shall be made to offset the cost of furnishing and applying such additional stabilization material. Cost shall be based upon the unit price set forth in the current BLM Timber Appraisal Production Cost Schedule.

- 1808 - Mulch materials conforming to the requirements of Subsection 1808a shall be furnished by the Purchaser in the amounts specified under Subsection 1811 and applied in accordance with Subsection 1812.
- 1808a - Straw mulch shall be certified weed free from commercial grain fields and native grass fields. Straw mulch shall be from oats, wheat, rye, or other approved grain crops and shall be free from, mold, or other objectionable material. Straw mulch shall be in an air-dry condition and suitable for placement.
- 1809 - Mulch material shall be delivered to the work area in a dry state. Material found to be wet will not be accepted. Material to be used in the mulching operation may be stockpiled along the road designated for treatment provided that it is maintained in a dry state and has the approval of the Authorized Officer.
- 1810 - Bulk mulching material required under these specifications shall be delivered to the work area bound either by twine, string or hemp rope. Wire binding will not be permitted.
- 1811 - The Purchaser shall furnish and apply to approximately **0.55** acres designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch material at the following rate of application:
- a. Two Stage:

Grass Seed	20 lbs./acre
Mulch	3,000 lbs./acre

The above proportion and application rate are subject to adjustment by the Authorized Officer during the application operation.

- 1812 - The Purchaser shall furnish and apply to the area designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch, material at the application rate to be determined by the Authorized Officer based on visual observation of trial applications.

## **TIMBER SALE ROAD SPECIFICATIONS**

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Mulches shall be spread/placed in treatment areas to a depth of 2 inches to allow seed germination or as directed by the Authorized Officer. Treatment area will be covered evenly and completely. Mulch can be broadcast onto the soil surface by hand or with hand/mechanical operated spreaders.

- 1814 - The Purchaser may reduce the application rate on partially covered slopes and refrain from application on areas already well stocked with grass or on rock surfaces as determined by the Authorized Officer.
- 1815 - The seed and mulch materials shall be placed by the dry method in accordance with the requirements set forth in Subsection 1815b.
- 1815b - Dry Method - Blowers, mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical seeding equipment may be used when seed and fertilizer are to be applied in dry form.
- 1819 - The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.
- 1821 - Mulch that collects at the end of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer.
- 1822 - No materials shall be applied when wind velocities would prevent a uniform application of the mix or slurry or when winds would drift the mix or slurry spray outside of the designated treatment area.
- 1824 - Twine, rope, sacks, and other debris resulting from the soil-stabilization operation shall be picked up and disposed of to the satisfaction of the Authorized Officer.

### **ROADSIDE BRUSHING - 2100**

- 2101 - This work shall consist of the removal of vegetation from the road prism - variable distance, and inside curves in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail Sheet (C-4) of this exhibit, at designated locations as shown in the plans.

### **TIMBER SALE ROAD SPECIFICATIONS**

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- 2102 - Roadside brushing may be performed mechanically with self-powered, self-propelled equipment and/or manually with hand tools, including chain saws.
- 2103 - Vegetation cut manually and/or mechanically less than 6 inches in diameter when measured at D.B.H. shall be cut to a maximum height of 3 inches above the ground surface or above obstructions such as rocks or stumps on cut and fill slopes and all limbs below the 2 inch area will be severed from the trunk.
- 2103a - Vegetation shall be cut and removed from the road bed between the outside shoulder(s) and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. Limbs below the 1 inch area will be severed from the trunk. Sharp pointed ends will not be permitted. Cuts shall be parallel to the ground line or running surface.
- 2104 - Trees in excess of 6 inches in diameter at D.B.H. shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway on cut and fill slopes, within the road prism-variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inches of the trunk to produce a smooth vertical face.
- 2106 - Vegetative growth capable of growing 1 foot in height or higher shall be cut, within the road prism-variable distance or as directed by the Authorized Officer.
- 2107 - Inside curves shall be brushed out for a sight distance of 200 feet chord distance or a middle ordinate distance of 25 feet, whichever is achieved first. Overhanging limbs and vegetation in excess of 1 foot in height, shall be cut within these areas.
- 2108 - Self propelled equipment shall not be permitted on cut and fill slopes or in ditches.
- 2109 - Debris resulting from this operation shall be scattered (unless otherwise noted in the work list) downslope from the roadway. Debris shall not be allowed to accumulate in concentrations. Debris in excess of 1 foot in length and 2 inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer.

## **TIMBER SALE ROAD SPECIFICATIONS**

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- 2110 - Vegetation 6 inches and smaller in diameter shall be chipped where indicated in the work list. Chips shall be scattered downslope from the roadway. Vegetation over 6 inches in diameter shall be disposed of by direction of the Authorized Officer.
- 2114 - Sections of roadway to have vegetation removed will be marked at start and stop points with red-topped painted stakes.
- 2115 - Mechanical brush cutters shall not be operated when there are people and occupied vehicles within 400 feet of the immediate operating area.
- 2116 - Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.



## **ROAD MAINTENANCE SPECIFICATIONS**

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### **ROAD MAINTENANCE SPECIFICATIONS TABLE OF CONTENTS**

SECTION	DESCRIPTION
3000	General
3100	Operational Maintenance
3200	Seasonal Maintenance
3300	Final Maintenance
3400	Other Maintenance
3500	Decommissioning

## ROAD MAINTENANCE SPECIFICATIONS

### GENERAL - 3000

3001 The Purchaser shall be required to maintain all roads listed and/or as shown on the Exhibit D2 map of this contract in accordance with Sections 3000, 3100, 3200, 3300, and 3400 of this exhibit.

Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
33-4W-23.00 A1	0.13	BLM	Aggregate	BLM
33-4W-23.01	0.70	BLM	Aggregate	BLM
33-4W-23.03	0.48	BLM	Aggregate	BLM
33-4W-26.01 A-C	1.87	Private	Aggregate	Third Party
33-4W-26.01 D1-D2	0.93	BLM	Aggregate	BLM
33-4W-33.06 A-B	1.65	BLM	Aggregate	BLM
34-4W-2.03 A-E	4.85	BLM	Aggregate	BLM
34-4W-5.02 A-B	2.44	BLM	Aggregate	BLM
34-4W-10.00 A-B	1.04	BLM	Aggregate	BLM
34-4W-15.00 A-D	1.40	BLM	Aggregate	BLM
34-4W-15.00 E	0.10	Private	Aggregate	BLM
34-4W-15.00 F1-H3	3.19	Private	Aggregate	Third Party
34-4W-15.00 I-J1	1.99	BLM	Aggregate	BLM
34-4W-28.00 A-B	1.39	BLM	Bituminous	BLM
34-4W-28.00 C-J	5.30	BLM	Aggregate	BLM
33-4W-33.00	0.97	BLM	Aggregate	Purchaser
33-4W-33.01	0.22	BLM	Aggregate	Purchaser
33-4W-33.03	0.13	BLM	Aggregate	Purchaser
33-4W-33.06 C	0.45	BLM	Natural	Purchaser
34-4W-9.00	0.62	BLM	Aggregate	Purchaser
34-4W-9.01	0.25	BLM	Natural	Purchaser

## **ROAD MAINTENANCE SPECIFICATIONS**

Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
NS 33S 4W 27.02	0.13	BLM	Natural	Purchaser
NS 33S 4W 33.06	0.54	BLM	Natural	Purchaser

- 3001a The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403 and 3404.
- 3002 The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards.
- 3003 The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 The Purchaser shall be responsible for providing timely maintenance and cleanup on any roads with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non-cleanup of the road prism shall not exceed the sum of one 1 mile at any time. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

### **OPERATIONAL MAINTENANCE - 3100**

- 3101 The Purchaser shall blade and shape the road surface and shoulders with a motor grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3104 The purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor grader, rubber tired front end bucket loader, rubber tired backhoe or comparable equipment, and by the use of hand tools.
- 3104a Removal of bank slough and slide material includes placement of material at the nearest designated, suitable disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion as directed by the Authorized Officer.
- 3104b The Purchaser shall be responsible for removal of all slides or slough, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the purchaser.

## **ROAD MAINTENANCE SPECIFICATIONS**

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Prior to removal of any slough or slide material exceeding fifteen station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, method of disposal, and the disposal site. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based on current BLM Road Cost Guide. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.

3105        The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe, and maintaining water dips and water-bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.

3106        The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source and method of repair. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work based upon current BLM Road Cost Guide. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.

3107        The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way when directed by the Authorized Officer.

The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road in accordance with Section 2100 of Exhibit C.

3108        The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required caused by such skidding activity is not considered maintenance and shall be repaired at the Purchaser's expense.

## **ROAD MAINTENANCE SPECIFICATIONS**

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- 3108a      The Purchaser shall perform logging operations on gravel and/or bituminous roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. (Repair of the roads is not considered maintenance and shall be repaired at the Purchaser's expense.

### **SEASONAL MAINTENANCE - 3200**

- 3201      The Purchaser shall perform preventative maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes requirements specified in Section 3100.
- 3202      The purchaser shall perform and complete maintenance specified in Sections 3000, 3100, and 3200 on all roads maintained by him, prior to October 1 each year, except as specified in Subsection 3203, after initial commencement of construction or logging operations. Thereafter, all roads shall have continuous preventive maintenance and road cleanup until suspension of seasonal operations. This includes all roads used and not used during the proceeding operating seasons.
- 3203      The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads located in an area separate from the area where logging activities will resume.
- 3204      The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential road or watershed damage.

### **FINAL MAINTENANCE - 3300**

- 3301      The Purchaser shall complete final maintenance and/or damage repairs on all roads used under terms of their contract within thirty 30 calendar days following the completion of hauling and in accordance with Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section.
- The Authorized Officer may grant acceptance of Purchaser's maintenance responsibility in part where certain individual roads or road segments are no longer of any use to the Purchaser's remaining removal operations, providing that all contract requirements as specified under Sec. 16(b), Special Provisions Sections 3000, 3100, 3200 and 3300 of the maintenance specifications have been completed and a relinquishment of cutting and removal rights on cutting units tributary to these roads is signed by the Purchaser. Request for partial acceptance must be submitted in writing by the Purchaser.

## **ROAD MAINTENANCE SPECIFICATIONS**

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3302        The Purchaser shall perform final road maintenance only when weather or soil moisture conditions are suitable for normal maintenance equipment operations as determined by the Authorized Officer.

If final maintenance is delayed after the date required in Subsection 3301 of this contract by adverse soil moisture or unsuitable equipment operating conditions, the Purchaser will be notified by the Authorized Officer when soil moisture and equipment operating conditions are suitable. The Purchaser shall then be required to complete final maintenance within 30 days.

### **OTHER MAINTENANCE - 3400**

3401        The Purchaser shall repair any damage to road surfaces that was specified under Subsection 3108 and 3108a. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.

3402        The Purchaser shall be permitted to remove ice and snow from roads authorized for use under this contract only when prior written approval has been secured from the Authorized Officer. The Purchaser shall submit a written request for permission to remove ice and snow in advance of the date operations are to begin.

Upon receiving written authorization for ice or snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the authorization.

3403        The Purchaser shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one-half gallon per yd<sup>2</sup> of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds<sup>3</sup> of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd<sup>2</sup> when a specified lesser rate is approved by the Authorized Officer.

The following roads shall be watered:

Road Number	From M.P.	to M.P.
34-4W-15.00	0.00	1.00
34-4W-28.00	1.39	1.89

The Purchaser shall secure any necessary water permits and pay all required water fees for use of the water sources selected by the Purchaser and approved by the Authorized Officer.

## **ROAD MAINTENANCE SPECIFICATIONS**

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During drought periods when the transportation of water from the source to the roads noted above exceeds 20 miles, a reduction shall be made in the total purchase price to reflect the additional haul or the substitution of other acceptable dust palliatives in lieu of watering based on equipment rental rates from the current BLM Road Cost Guide.

3403a During dry hauling conditions when watering is not required, the Purchaser shall reduce hauling speeds or restrict the number of loads hauled to reduce dust as directed by the Authorized Officer.

Adjustments to the above schedules may be made by the Authorized Officer at his option as hauling conditions improve. The Purchaser, at his option and expense, may elect to substitute watering or other dust palliatives in lieu of the above hauling requirements provided that written approval is received from the Authorized Officer. Such authorization shall include the approval of product specifications for the application and the product to be used.

