PROSPECTUS

Lump Sum Sale

Grants Pass Field Office Josephine Master Unit

Medford Sale #ORM07-TS-2023.0014 September 28, 2023 (SQF)

Salmon Run Timber Sale, Josephine County, O&C, P.D.

BID DEPOSIT REQUIRED: \$38,400.00

All timber designated for cutting in SW¼, S½SE¼ Section 17, N½SE¼ Section 18, Lot 5, Lot 6, S½NE¼, SE¼ Section 30, Lot 1, W½NE¼, SE¼NE¼, E½NW¼, SE¼SW¼, NE¼SE¼, S½SE¼ Section 31, SW¼, W½SE¼ Section 32, T. 33 S., R. 5 W; SE¼SW¼, SW¼SE¼ Section 13, NE¼NE¼, S½NW¼ Section 23, NW¼NE¼, E½NW¼, NE¼SW¼, NW¼SE¼ Section 24, NE¼NE¼ Section 35, T. 33 S., R. 6 W; A portion of the Spike Buck claim, unnumbered lot NE¼NW¼, unnumbered lot NW¼NW¼, SE¼SW¼ Section 6, T. 34 S., R. 5 W; unnumbered lot NE¼NE¼, unnumbered lot NW¼NE¼, SE¼SW¼ Section 6, T. 34 S., R. 5 W; unnumbered lot NE¼NE¼, S½NW¼, NW¼SE¼ Section 1, T. 34 S., R. 6 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
40,087	7,149	Douglas-fir	8,848	\$42.20+	\$373,385.60
979	185	ponderosa pine	231	\$18.40+	\$4,250.40
899	82	white fir	97	\$28.40+	\$2,754.80
690	72	incense-cedar	95	\$27.80+	\$2,641.00
53	4	sugar pine	5	\$18.30+	\$91.50
42,708	7,492	Totals	9,276		\$383,123.30

*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 (6.1% of Pond Value). Reduced Douglas fir value by \$105,114.24 to pay for deficit species Ponderosa pine Incense-cedar, White Fir and Sugar pine.

<u>TIMBER AUCTION LOCATION</u> – The timber auction will be held at the Grants Pass Inter-agency Office, located at 2164 NE Spalding Avenue, Grants Pass, Oregon, at 9:00 a.m. on Thursday, September 28, 2023.

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.

<u>CRUISE INFORMATION</u> - The Salmon Run timber sale was cruised using the PCMTRE and 3P cruise methods. The 515 acres of PCMTRE were split into 2 strata, both using a 40BAF and a 1 in 6 sampling frequency. The conventional logging units (Strata 1) had 387 plots covering 398 acres. The Douglas fir (Strata1) had an average of 100 basal area per acre and a VBAR of 162.9. The helicopter logging units

(Strata 2) had 91 plots covering 103 acres. The Douglas fir (Strata2) had an average of 104 basal area per acre and a VBAR of 205.4. The 14 Acres of roadside clearing units were cruised using the 3P cruise method resulting in 13 sample trees. Cruise plot maps showing the location of the PCMTRE plots and 3P sample trees are available at the Medford District Office.

Approximately 0 trees which are nonmerchantable are designated for cutting. Approximately 0% of the sale volume is salvage material. With respect to merchantable trees of all conifer species: the average tree is 15.4 inches DBHOB; the average gross merchantable log contains 64 bd. ft.; the total gross volume is approximately 10,554 MBF; and 88% recovery is expected. (Average DF is 15.4 inches DBHOB; average gross merchantable log DF contains 64 bd. ft.)

<u>LOG EXPORT AND SUBSTITUTION RESTRICTIONS</u> - 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.

<u>CUTTING AREA</u> – Twenty-two (22) units containing four hundred eighty-six (486) acres must be partial cut (commercial thin and selection harvest), two (2) units containing eleven (11) acres must be