3404 The Purchaser may at his option and expense substitute lignin sulfonate, magnesium chloride, or an approved petroleum based dust abatement product for water on any or all road segments listed in Subsection 3403 or 3403a provided that written approval is received from the Authorized Officer. Such authorization shall include the approval of product specifications for the application of the product to be used. Multiple applications may be required to maintain the conditions specified in Subsection 3403.

3408 Dust palliatives shall be applied with standard commercial distribution equipment operated in a manner that the material is uniformly applied on variable widths of surface at controlled rates.

3409 The Purchaser shall notify the Authorized Officer a minimum of 3 days in advance of application of required dust palliative.

3410 The Purchaser shall submit an application schedule for all dust palliative work to the Authorized Officer for approval. All work shall be in accordance with the approved plan.

## **DECOMMISSIONING – 3500**

3506 Stockpiled slash shall be used to protect exposed areas created by the Purchaser's operations described in these sections. Slash shall be uniformly spread and placed without bunching. The operation shall produce a dense, uniform mat. All slash stockpiles created by the purchaser shall be utilized for Camouflaging and Full Decommission.

3507 Culverts not designated as salvage by the Authorized Officer for the Government shall become the property of the Purchaser. The Purchaser shall be responsible for disposal of materials in a legal manner and for payment of any fees required. Sale of material on site is not allowed unless authorized in writing by the Authorized Officer.

## ROAD MAINTENANCE SPECIFICATIONS

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- 3508 Protect areas with camouflaging and soil stabilization from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3509 Barricades shall be installed across full width of roadway at locations designated in the specifications. Barricades shall be constructed conforming to the lines, grades, dimensions and typical details as shown on Exhibit D5.
- 3513 Water bars shall be installed across full width of roadway at spacing shown in the specifications. Water bars shall be constructed conforming to the lines, grades, dimensions and typical details as shown on Exhibit D5. No water bar will be installed closer than 50 feet to a draw crossing.
- 3514 Protection of exposed surfaces shall be accomplished by placement of soil stabilization material in accordance with Section 1800 and placement of slash described in Subsection 3506 on designated roadways, disturbed areas, landings, and other areas disturbed by the purchaser's operations in accordance with these specifications and as shown in the plans.
- 3520 Long Term Closure of roads shall consist of all or part of the following treatments:
- a. Construct water bars along entire length of road at 200' spacing, or as staked or directed by the Authorized Officer's Representative.
  - b. The Purchaser shall Camouflaged the road entrance for a minimum of 100 feet or to the first curve or hillcrest. Camouflaged roads shall consist of using boulders, brush, dead material, stumps, and other debris to disguise the entire length of the road prism to the extent possible. No live trees should be used without approval by the Authorized Officer.
  - c. An earth berm or equivalent barricade shall be constructed near the beginning of road. The final locations will be staked by the Authorized Officer's Rep.
- 3521 Long Term Closure shall be performed on existing roads in accordance with these specifications, and as shown on the plans at the following locations:

Road No or Site	Treatment
33-4W-33.06 C	Waterbar, Barricade
34-4W-9.01	Waterbar, Barricade
NS 33S 4W 27.02	Waterbar
NS 33S 4W 33.06	Waterbar

- 3522 Long Term Closure work shall be completed at the end of timber hauling. All work shall be performed during the dry season before October 15<sup>th</sup>.



## **ROAD MAINTENANCE SPECIFICATIONS**

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- 3523      Protect areas mulched and treated with slash placement from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3524      Access shall be blocked with barricades as shown at locations on Exhibit D2.
- Existing barricades removed during timber operations shall be replaced immediately after use. For activities that are not finished in one dry season, barricades shall be re-installed before the wet season, October 15<sup>th</sup>.
- 3525      Full Decommissioning of roads shall consist of all or part of the following treatments:
- a.    Subsoiling shall be done using mechanical treatment to de-compact road surface to a depth 12 to 18 inches or to a point where 10 inch diameter stones are the dominant substrate (whichever is shallower). Where it is determined by the Authorized Officer that decompaction may cause unacceptable damage to the root systems of residual trees along a majority of the road, decompaction may be intermittent, or scarification may be used instead. Woody debris, brush, stumps, boulders, and other debris shall be placed along the roads entire length as determined by availability of materials to provide ground cover and discourage use. No live trees shall be cut or used without approval of the Authorized Officer.  
  
Where multiple entrances exist, the work shall include obscuring all road entrances. Ditchlines at intersecting roads shall be restored. The Purchaser shall use soil, boulders, brush, dead material, stumps, and other debris to disguise the road prism to the extent possible.
  - b.    All culverts shall be removed from road for its entire length. Excavated culverts shall be left open to drain and have slopes of 1 1/2:1. Where draw culverts are removed the grade of the channel shall be restored to match existing stream. Culverts not designated as salvage for the Government shall become the property of the Contractor. The Contractor shall be responsible for legally disposing of material.
  - c.    Construct water bars along entire length of road at 200' spacing, or as staked or directed by the Authorized Officer's Representative.
  - d.    The Purchaser shall Camouflaged the road entrance for a minimum of 100 feet or to the first curve or hillcrest. Camouflaged roads shall consist of using boulders, brush, dead material, stumps, and other debris to disguise the entire length of the road prism to the extent possible. No live trees should be used without approval by the Authorized Officer.
  - e.    An earth berm or equivalent barricade shall be constructed near the beginning of road. The final locations will be staked by the Authorized Officer's Rep.

## **ROAD MAINTENANCE SPECIFICATIONS**

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3526 Full Decommission shall be performed on existing roads in accordance with these specifications, and as shown on the plans at the following locations:

Road No or Site	Treatment
T34 R4W Temp 5.02	Subsoil, Camouflage, Seed and Mulch
T33 R4W Temp 27.02	Subsoil, Camouflage, Seed and Mulch
T33 R4W Temp 33.03	Subsoil, Camouflage, Seed and Mulch
T33 R4W Temp 33.06	Subsoil, Camouflage, Seed and Mulch
T33 R4W Temp 33.06A	Subsoil, Camouflage, Seed and Mulch
T33 R4W Temp 33.06B	Subsoil, Camouflage, Seed and Mulch

U.S.D.I. BLM MEDFORD DISTRICT

T.33S., R.4W. WILL. MER.  
T.34S., R.4W. WILL. MER.

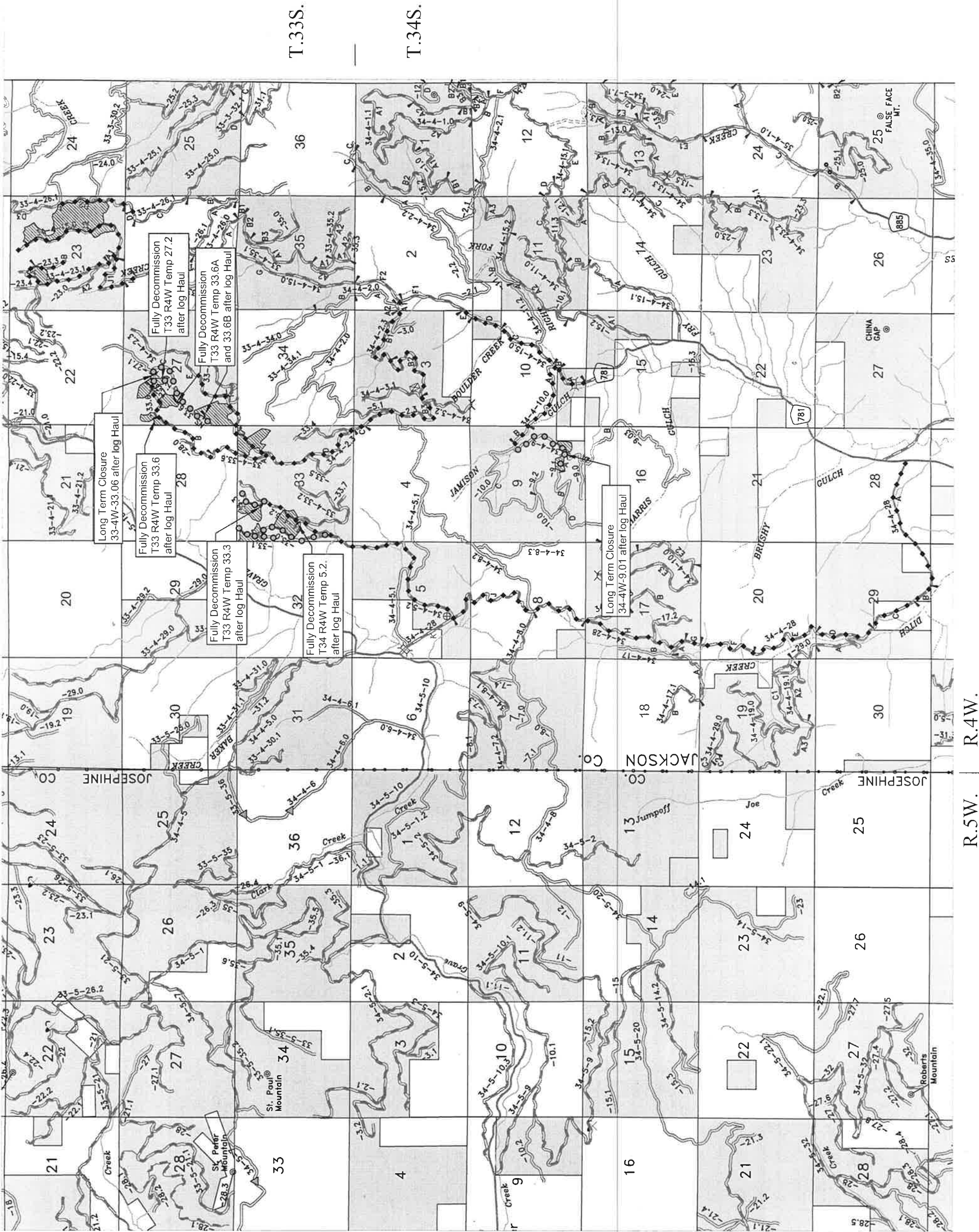
EXISTING GATE  
EXISTING BARRICADE  
APPROVED STOCKPILE  
DESIGNATED DISPOSAL SITE

ROAD TYPES

EXISTING ROAD  
EXISTING PAVED ROAD  
EXISTING PRIMITIVE ROAD

OPERATOR MAINTENANCE  
BLM MAINTENANCE

BLM LAND  
TS UNITS

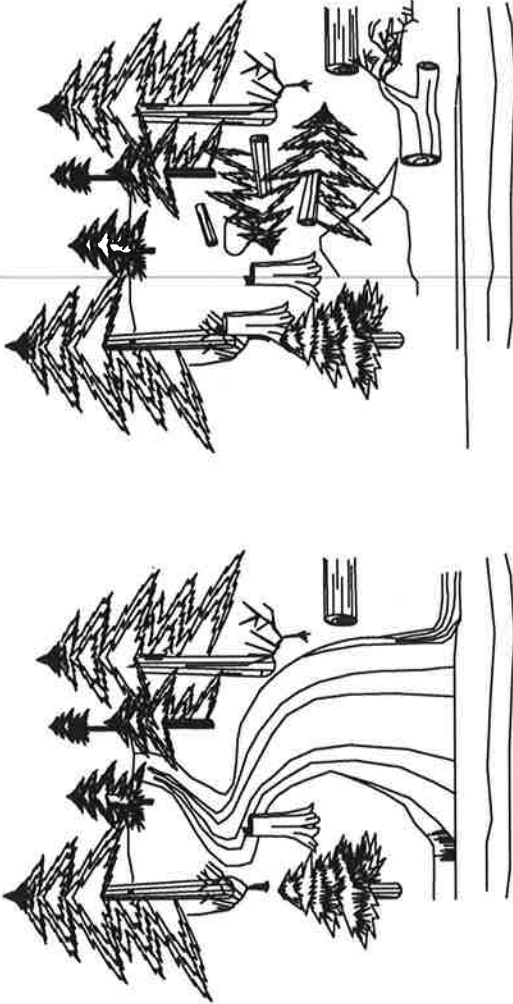




# EXHIBIT D-3 SHEET 1 OF 1

## Notes:

1. The Purchaser shall barricade, decompact the road prism and camouflage the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. Camouflaged entrances shall consist of logs, slash, boulders and other debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use. Barricades shall be constructed as shown for each road.
- Where multiple entrances exist, the work shall include obscuring all road entrances. Ditchlines of intersecting roads will be restored as indicated on plan view. The Purchaser shall use soil, boulders, brush, dead material, stumps, and other debris to disguise the road prism to the extent possible. No live trees shall be used without approval of the Authorized Officer.
3. Road surface shall be decompacked for its entire length using mechanical equipment. Decompack road surface to a depth of 12 to 18 inches or to a point where 10 inch diameter stones are the dominant substrate (whichever is shallower). Where it is determined by the Authorized Officer that decompaction may cause unacceptable damage to the root systems of residual trees along a majority of the road, decompaction may be intermittent, or scarification may be used instead. Woody debris, brush, stumps, boulders, and other debris shall be placed along the roads entire length as determined by availability of materials to provide ground cover and discourage use. No live trees shall be cut or used without approval of the Authorized Officer.
4. All culverts shall be removed from road for its entire length. Excavated culverts shall be left open to drain and have slopes of 1½:1. Where draw culverts are removed the grade of the channel shall be restored to match existing stream. Culverts not designated as salvage for the Government shall become the property of the Contractor. The Contractor shall be responsible for legally disposing of material.
5. See Section 1800 for Seeding Specifications.



Typical Entrance - After

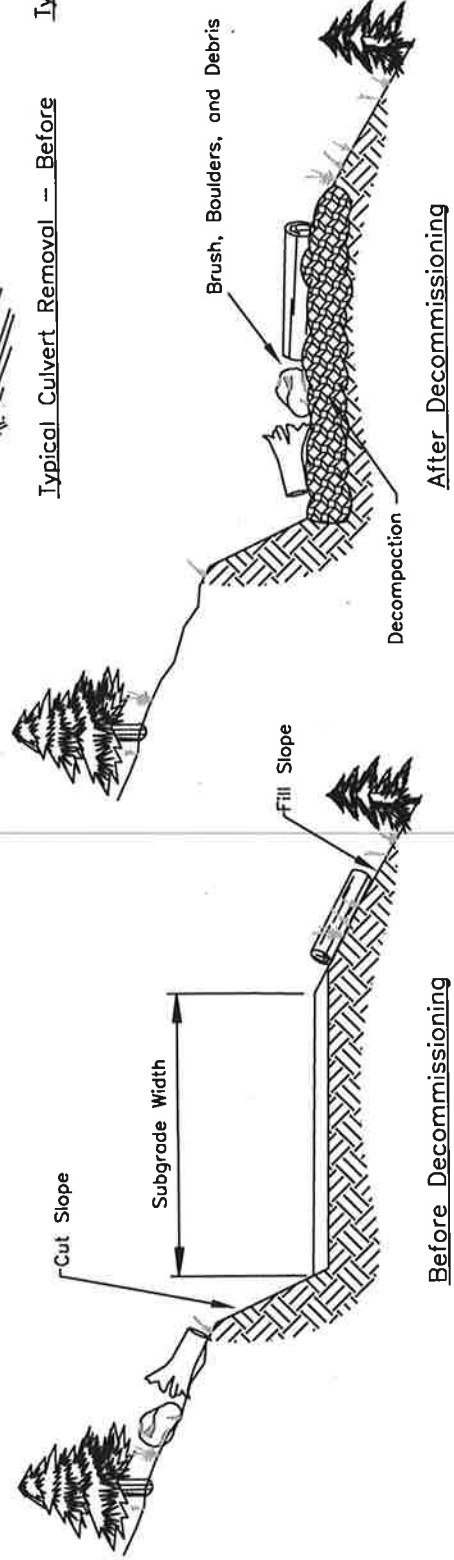
Typical Road Camouflaged Entrance  
(See Exhibit D-4)



1½:1  
Slopes

Typical Culvert Removal - Before

Typical Culvert Removal - After



Before Decommissioning

After Decommissioning

Typical Full Decommission

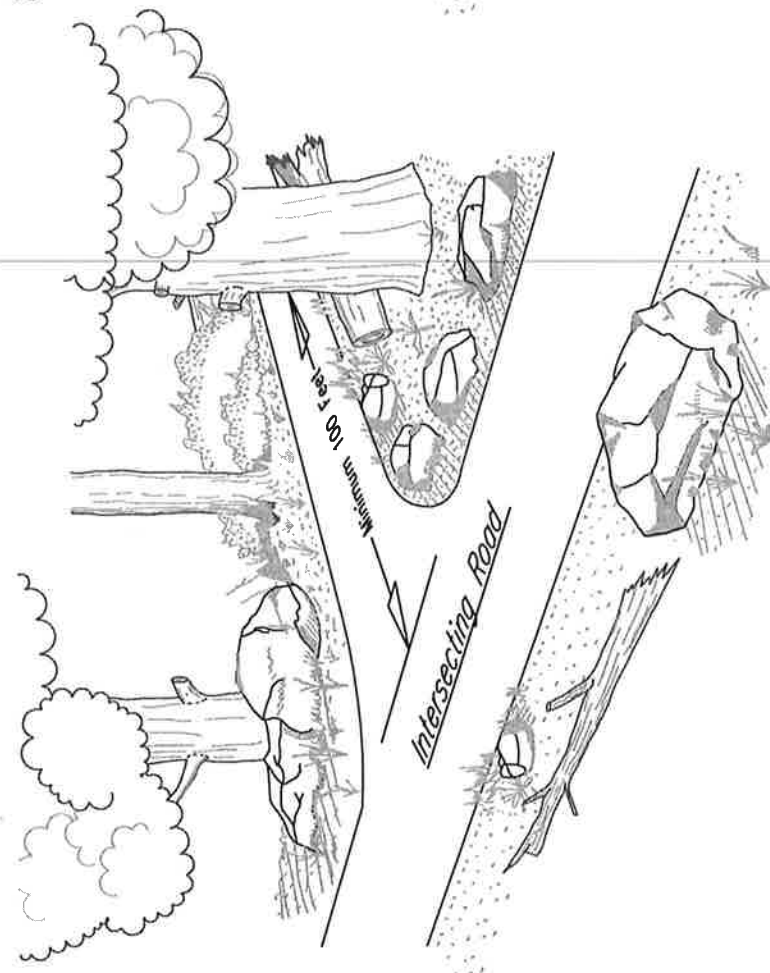
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
Typical Full Decommission			
DRAWN	JWR	SCALE	NONE
DATE	November 2018	SHEET	1 OF 1
DRAWING NO.	OR 117-TS19-11-D3		



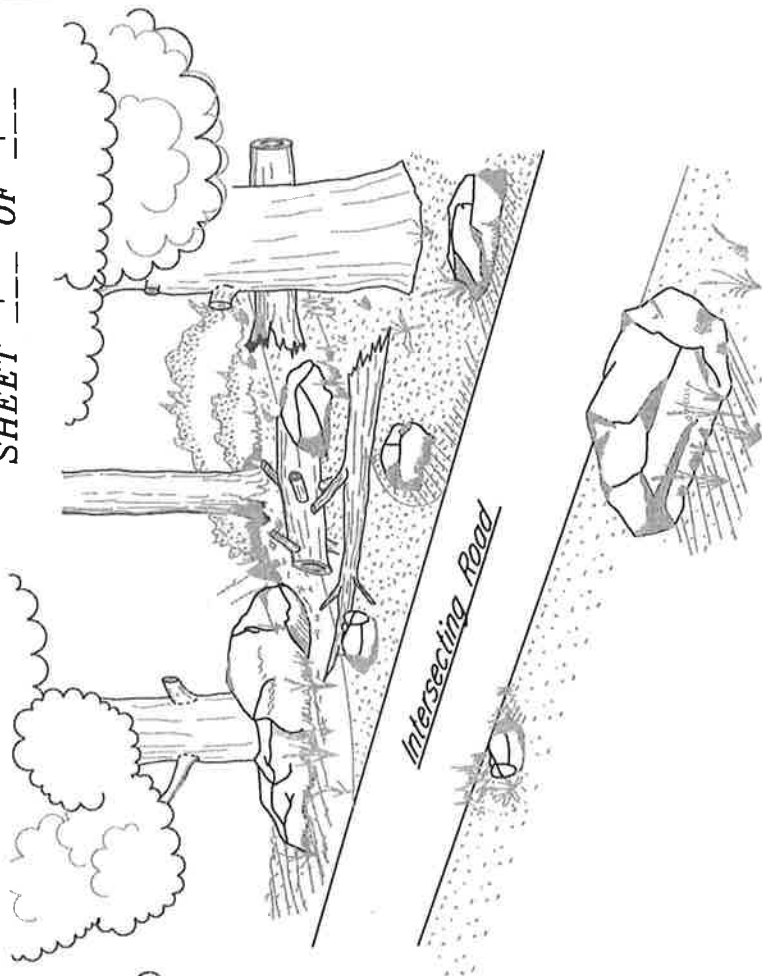


# EXHIBIT D-4

SHEET 1 OF 1



Typical Entrance - Before



Typical Entrance - After

## Notes:

1. The Purchaser shall barricade and Camouflage the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. Camouflaged entrances shall consist of logs, slash, boulders and others debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use. An Earth Berm or equivalent barricade shall be constructed at road entrance as approved by the Authorized Officer..
2. Where multiple entrances exist, the work shall include obscuring all road entrances. Ditchlines at intersecting roads will be restored as indicated on plan view. The Purchaser shall use soil, boulders, brush, dead material, stumps, and other debris to disguise the road prism to the extent possible. No live trees should be used without approval of the Authorized Officer.

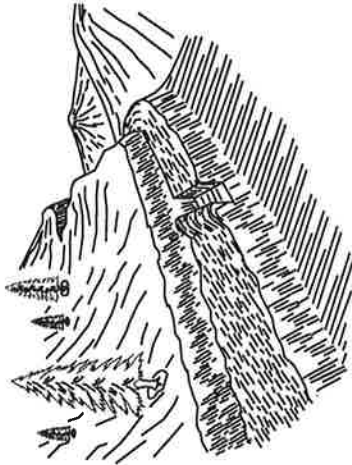
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT - MEDFORD, OREGON

## Typical Road Camouflage

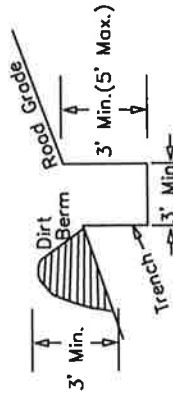
DRAWN	JWR	SCALE	NONE
DATE	November 2018	SHEET	1 OF 1
DRAWING NO. OR 117-TS19-11-D4			



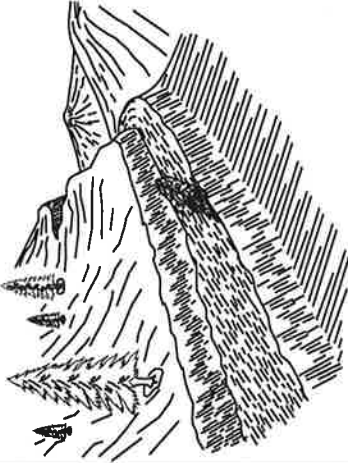




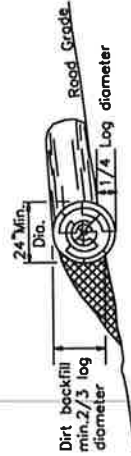
TRENCH BARRICADE



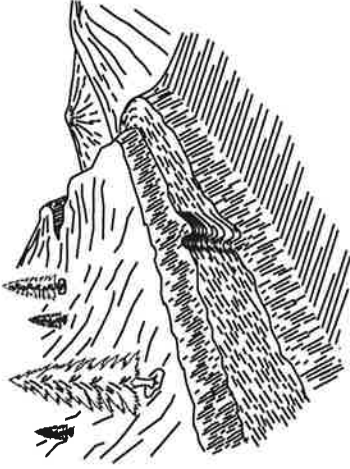
1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.



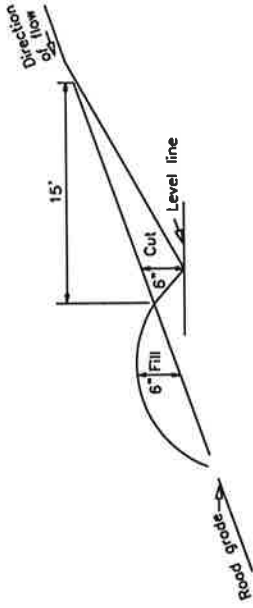
LOG BARRICADE



1. LOG BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL BARRICADES SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE.
5. THE MINIMUM SMALL END DIAMETER OF THE LOG BARRICADE SHALL BE 24".

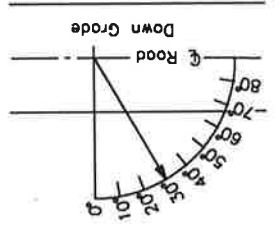


WATER BAR



1. CROSS-DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.
4. THE CROSS-DRAINS INVERT SHALL BE SMOOTH AND FREE DRAINING.

SKEW DIAGRAM



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT -- MEDFORD, OREGON			
DRAWN	DCM	SCALE	NONE
DATE	November 2018	SHEET	1 OF 1
DRAWING NO.	OR117-TS19-11-D5		

**DRAINAGE & EROSION  
CONTROL INSTALLATION**



## BIG GRAVE SALVAGE SALE Road Decommissioning Work List

### GENERAL DEFINITIONS:

**Decommission (Full)** = Full Decommissioning shall include decompacting the surface to a depth of 12 to 18 inches, installing waterbars (every 200' for grades <10% - every 100' grades >10%) unless otherwise noted in the work list, stabilizing or removing fills on unstable areas, barricading the road entrance, camouflaging, and/or removing culverts (armor if needed). Seeding with approved native seed species and mulching with weed-free straw or approved native materials.

**Long Term Closure** = Long Term Closure shall include installing waterbars (every 200' for grades <10% - every 100' grades >10%) unless otherwise noted in the work list, stabilizing or removing fills on unstable areas, barricading the road entrance, camouflaging, and/or removing culverts (armor if needed). Seeding with approved native seed species and mulching with weed-free straw or approved native materials.

**Camouflaging** = Camouflaged entrances shall consist of logs, slash, boulders and others debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use.

**Barricade** = Barricade only.

CMP – Corrugated metal pipe  
D.B.H.- Diameter breast height

Cu. Yds = CY = Cubic Yards  
Jct.– Junction

<u>Road 33-4W-33.06</u>	
<u>MP</u>	<u>Aggregate/Natural</u> <u>14'-16' Width</u>
<u>Remarks</u>	
0.00	Jct. with 34-4W-2.03.
1.33	Jct. Temporary road 33.06 to left.
1.65	End aggregate surface. Begin natural surface.
1.79	Upon completion of log haul begin Long Term Closure. Construct 8 waterbars, Install Barricade to block vehicle access beyond the end of road.
2.10	Jct. with NS 33S 4W 27.02 to right and NS 33S 4W 33.06.

**Road NS 33S 4W 27.02**

**Natural 14' Width**

**MP**

**Remarks**

0.00 Jct. with 33-4W-33.06. Construct 3 waterbars,  
0.09 Jct. Temporary road 27.02 to right.  
0.13 End of Project

**Road NS 33S 4W 33.06**

**Natural 14' Width**

**MP**

**Remarks**

0.00 Jct. with 33-4W-33.06. Construct 14 waterbars,  
0.18 Jct. Temporary road 33.06B to right.  
0.43 Jct. Temporary road 33.06A to left.  
0.54 End of Project

**Road 34-4W-9.01**

**Natural 14' Width**

**MP**

**Remarks**

0.00 Jct. with 34-4W-9.00. Upon completion of log haul begin Long Term Closure.  
Construct 7 waterbars,  
0.01 Install Barricade.  
0.25 End of Project

**Temporary Road T33 R4W Temp 5.02**

**Natural 14' Width**

**MP**

**Remarks**

0.00 Jct. with 34-4W-5.02. Upon completion of log haul Fully Decommission entire  
length of temporary road using mechanical treatment to de-compact road surface  
to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet.  
Seed and mulch  
0.02 End of Project

**Temporary Road T33 R4W Temp 27.02**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with NS 33S 4W 27.02. Upon completion of log haul Fully Decommission entire length of temporary road using mechanical treatment to de-compact road surface to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet. Seed and mulch
0.02	End of Project

**Temporary Road T33 R4W Temp 33.03**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.03. Upon completion of log haul Fully Decommission entire length of temporary road using mechanical treatment to de-compact road surface to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet. Seed and mulch
0.04	End of Project

**Temporary Road T33 R4W Temp 33.06**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with 33-4W-33.06. Upon completion of log haul Fully Decommission entire length of temporary road using mechanical treatment to de-compact road surface to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet. Seed and mulch
0.04	End of Project

**Temporary Road T33 R4W Temp 33.06A**  
**Natural 14' Width**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. with NS 33S 4W 33.06. Upon completion of log haul Fully Decommission entire length of temporary road using mechanical treatment to de-compact road surface to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet. Seed and mulch
0.09	End of Project

**Temporary Road T33 R4W Temp 33.06B**

**Natural**

**14' Width**

**MP**

**Remarks**

0.00

Jct. with NS 33S 4W 33.06. Upon completion of log haul Fully Decommission entire length of temporary road using mechanical treatment to de-compact road surface to a depth 12 to 18 inches. Camouflage road entrance with debris for 100 feet. Seed and mulch.

0.12

End of Project

## **SELECTION CRITERIA-DESIGNATION BY PRESCRIPTION EXHIBIT F**

The Selection Criteria shown below shall be used by the Purchaser in determining which trees are to be retained and which trees are to be cut and removed. Consider safety in determining whether a fire-killed or fire-injured snag should remain standing. The operator will have flexibility and responsibility to remove any snag or tree deemed unsafe for workers on site.

The Purchaser shall leave all boundary trees marked with orange paint and/or poster tags. Within harvest units, the Purchaser shall also leave live hardwoods and live green conifers with a low probability of mortality as defined in Table 1 of this Exhibit.

Before cutting and removing any trees necessary to facilitate logging in all Harvest Units shown on Exhibit A, the Purchaser shall identify the location of the skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal.

## **SELECTION CRITERIA GUIDELINES FOR FIRE-INJURED TREES**

The model for fire mortality trees utilizes the methods and procedures detailed in USFS Marking Guidelines for Fire-Injured Trees in California (Smith & Cluck, 2011), this document may be used as supplemental information by the Purchaser if needed. The method uses percent crown killed only or in combination with other guiding variables, such DBH and/or the presence of absence of bark beetle activity, to determine mortality probability. Percent crown kill is a measure of the proportion of foliage that includes any brown needles, as well as any areas that have blackened fine branches relative to the entire amount of foliage that was present before the burn. Lower branches that are presumed to have died before the fire should not be included when determining crown kill. Using the probability of mortality, this model also offers flexibility to accommodate BLM management goals and objectives for salvage operations.

A probability of mortality (Pm) of 40% or greater has been selected as the target for removal (Table and Figure 1) based on the following project objectives:

- Keep roads clear of hazard trees and debris in All Land Use Allocations
- Recover Economic Value in the Harvest Land Base Allocations
- Improve worker safety involved in reforestation and subsequent maintenance of the site
- Retain those trees that have a moderate to high probability of survival for satisfying other resource needs

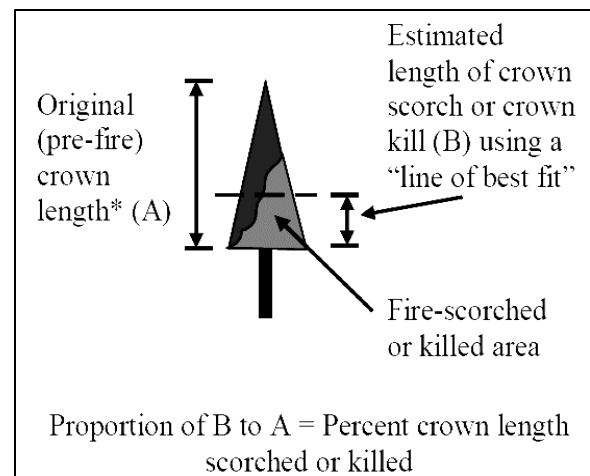
**Required Leave Trees: retain all trees that meet the following criteria:**

1. Conifers with a less than 40% probability of mortality (see below Table and Figure 1).  
These should be left standing unless they pose an immediate safety hazard.
2. Live hardwoods > 8 inches DBH
3. Standing cull trees, these should be left standing unless they pose an immediate safety hazard, or left as coarse woody debris if felling is required.
4. Orange marked trees including boundary trees
5. Cull material and existing Down Woody Material (DWM) should be left in place to the extent possible.

**Note:** The above retention standards apply in all units and contribute to the Required Minimum Retention standards provided in Table 2. For each unit the actual retention may be higher due to the varying severity of the burn and resulting probability of mortality. Unit 1 requires additional snags to be retained (found below in Table 2) that do not meet the above Required Leave Tree criteria due to the high severity of the burn. Only merchantable sized snags count towards retention requirements. They may be retained in any spatial distribution shown in Figures 2-4. Snags with prominent structural complexity and defect such as broken or forked tops and large limbs that provide wildlife habitat benefit should be left where there is no immediate safety risk.

**Table and Figure 1. Crown scorch levels for 40% predicted mortality**

<b>P<sub>m</sub>=0.4 level</b>	<b>Douglas-fir</b>	
	<b>DBH</b>	<b>Percent Crown Volume Killed</b>
	4-40"	55
	<b>Ponderosa pine</b>	
	<b>DBH</b>	<b>Percent Crown Length Killed</b>
	10-29"	45
	30-40"	15
	41-50"	5
	<b>Incense cedar</b>	
	<b>DBH</b>	<b>Percent Crown Length Killed</b>
	10-60"	80
	<b>Sugar pine</b>	
	<b>DBH</b>	<b>Percent Crown Length Killed</b>
	10-60"	50
	<b>White Fir</b>	
	10-35"	70
	>35-60"	50





**Table 2. Unit Specific Retention Targets**

Unit	Approx. Acres	Land Use Allocation	Required Minimum Retention
1	41	LITA/TPCC	> 25 ft <sup>2</sup> /ac
2	24	UTA	> 10 ft <sup>2</sup> /ac
3	29	LITA	> 30 ft <sup>2</sup> /ac
4	47	LITA/TPCC	> 20 ft <sup>2</sup> /ac
5	12	LITA	> 30ft <sup>2</sup> /ac
6	78	LITA/UTA	> 25 ft <sup>2</sup> /ac
7	8	LSR: Hazard Trees	All non-hazardous trees
8	11	UTA	> 10 ft <sup>2</sup> /ac

**Example Conversion of Basal Area to Trees Per Acre (TPA) by Size Class:**

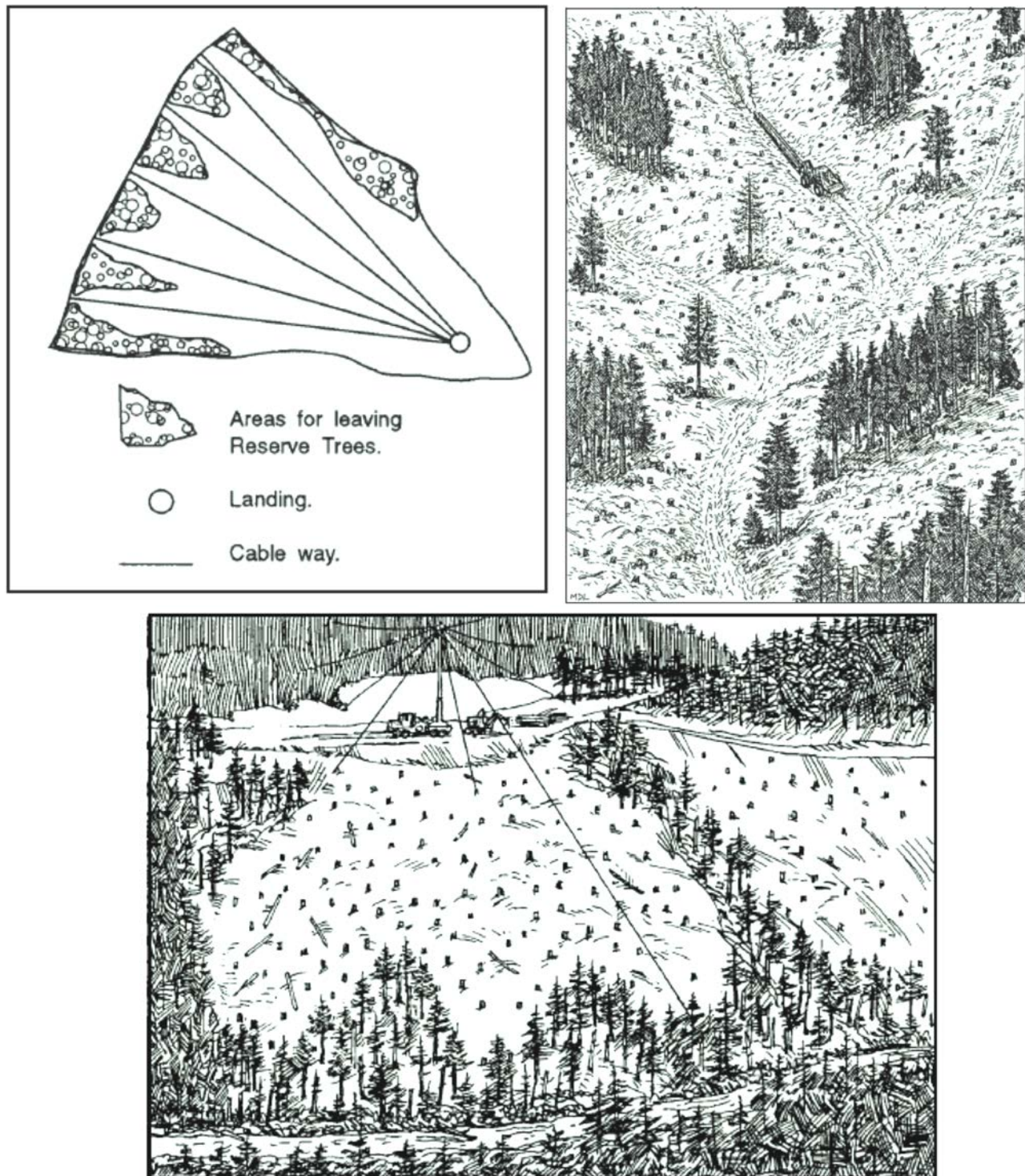
To equal 10 ft <sup>2</sup> /ac	
Diameter Class (DBH)	Approximate TPA
8-12"	20
12-16"	10
16-20"	5
20-24"	4
24-28"	3
28-32"	2

To equal 30 ft <sup>2</sup> /ac	
Diameter Class (DBH)	Approximate TPA
8-12"	55
12-16"	30
16-20"	15
20-24"	12
24-28"	8
28-32"	6

**COMPLIANCE INSPECTION:**

Compliance inspection of the marking will occur after unit tally cards are submitted to the Government and prior to the falling of trees within the unit to be inspected. Non-compliance with the Prescription and/or Selection Criteria shall constitute a contract violation which may result in a suspension of operations as provided in Section 10 of the contract. Inspection will consist of:

- 1) A ½ acre sample mark is required before falling operations begin to determine that the purchaser understands the intent of the Prescription in this Exhibit
- 2) Field review of the selection of leave trees in compliance with crown scorch guidelines and the Prescription in this Exhibit during operations.
- 3) A tally of reserved trees by unit shall be provided by the purchaser to the authorized officer, trees are to be tallied by four inch diameter class (as shown in the conversion table above) to ensure adequate retention



**Figure 2-4: Example of preferred distribution of leave trees within harvest units. Source: *Guidelines for Selecting Reserve Trees* (Publication F417-092-000 [08/2005])**

## **DEFINITIONS**

Coarse Woody Debris (CWD): Portion of tree or entire tree that has fallen or been cut and left lying on the forest floor. Minimum qualifying stem as defined in this project must be  $\geq 16$  inches in diameter and  $\geq 16$  feet long.

Conifer: An evergreen tree that produces cones, needle-shaped leaves, and wood known commercially as “softwood”.

DBH: Diameter of the tree at breast height, measured at four point five feet (4.5') above the ground level from the uphill side of the tree.

Down Woody Material (DWM): Logs lying on the forest floor that include merchantable and non-merchantable material in all decay classes.

Fire-Killed Tree: A standing or fallen conifer tree with 100% of the crown scorched showing brown needles or the crown is black with no needles.

Fire-Injured Tree: A conifer tree exhibiting crown scorch while still retaining green needles. Some fire-injured trees may die within the next 4 years (Appendix 1).

Fire-Injured Trees with a High Probability of Mortality: Standing trees that meet the description of fire-killed or fire-injured trees with a high probability of mortality defined in Appendix 1.

Hardwood: A live green broad-leaved tree which usually has a single well-defined trunk, exhibits  $> 30\%$  live crown ratio and is capable of attaining a height greater than 20 feet. These include, but are not limited to alder, chinquapin, bigleaf maple, madrone, and oak species. Sprouting hardwood species may be in the form of multi-stemmed clumps originating from the base of a single defined stump.

Leave tree: Live green tree to be retained within the specifications of this prescription. These include live green conifers and large hardwoods, as well as fire-injured trees with a low probability of mortality as designated in Table and Figure 1..

Percent crown scorch: A measure of the proportion of foliage that has been killed by the fire relative to the entire amount of foliage that was present before the burn (scorched foliage should be obvious to the naked eye as yellowish brown or red needles).

Snag: 1. A dead or dying tree with physical characteristics exhibiting varying rates of decomposition (Appendix 4, Table 4-3). 2. Standing dead conifer or hardwood tree species (with a well-defined single main stem or trunk) from which the top has died or from which the leaves and most of the branches have fallen. 3. The remaining standing section of a tree whose crown has broken away from the stem. 4. Conifer trees that exhibit a high probability of mortality within the next 4 years (Appendix 1).

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Version: 5.2.0.133

Updated: 6/14/2017

Summary of All Roads and Projects

T.S. Contract Name: Big Graves Salvage Tract No: 19-11 Sale Date: January 19

Prepared by: Josh R Ph: 2258 Print Date: 11/29/2018 11:01:11 AM

Construction: 0.00 sta

Improve: 0.00 sta Renov: 780.38 sta Decom: 0.00 sta Temp: 17.43 sta

200 Clearing and Grubbing: 0.7 acres .....	\$1,759.27
300 Excavation: .....	\$0.00
Haul < 500 ft: 0 sta-yds	
Haul > 500 ft: 0 yd-mi	
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$20,606.37
Blading 14.78 mi	
Slide Removal 40 cy	
700-1200 Surfacing: .....	\$2,373.80
2 Stage Crushed Quarry Name: BLM Stockpile 260 LCY	
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing: .....	\$10,215.74
Manual Brushing: 14.2 acres	
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$3,478.42
Mobilization: Const. \$3,540.00 Surf. \$1,588.00.....	\$5,128.00
Quarry Development: .....	\$0.00

Total: 3,996 mbf @ \$10.901/mbf = \$43,561.60

Notes:

Quantities shown are estimates only and not pay items.  
Surfacing Quantities are loose cubic yards.

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-23.00** Road Name:

Road Renovation: 0.13 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$180.15
Blading 0.13 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.1 acres .....	\$66.34
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$22.70 Surf. \$0.00.....	\$22.70
Quarry Development: .....	\$0.00
Total:	\$269.19

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-23.00 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.13 \text{ mi} = \$90.29$

Compaction:  $\$325.47/\text{mi} \times 0.13 \text{ mi} = \$42.31$

Clean Culverts:  $\$365.82/\text{mi} \times 0.13 \text{ mi} = \$47.56$

Subtotal: \$180.15

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.10 \text{ acres} = \$66.34$

Subtotal: \$66.34

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.64% of total Costs = \$22.70

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$22.70

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 33-4-23.00 Continued

Total: \$269.19

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-23.01** Road Name:

Road Renovation: 0.70 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$970.05
Blading 0.70 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.7 acres .....	\$464.35
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$132.12 Surf. \$0.00.....	\$132.12
Quarry Development: .....	\$0.00
Total:	\$1,566.52

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.



Road Construction Worksheet

Road Number: 33-4-23.01 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.70 \text{ mi} = \$486.15$

Compaction:  $\$325.47/\text{mi} \times 0.70 \text{ mi} = \$227.83$

Clean Culverts:  $\$365.82/\text{mi} \times 0.70 \text{ mi} = \$256.07$

Subtotal: \$970.05

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.70 \text{ acres} = \$464.35$

Subtotal: \$464.35

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 3.73% of total Costs = \$132.12

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$132.12

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 33-4-23.01 Continued

Total: \$1,566.52

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-23.03** Road Name:

Road Renovation: 0.48 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$665.18
Blading 0.48 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.5 acres .....	\$331.68
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$91.82 Surf. \$0.00.....	\$91.82
Quarry Development: .....	\$0.00
Total:	\$1,088.68

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-23.03 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.48 \text{ mi} = \$333.36$

Compaction:  $\$325.47/\text{mi} \times 0.48 \text{ mi} = \$156.23$

Clean Culverts:  $\$365.82/\text{mi} \times 0.48 \text{ mi} = \$175.59$

Subtotal: \$665.18

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.50 \text{ acres} = \$331.68$

Subtotal: \$331.68

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.59% of total Costs = \$91.82

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$91.82

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 33-4-23.03 Continued

Total: \$1,088.68

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-33.00** Road Name:

Road Renovation: 0.97 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$1,344.22
Blading 0.97 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.9 acres .....	\$597.02
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$178.80 Surf. \$0.00.....	\$178.80
Quarry Development: .....	\$0.00
Total:	\$2,120.04

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-33.00 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.97 \text{ mi} = \$673.67$

Compaction:  $\$325.47/\text{mi} \times 0.97 \text{ mi} = \$315.71$

Clean Culverts:  $\$365.82/\text{mi} \times 0.97 \text{ mi} = \$354.85$

Subtotal: \$1,344.22

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.90 \text{ acres} = \$597.02$

Subtotal: \$597.02

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 5.05% of total Costs = \$178.80

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$178.80

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 33-4-33.00 Continued

Total: \$2,120.04



# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-33.01** Road Name:

Road Renovation: 0.22 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$656.11
Blading 0.22 mi	
Slide Removal 40 cy	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.2 acres .....	\$132.67
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$72.65 Surf. \$0.00.....	\$72.65
Quarry Development: .....	\$0.00

Total: \$861.44

## Notes:

Quantities shown are estimates only and not pay items.  
 Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-33.01 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Slide Removal 40 cy

Front End Loader \$101.17/hr x 2.00 hr = \$202.34

Dump Truck: \$74.45/hr x 2.00 hr = \$148.90

Blading: \$694.50/mi x 0.22 mi = \$152.79

Compaction: \$325.47/mi x 0.22 mi = \$71.60

Clean Culverts: \$365.82/mi x 0.22 mi = \$80.48

Subtotal: \$656.11

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium: \$663.36/acre x 0.20 acres = \$132.67

Subtotal: \$132.67

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.05% of total Costs = \$72.65

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$72.65

Quarry Development:

Road Number: 33-4-33.01 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$861.44

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-33.03** Road Name:

Road Renovation: 0.31 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$429.59
Blading 0.31 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.3 acres .....	\$199.01
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$57.90 Surf. \$0.00.....	\$57.90
Quarry Development: .....	\$0.00
Total:	\$686.50

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-33.03 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.31 \text{ mi} = \$215.30$

Compaction:  $\$325.47/\text{mi} \times 0.31 \text{ mi} = \$100.90$

Clean Culverts:  $\$365.82/\text{mi} \times 0.31 \text{ mi} = \$113.40$

Subtotal: \$429.59

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.30 \text{ acres} = \$199.01$

Subtotal: \$199.01

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.64% of total Costs = \$57.90

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$57.90

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 33-4-33.03 Continued

Total: \$686.50

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 33-4-33.06** Road Name:

Road Renovation: 2.10 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$2,475.02
Blading 2.10 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):2.0 acres .....	\$1,592.06
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$374.61 Surf. \$0.00.....	\$374.61
Quarry Development: .....	\$0.00
Total:	\$4,441.69

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 33-4-33.06 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 1.65 \text{ mi} = \$1,145.93$

Scarification:  $\$857.82/\text{mi} \times 0.45 \text{ mi} = \$386.02$

Blading w/o Ditches:  $\$428.91/\text{mi} \times 0.45 \text{ mi} = \$193.01$

Compaction:  $\$325.47/\text{mi} \times 0.45 \text{ mi} = \$146.46$

Clean Culverts:  $\$365.82/\text{mi} \times 1.65 \text{ mi} = \$603.60$

Subtotal: \$2,475.02

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 1.60 \text{ acres} = \$1,061.38$

RoadSide Brushing Heavy:  $\$1326.72/\text{acre} \times 0.40 \text{ acres} = \$530.69$

Subtotal: \$1,592.06

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 10.58% of total Costs = \$374.61

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$374.61

Quarry Development:



Road Number: 33-4-33.06 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$4,441.69

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 34-4-02.03** Road Name:

Road Renovation: 4.85 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$6,721.08
Blading 4.85 mi	
700-1200 Surfacing: .....	\$2,373.80
Quarry Name: BLM Stockpile 260 LCY	
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):4.7 acres .....	\$3,117.79
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$1,124.87 Surf. \$1,588.00.....	\$2,712.87
Quarry Development: .....	\$0.00

Total: \$14,925.54

## Notes:

Quantities shown are estimates only and not pay items.  
 Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-4-02.03 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$694.50/mi x 4.85 mi = \$3,368.33

Compaction: \$325.47/mi x 4.85 mi = \$1,578.53

Clean Culverts: \$365.82/mi x 4.85 mi = \$1,774.23

Subtotal: \$6,721.08

Section 700-1200 Surfacing:

2 Stage Crusher Quarry Name: BLM Stockpile

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
0.00mi									260 LCY

Rock Volume = 260 LCY

Production: \$5.05/LCY x 260 LCY = \$1,313.00

Processing: \$0.88/LCY x 260 LCY = \$228.80

Compaction: \$1.08/LCY x 260 LCY = \$280.80

Stockpiling & Loading: \$2.12/LCY x 260 LCY = \$551.20

Subtotal: \$2,373.80

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium: \$663.36/acre x 4.70 acres = \$3,117.79

Subtotal: \$3,117.79

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 31.78% of total Costs = \$1,124.87

Road Number: 34-4-02.03    Continued

Surfacing - 100.00% by rock volume = \$1,588.00

Subtotal:    \$2,712.87

Quarry Development:

Based on 100.00% of total rock volume

Subtotal:            \$0.00

Total:            \$14,925.54

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 34-4-05.02** Road Name:

Road Renovation: 2.44 mi 15 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$3,381.33
Blading 2.44 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):2.4 acres .....	\$1,592.06
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$458.08 Surf. \$0.00.....	\$458.08
Quarry Development: .....	\$0.00
Total:	\$5,431.48

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-4-05.02 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 2.44 \text{ mi} = \$1,694.58$

Compaction:  $\$325.47/\text{mi} \times 2.44 \text{ mi} = \$794.15$

Clean Culverts:  $\$365.82/\text{mi} \times 2.44 \text{ mi} = \$892.60$

Subtotal: \$3,381.33

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 2.40 \text{ acres} = \$1,592.06$

Subtotal: \$1,592.06

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 12.94% of total Costs = \$458.08

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$458.08

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 34-4-05.02    Continued

Total:        \$5,431.48

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 34-4-09.00** Road Name:

Road Renovation: 0.62 mi 15 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$859.19
Blading 0.62 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.6 acres .....	\$398.02
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$115.80 Surf. \$0.00.....	\$115.80
Quarry Development: .....	\$0.00
Total:	\$1,373.00

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.



Road Construction Worksheet

Road Number: 34-4-09.00 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 0.62 \text{ mi} = \$430.59$

Compaction:  $\$325.47/\text{mi} \times 0.62 \text{ mi} = \$201.79$

Clean Culverts:  $\$365.82/\text{mi} \times 0.62 \text{ mi} = \$226.81$

Subtotal: \$859.19

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 0.60 \text{ acres} = \$398.02$

Subtotal: \$398.02

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 3.27% of total Costs = \$115.80

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$115.80

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 34-4-09.00 Continued

Total: \$1,373.00

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 34-4-09.01** Road Name:

Road Renovation: 0.25 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$403.05
Blading 0.25 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.2 acres .....	\$265.34
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$61.56 Surf. \$0.00.....	\$61.56
Quarry Development: .....	\$0.00
Total:	\$729.96

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-4-09.01 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Scarification:  $\$857.82/\text{mi} \times 0.25 \text{ mi} = \$214.46$

Blading w/o Ditches:  $\$428.91/\text{mi} \times 0.25 \text{ mi} = \$107.23$

Compaction:  $\$325.47/\text{mi} \times 0.25 \text{ mi} = \$81.37$

Subtotal: \$403.05

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Heavy:  $\$1326.72/\text{acre} \times 0.20 \text{ acres} = \$265.34$

Subtotal: \$265.34

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.74% of total Costs = \$61.56

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$61.56

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 34-4-09.01 Continued

Total: \$729.96

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: 34-4-10.00** Road Name:

Road Renovation: 1.04 mi 17 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$1,441.22
Blading 1.04 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):1.0 acres .....	\$663.36
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$193.85 Surf. \$0.00.....	\$193.85
Quarry Development: .....	\$0.00
Total:	\$2,298.43

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-4-10.00 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading:  $\$694.50/\text{mi} \times 1.04 \text{ mi} = \$722.28$

Compaction:  $\$325.47/\text{mi} \times 1.04 \text{ mi} = \$338.49$

Clean Culverts:  $\$365.82/\text{mi} \times 1.04 \text{ mi} = \$380.45$

Subtotal: \$1,441.22

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Medium:  $\$663.36/\text{acre} \times 1.00 \text{ acres} = \$663.36$

Subtotal: \$663.36

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 5.48% of total Costs = \$193.85

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$193.85

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 34-4-10.00 Continued

Total: \$2,298.43



# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: NS 33S 4W 27.02** Road Name:

Road Renovation: 0.13 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$209.59
Blading 0.13 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.1 acres .....	\$132.67
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$31.52 Surf. \$0.00.....	\$31.52
Quarry Development: .....	\$0.00
Total:	\$373.78

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: NS 33S 4W 27.02 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Scarification:  $\$857.82/\text{mi} \times 0.13 \text{ mi} = \$111.52$

Blading w/o Ditches:  $\$428.91/\text{mi} \times 0.13 \text{ mi} = \$55.76$

Compaction:  $\$325.47/\text{mi} \times 0.13 \text{ mi} = \$42.31$

Subtotal: \$209.59

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Heavy:  $\$1326.72/\text{acre} \times 0.10 \text{ acres} = \$132.67$

Subtotal: \$132.67

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.89% of total Costs = \$31.52

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$31.52

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: NS 33S 4W 27.02 Continued

Total: \$373.78

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: NS 33S 4W 33.06** Road Name:

Road Renovation: 0.54 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: acres .....	\$0.00
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$870.59
Blading 0.54 mi	
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (Manual):0.5 acres .....	\$663.36
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$0.00
Mobilization: Const. \$141.29 Surf. \$0.00.....	\$141.29
Quarry Development: .....	\$0.00
Total:	\$1,675.24

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: NS 33S 4W 33.06 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Scarification:  $\$857.82/\text{mi} \times 0.54 \text{ mi} = \$463.22$

Blading w/o Ditches:  $\$428.91/\text{mi} \times 0.54 \text{ mi} = \$231.61$

Compaction:  $\$325.47/\text{mi} \times 0.54 \text{ mi} = \$175.75$

Subtotal: \$870.59

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Manual Brushing

RoadSide Brushing Heavy:  $\$1326.72/\text{acre} \times 0.50 \text{ acres} = \$663.36$

Subtotal: \$663.36

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 3.99% of total Costs = \$141.29

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$141.29

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: NS 33S 4W 33.06 Continued

Total: \$1,675.24

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 05.02** Road Name:

Temporary Road: 0.02 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.0 acres .....	\$106.62
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$316.22
Mobilization: Const. \$38.95 Surf. \$0.00.....	\$38.95
Quarry Development: .....	\$0.00
Total:	\$461.79

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: Temp 05.02 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.04 = \$106.62

Subtotal: \$106.62

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 2 hr x \$158.11/hr = \$316.22

Subtotal: \$316.22

Mobilization:

Construction - 1.10% of total Costs = \$38.95

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$38.95

Quarry Development:



Road Number: Temp 05.02 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$461.79

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 27.02** Road Name:

Temporary Road: 0.02 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.0 acres .....	\$106.62
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$316.22
Mobilization: Const. \$38.95 Surf. \$0.00.....	\$38.95
Quarry Development: .....	\$0.00
Total:	\$461.79

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: Temp 27.02 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.04 = \$106.62

Subtotal: \$106.62

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 2 hr x \$158.11/hr = \$316.22

Subtotal: \$316.22

Mobilization:

Construction - 1.10% of total Costs = \$38.95

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$38.95

Quarry Development:

Road Number: Temp 27.02 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$461.79

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 33.03** Road Name:

Temporary Road: 0.04 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.1 acres .....	\$213.24
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$474.33
Mobilization: Const. \$63.33 Surf. \$0.00.....	\$63.33
Quarry Development: .....	\$0.00
Total:	\$750.90

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: Temp 33.03 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.08 = \$213.24

Subtotal: \$213.24

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 3 hr x \$158.11/hr = \$474.33

Subtotal: \$474.33

Mobilization:

Construction - 1.79% of total Costs = \$63.33

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$63.33

Quarry Development:

Road Number: Temp 33.03 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$750.90

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 33.06** Road Name:

Temporary Road: 0.04 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.1 acres .....	\$213.24
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$474.33
Mobilization: Const. \$63.33 Surf. \$0.00.....	\$63.33
Quarry Development: .....	\$0.00
Total:	\$750.90

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.



Road Construction Worksheet

Road Number: Temp 33.06 Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.08 = \$213.24

Subtotal: \$213.24

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 3 hr x \$158.11/hr = \$474.33

Subtotal: \$474.33

Mobilization:

Construction - 1.79% of total Costs = \$63.33

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$63.33

Quarry Development:

Road Number: Temp 33.06 Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$750.90

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 33.06A** Road Name:

Temporary Road: 0.09 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.2 acres .....	\$479.80
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$790.55
Mobilization: Const. \$117.01 Surf. \$0.00.....	\$117.01
Quarry Development: .....	\$0.00

Total: \$1,387.36

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: Temp 33.06A Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.18 = \$479.80

Subtotal: \$479.80

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 5 hr x \$158.11/hr = \$790.55

Subtotal: \$790.55

Mobilization:

Construction - 3.31% of total Costs = \$117.01

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$117.01

Quarry Development:

Road Number: Temp 33.06A Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,387.36

# ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Big Graves Salvage Sale Date: January 19

**Road Number: Temp 33.06B** Road Name:

Temporary Road: 0.12 mi 14 ft Subgrade ft ditch

200 Clearing and Grubbing: 0.2 acres .....	\$639.73
300 Excavation: .....	\$0.00
400 Drainage: .....	\$0.00
Culvert: 0 lf	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation: .....	\$0.00
700-1200 Surfacing: .....	\$0.00
1300 Geotextiles: .....	\$0.00
1400 Slope Protection: .....	\$0.00
1800 Soil Stabilization: 0.0 acres .....	\$0.00
1900 Cattleguards: .....	\$0.00
2100 RoadSide Brushing (NONE):0.0 acres .....	\$0.00
2300 Engineering: 0.00 sta. ....	\$0.00
2400 Minor Concrete: .....	\$0.00
2500 Gabions: .....	\$0.00
8000 Miscellaneous: .....	\$1,106.77
Mobilization: Const. \$160.86 Surf. \$0.00.....	\$160.86
Quarry Development: .....	\$0.00
Total:	\$1,907.37

## Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: Temp 33.06B Road Name:

Section 200 Clearing and Grubbing:

Clearing - Medium (Clearing): Adjustment Factor (1.67)

1-15% (Avg Side Slopes): Adjustment Factor (0)

Windrow (Slash): Adjustment Factor (1.07)

less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)

Total Adjustment Factor:  $1.67 + 0 + 1.07 + 0.25 = 2.99$

Base Cost/Acre: \$891.49 x Adjustment Factor: 2.99 x Total Acres: 0.24 = \$639.73

Subtotal: \$639.73

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Section 700-1200 Surfacing:

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Temp Road Construction

Tractor: D7 with rippers 7 hr x \$158.11/hr = \$1,106.77

Subtotal: \$1,106.77

Mobilization:

Construction - 4.54% of total Costs = \$160.86

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$160.86

Quarry Development:

Road Number: Temp 33.06B Continued

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,907.37



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sale: Big Graves Salvage  
Sale Date: January 19  
Prep. By: Josh R  
Tract No: 19-11

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization:           \$0.00/3996 MBF = \$0.00/MBF

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Road Maintenance Obligation:

(2.1) BLM Maintenance . . . . .	\$18,624.63
(2.2) BLM Rockwear . . . . .	\$12,097.73
(5.1) Purchaser Maintenance Rockwear . . . . .	<u>\$156.69</u>
Total Rockwear Payable to BLM . . . . .	\$12,254.42
(3.1) 3rd Party Maintenance . . . . .	\$5,932.18
(3.2) 3rd Party Rockwear . . . . .	\$3,929.57
(4.1) Other Maintenance Payments . . . . .	\$0.00
Total Maintenance Fee Obligation (2.1-5.1)	<u>\$40,740.80</u>

Purchaser Maintenance Allowances:

(5.2A) Move In . . . . .	\$1,341.27
(5.2B) Culverts, Catch Basins, Downspouts . . . . .	\$775.54
(5.2C) Grading, Ditching . . . . .	\$1,965.59
(5.2D) Slide Removal and Slump Repair . . . . .	\$0.00
(5.2E) Dust Palliative (Water) . . . . .	\$945.72
(5.2F) Surface Repair (Aggregate) . . . . .	\$0.00
(5.2G) Other . . . . .	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	<u>\$5,028.11</u>
(2.1-5.2G) Cost (\$40,740.80 + \$5,028.11) = \$45,768.91	
Cost/MBF \$45,768.91 / 3996 MBF = \$11.45/MBF	<u>\$11.45/MBF</u>
(5.2H) Decommissioning . . . . .	\$3,409.71
(5.2H) Cost/MBF \$3,409.71/3996 MBF =	<u>\$0.85/MBF</u>
(2.1-5.2H) Cost (\$40,740.80 + \$5,028.11 + \$3,409.71) = \$49,178.62	
Total Cost/MBF (Excluding Road Use) \$49,178.62/3996 MBF =	<u>\$12.31/MBF</u>

# 1) Road Use Fees - Amortization

Details

R/W	Rd Use	Vol	Road Use
Number	Road Number	Fee x MBF =	Obligation

Subtotal by agreement number

(1.1) Subtotal \$0.00

# 2) BLM Maintenance - Timber Haul

MAINTENANCE (2.1)						ROCKWEAR (2.2)			
Road Number and Segment	A Surf N Type	Mi	Maint x Fee x	Vol MBF =	Maint	Fee x MBF =	Rkwear		
33-4-23.00 A1 N AGG	0.13	0.95	196	\$24.21	0.60	196	\$15.29		
33-4-23.01 N AGG	0.70	0.95	196	\$130.34	0.60	196	\$82.32		
33-4-23.03 N AGG	0.28	0.95	196	\$52.14	0.60	196	\$32.93		
33-4-26.01D1-D2N AGG	0.93	0.95	319	\$281.84	0.60	319	\$178.00		
33-4-33.06 A-BN AGG	1.33	0.95	133	\$168.05	0.60	133	\$106.13		
33-4-33.06 A-BN AGG	1.65	0.95	824	\$1,291.62	0.60	824	\$815.76		
34-4-02.03 A-DN AGG	4.30	0.95	1445	\$5,902.83	0.60	1445	\$3,728.10		
34-4-02.03 E N AGG	0.32	0.95	393	\$119.47	0.60	393	\$75.46		
34-4-02.03 E N AGG	0.73	0.95	95	\$65.88	0.60	95	\$41.61		
34-4-05.02 A A AGG	1.20	0.75	768	\$691.20	0.60	768	\$552.96		
34-4-05.02 B N AGG	1.23	0.95	207	\$241.88	0.60	207	\$152.77		
34-4-05.02 B N AGG	0.95	0.95	361	\$325.80	0.60	361	\$205.77		
34-4-05.02 B N AGG	0.49	0.95	200	\$93.10	0.60	200	\$58.80		
34-4-10.00 A-BN AGG	1.04	0.95	179	\$176.85	0.60	179	\$111.70		
34-4-15.00 A A AGG	0.30	0.75	3228	\$726.30	0.60	3228	\$581.04		
34-4-15.00 B-DA AGG	1.00	0.75	3049	\$2,286.75	0.60	3049	\$1,829.40		
34-4-15.00 E N AGG	0.10	0.95	3049	\$289.66	0.00	3049	\$0.00		
34-4-15.00 J1-IN AGG	0.80	0.95	1285	\$976.60	0.60	1285	\$616.80		
34-4-15.00 J2 N AGG	0.76	0.95	958	\$691.68	0.60	958	\$436.85		
34-4-15.00 J2 N AGG	0.43	0.95	131	\$53.51	0.60	131	\$33.80		
34-4-28.00 A-BA BST	1.39	0.92	768	\$982.12	0.00	768	\$0.00		
34-4-28.00 C-JA AGG	5.30	0.75	768	\$3,052.80	0.60	768	\$2,442.24		

(2.1) Subtotal \$18,624.63

(2.2) Subtotal \$12,097.73

# 3) Third Party Maintenance and Rockwear

MAINTENANCE (3.1)						ROCKWEAR (3.2)			
Agmnt Number	Surface Type	Road Number	Mi	x Fee x MBF =	Maint	Fee x MBF =	Rkwear		
M-2000D	AGG	34-4-15.00 H3	0.60	0.95	1285	\$732.45	0.60	1285	\$462.60
M-2000D	AGG	34-4-15.00 H2	0.14	0.95	1604	\$213.33	0.60	1604	\$134.74
M-2000D	AGG	34-4-15.00 H1	0.27	0.95	1604	\$411.43	0.60	1604	\$259.85
M-2000D	AGG	34-4-15.00 G	1.08	0.95	1604	\$1,645.70	0.60	1604	\$1,039.39
M-2000D	AGG	34-4-15.00 F2	0.60	0.95	1604	\$914.28	0.60	1604	\$577.44
M-2000D	AGG	34-4-15.00 F1	0.50	0.95	3049	\$1,448.28	0.60	3049	\$914.70
M-2000D	AGG	33-4-26.01 C	0.57	0.95	319	\$172.74	0.60	319	\$109.10
M-2000D	AGG	33-4-26.01 B	0.49	0.95	319	\$148.50	0.60	319	\$93.79
M-2000D	AGG	33-4-26.01 A	0.81	0.95	319	\$245.47	0.60	319	\$155.03
M-2000EA	AGG	34-4-15.00 E	0.10				0.60	3049	\$182.94

Subtotal of maintenance fees by agreement number:

M-2000D \$5,932.18

Subtotal of rockwear fees by agreement number:

M-2000D \$3,746.64

M-2000EA \$182.94

(3.1) Subtotal \$5,932.18

(3.2) Subtotal \$3,929.58

#### 4) Other Maintenance Payments - USFS or Others Perform Maintenance

Agency	Road Number	Miles (Log)	Vol x (mbf)	Fee x MBF/MI	= Cost
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(4.1) Subtotal \$0.00

#### 5) Purchaser Maintenance - Rock Wear

TIMBER HAUL (5.1)

Road No and Segment	A N	Mi	RkWear x Fee	Vol x MBF	Total = RkWear
33-4-33.00	N	0.97	0.60	108	\$62.86
33-4-33.01	N	0.22	0.60	84	\$11.09
33-4-33.03	N	0.13	0.60	207	\$16.15
33-4-33.06 C	N	0.45	0.00	674	\$0.00
34-4-9.00	N	0.62	0.60	179	\$66.59
34-4-9.01 A	N	0.21	0.00	107	\$0.00
NS 33S 4W 27.02N		0.13	0.00	104	\$0.00
NS 33S 4W 33.06N		0.54	0.00	570	\$0.00

(5.1) Subtotal \$156.69

#### Purchaser Operational Maintenance

##### Move In

Equipment	Units	No x in	Move x 50 Mi	Cost/ x Factor	Dist =	Sub- total
Motor Grader:	1	1	\$410.00	0.63		\$258.30
Back Hoe:	1	1	\$305.00	0.63		\$192.15
Loader:	1	1	\$410.00	0.63		\$258.30
Water Truck:	1	1	\$95.00	0.63		\$59.85
Dump Truck:	1	1	\$89.00	0.63		\$56.07
Excavator:	1	1	\$410.00	0.63		\$258.30
Roller:	1	1	\$410.00	0.63		\$258.30

(5.2A) Total \$1,341.27

#### Culvert Maintenance - Including Catch basins and Downpipes

Miles	x	Cost/Mi	= Subtotal
2.12		\$365.82	\$775.54

(5.2B) Total \$775.54

#### Grading (Includes Ditches and Shoulders)

Miles	x	Cost/Mi	x Freq	= Subtotal
Blade w/ Ditch:	2.12	\$694.50	1	\$1,472.34
Blade w/o Ditch:	1.15	\$428.91	1	\$493.25

(5.2C) Total \$1,965.59

**Slide and Slough removal, Slump Repair (15 sta-yds. ea.)**

Type	No Slides	Hours	Equip	
Equipment	/Slumps	x Each	x Cost	= Subtotal
Grader:	0		0 \$140.96	\$0.00
Loader:	0	0	\$101.17	\$0.00
Backhoe:	0	0	\$85.84	\$0.00

(5.2D) Total \$0.00

**Dust Palliative (Water)**

**Spreading Hours**

No	Freq	Truck	
Miles	/ MPH	= Hours	x Days x /Day = Hours
1.50	5	0.3	40 1 12
Load & Haul =		0.0	0 0 0
Total Hours =		12	

Truck Cost: \$78.81/Hr. x 12.0 Hours = \$945.72

(5.2E) Total \$945.72

**Surface Repair (Aggregate)**

Production Cost:	0.0 CY x \$0.00/CY	=	\$0.00
Haul to Stockpile:	0.0 CY x ((\$1.75/CY x 0.00 Mi) + \$0.58)	=	\$0.00
Stockpile:	0.0 CY x \$1.07/CY	=	\$0.00
Load from Stockpile:	0.0 CY x \$1.05/CY	=	\$0.00
Haul from Stockpile:	0.0 CY x ((\$1.75/CY x 0.00 Mi) + \$0.58)	=	\$0.00
Process with Grader:	0.0 CY x \$0.88/CY	=	\$0.00
Compaction:	0.0 CY x \$1.08/CY	=	\$0.00

(5.2F) Total \$0.00

**Other**

Fallen Timber Cutting:	0.0 Hours x \$0.00/Hour	=	\$0.00
Brush Cutting/Tree Trimming:	0.0 Hours x \$0.00/Hour	=	\$0.00
Oil/Asphalt Materials:	Lump Sum	=	\$0.00
Signing for Dust Palliatives:	Lump Sum	=	\$0.00
	Lump Sum	=	\$0.00
	Lump Sum	=	\$0.00
	Lump Sum	=	\$0.00
	Lump Sum	=	\$0.00
	Lump Sum	=	\$0.00

(5.2G) Total \$0.00

**Decommissioning**

**Ripping**

Road Number	Ripping Cost	x	(NumSta or CuYds)	= Total
Temp 05.02	\$30.34	x	1.06	= \$32.16
Temp 27.02	\$30.34	x	1.06	= \$32.16
Temp 33.03	\$30.34	x	2.11	= \$64.02
Temp 33.06	\$30.34	x	2.11	= \$64.02
Temp 33.06A	\$30.34	x	4.75	= \$144.12
Temp 33.06B	\$30.34	x	6.34	= \$192.36

(Ripping) Total \$528.83

**Other Costs**

Road Number	Cubic Yds Pullback Material		Qty Waterbars		Qty Earthen Barriers	= Total
NS 33S 4W 27.02	(0x\$1.77)	+	(3x\$55.35)	+	(0x\$166.04)	= \$166.05
33-4-33.06	(0x\$1.77)	+	(8x\$55.35)	+	(1x\$166.04)	= \$608.84
34-4-09.01	(0x\$1.77)	+	(7x\$55.35)	+	(1x\$166.04)	= \$553.49
NS 33S 4W 33.06	(0x\$1.77)	+	(14x\$55.35)	+	(0x\$166.04)	= \$774.90

(Other Cost) Total \$2,103.28

**Time & Equipment**

Temp 05.02 Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 05.02 Seed and Mulch: 0.03 AC @ \$595.65/AC	=\$17.87
Temp 27.02 Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 27.02 Seed and Mulch: 0.03 AC @ \$595.65/AC	=\$17.87
Temp 33.03 Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 33.03 Seed and Mulch: 0.07 AC @ \$595.65/AC	=\$41.70
Temp 33.06 Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 33.06 Seed and Mulch: 0.07 AC @ \$595.65/AC	=\$41.70
Temp 33.06A Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 33.06A Seed and Mulch: 0.15 AC @ \$595.65/AC	=\$89.35
Temp 33.06B Camouflage Entrance: 1 EA @ \$75.00/EA	=\$75.00
Temp 33.06B Seed and Mulch: 0.2 AC @ \$595.65/AC	=\$119.13

(5.2H) Decommissioning Total \$3,409.71



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DEPOSIT AND BID FOR ☒ **TIMBER\***  
☐ **VEGETATIVE RESOURCE**  
(Other Than Timber)

DXP Scaled-SALE

Name of Bidder
Tract Number ORM07-TS-2019.0011
Sale Name Big Graves Timber Sale
Sale Notice (dated) January 24, 2019
BLM District Medford

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input checked="" type="checkbox"/> Written Bid for Oral Auction Sale
---------------------------------------------------------	-----------------------------------------------------------------------

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated timber/vegetative resource on the tract specified above.

Required bid deposited is \$ **45,400.00** and is enclosed in the form of ☐ cash ☐ money order ☐ bank draft  
☐ cashier's check ☐ certified check ☐ bid bond of corporate surety on approved list of the United States  
Treasury ☐ guaranteed remittance approved by the authorized officer.

IT IS AGREED That the bid deposit shall be retained by the United States as liquidated damages if the bid is accepted and the undersigned fails to execute and return the contract, together with any required performance bond and any required payment within 30 days after the contract is received by the successful bidder. It is understood that no bid for less than the appraised price on a unit basis per species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE – LUMP SUM SALE

NOTE: Bidders should carefully check computations in completing the Bid Schedule

BID SUBMITTED					ORAL BID MADE	
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
Douglas-fir	MBF	3500	X	=	X	=
Incense cedar	MBF	215	X\$201.80	=\$43,387.00	X X\$201.80	=\$43,387.00
sugar pine	MBF	136	X\$24.40	=\$3,318.40	X X\$24.40	=\$3,318.40
Ponderosa Pine	MBF	96	X\$23.90	=\$2,294.40	X X\$23.90	=\$2,294.40
White Fir	MBF	49	X\$32.20	=\$1,577.70	X X\$32.20	=\$1,577.80
<b>Total</b>		<b>3996</b>	X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

(Continued on reverse)

If sale contract is executed, undersigned is liable for total purchase price even though the quantity cut, removed, or designated for taking is more or less than the total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

Bid submitted on *(date)*

*(Check appropriate box, sign in ink, and complete the following)*

<input type="checkbox"/>	Signature, if firm is individually owned	Name of firm <i>(type or print)</i>
<input type="checkbox"/>	Signatures, if firm is a partnership or L.L.C.	Business address, include zip code <i>(type or print)</i>
<input type="checkbox"/>	Corporation organized under the state laws of	<i>(To be completed following oral bidding)</i>
	Signature of Authorized Corporate Signing Officer	I HEREBY confirm the above oral bid By <i>(signature)</i>
	Title	Date
Submit bid, in <i>duplicate</i> , to qualify for either an oral auction or sealed bid sale together with the required bid deposit made payable to the Department of the Interior – BLM.  Oral Auction – Submit to Sales Supervisor prior to closing of qualifying period for tract.		Sealed Bid – Send to District Manager, who issued the sale notice, in a sealed envelope marked on the outside: (1) “Bid for Timber” (2) Vegetative Resource Other Than Timber (3) Time bids are to be opened (4) Legal description

### NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 38 FR 6280 and 43 CFR 5442.1

**PURPOSE:** To qualify an oral auction bidder, and then if successful, to bind bidder to certain contract conditions.

**ROUTINE USE:** To determine that an individual is qualified to participate in oral auction bidding, and, as surety that bidder will fulfill contract requirements.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for timber or vegetative resources.



## INSTRUCTIONS TO BIDDERS

1. **AUTHORITY** – Timber located on the revested Oregon and California Railroad Grant Lands and on the reconveyed Coos Bay Wagon Road Grant Lands is administered and sold pursuant to authority of the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a); timber located on other lands and other vegetative resources on all public lands of the United States under jurisdiction of the Bureau of Land Management are administered and sold pursuant to authority of the Act of July 31, 1947 (61 Stat. 681), as amended, by the Act of July 23, 1955 (69 Stat. 367; 30 U.S.C. 601 et. seq.). Regulations of the Secretary of the Interior governing sale of timber are codified in 43 CFR Group 5400.

2. **QUALIFICATIONS OF BIDDERS** – A bidder for sale of timber/vegetative resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the timber/vegetative resource is located.

3. **INSPECTION OF TIMBER/VEGETATIVE RESOURCES** – Bidder is invited, urged, and cautioned to inspect the timber/vegetative resource prior to submitting a bid. By executing the timber/vegetative resource sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the timber/vegetative resource and his opinion of its value.

4. **DISCLAIMER OF WARRANTY** – Government expressly disclaims any warranty of the fitness of the designated timber/vegetative resource for any purpose of the bidder; all timber/vegetative resources are to be sold “As Is” without any warranty of merchantability by Government. Any warranty as to the quantity or quality of timber/vegetative resource to be sold is expressly disclaimed by Government.

5. **BIDS** – Sealed or written bids for not less than the advertised appraised price, per timber/vegetative resource must be submitted in duplicate to the District Manager who issued *Timber/Vegetative Resource Sale Notice*.

(a) **Sealed Bid Sales** – Bids will be received until time for opening which is set out in the Notice. Enclose both copies of bid with required bid deposit in a sealed envelope marked on the outside *Bid for Timber/Vegetative Resource*, time bid is to be opened, tract number, and legal description of land on which timber/vegetative resource is located. In event of a tie, the high bidder shall be determined by lot from among those who submitted the tie bids.

(b) **Auction Sales** – Submission of the required bid deposit and a written bid is required to qualify for oral bidding. Oral bidding shall begin from the highest written bid. No oral bid will be considered which is not higher than the preceding bid. In the event there is a tie in high written bids, and no oral bidding occurs, the bidder who was the first to submit his bid deposit and written bid shall be declared the high bidder. If the officer conducting the sale cannot determine who made the first submission of high tie written bids, the high bidder shall be determined by lot. High bidder must confirm his bid, in writing, immediately upon being declared high bidder.

(c) Except as otherwise provided in 43 CFR 5442.2, bids will not be considered in resale of timber/vegetative resource remaining from an uncompleted contract from any person or affiliate of such person who failed to complete the original contract because of (1) cancellation for the purchaser's breach or (2) through failure to complete payment by expiration date.

(d) When it is in the interest of the Government to do so, it may reject any and all bids and may waive minor deficiencies in bids or in sale advertisement.

6. **BID FORMS** – All sealed, written bids, and confirmation of oral bids shall be submitted on forms provided by Government.

(a) **Lump Sum Sales** – Bids shall specify (1) Bureau of Land Management estimated volume, (2) price per unit, and (3) total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, high bidder shall be liable for total purchase price, including any adjustment which may be made as a result of reappraisal if an extension of time is granted, even though quantity of timber/vegetative resource actually cut, removed, or designated for taking is more or less than the estimated volume or quantity listed.

(b) **Timber Scale Sales** – Bids must state price per thousand board feet that will be paid for each species. High bidder will be determined by multiplying bid price per thousand board feet per species by Bureau of Land Management estimate of volume of each species. Purchaser shall be liable for purchase price of all merchantable timber sold under contract even though all such timber is not actually cut

and removed prior to expiration of time for cutting and removal as specified in contract.\*

7. **BID DEPOSIT** – All bidders must make a deposit of not less than the amount specified in the *Timber/Vegetative Resource Notice*. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior – BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department\*, or any approved guaranteed remittance approved by the Authorized Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.

8. **AWARD OF CONTRACT** – Government may require high bidder to furnish such information as is necessary to determine the ability of bidder to perform the obligation of contract. Contract will be awarded to high bidder, unless he is not qualified or responsible or unless all bids are rejected. If high bidder is not qualified or responsible or fails to sign and return the contract together with required performance bond and any required payment, contract may be offered and awarded to the highest bidders qualified, responsible, and willing to accept the contract.

9. **TIMBER/VEGETATIVE RESOURCE SALE CONTRACT** – To be executed by purchaser, has been prepared by Government, and may be examined in the District Manager's office.

### 10. PERFORMANCE BOND-

(a) A performance bond in an amount of not less than 20 percent of total purchase price is required, but the amount of the bond shall not be in excess of \$500,000, except when the purchaser opts to increase the minimum bond to permit cutting prior to payment as provided in 43 CFR 5451.2, or in the event the purchaser is a holder of an unresolved default the bond may be increased as provided in 43 CFR 5450.1(b). Performance bond may be (1) bond of a corporate surety shown on approval list issued by the United States Treasury Department and executed on an approved standard form, (2) personal surety bond executed on an approved standard form if Government determines principals and bondsman are capable of carrying out the terms of the contract, (3) cash bonds, (4) negotiable securities of the United States, or (5) any guaranteed remittance approved by the Authorized Officer.

(b) If purchaser elects to cut timber without skidding or yarding it to a loading point or removing it prior to the payment of the second or subsequent installments, Government shall require an increase in amount of performance bond initially required by an amount equal to the value of timber to be cut. Such increase must be on a bond rider form supplied by Government and be approved, in writing, by Government prior to cutting timber covered by the bond increase. This increased amount of bond shall be used to assure payment for timber cut in advance of payment.\*

11. **PAYMENT BOND** – If purchaser elects to (a) cut and remove timber, or (b) remove timber already cut which has been secured by an increased performance bond as provided in paragraph 10(b) above, before payment of the second or subsequent installments, Government shall require a payment bond on a form supplied by Government. Purchaser shall obtain written approval from Government of payment bond prior to cutting and/or removal of timber covered by the bond. Payment bond shall be used to assure payment for timber cut and/or removed in advance of payment.\*

12. **PAYMENT OF PURCHASE PRICE** – For sales of \$500 or more, Government may allow payment by installments. Except as discussed in paragraphs 10 and 11 above, no part of any timber/vegetative resource sold may be severed, cut, or removed unless advance payment has been made as provided in contract.

13. **LIQUIDATED DAMAGES** – Within thirty (30) days from receipt of *Timber/Vegetative Resource Sale Contract*, the successful bidder shall sign contract and return it to Government, together with required bond and any required payment. If successful bidder fails to comply within the stipulated time, his bid deposit shall be retained by Government as liquidated damages.

14. **NINETY-DAY SALES** – If no bid is received within time specified in the advertisement of sale and if Government determines that there has been no significant rise in the market value of timber/vegetative resource, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

\*Applies to Timber Only

15. **UNAUTHORIZED USE OF GOVERNMENT PROPERTY** – A sale may be refused to high bidder who has been notified that he has failed to make satisfactory arrangements for payment of damages resulting from unauthorized use of, or injury to, property of the United States.

16. **EQUAL OPPORTUNITY CLAUSE** – This contract is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. Copies of this order may be obtained from the District Manager. 43 CFR 60-1.7(b) requires that the Equal Opportunity Compliance Report Certification will be completed by prospective contractors. Certification may be obtained from District Manager.

17. **LOG EXPORT** – All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs, and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end product use; or (4) western

red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. Timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to “unprocessed timber”. Special reporting, branding and painting of logs may be included in contract provisions.\*

18. **DETAILED INFORMATION** – Detailed information concerning contract provisions, bid, performance bond forms, tract location maps, and access conditions may be obtained from the District Manager. All persons interested in bidding on the products listed are encouraged to familiarize themselves with all such detailed information.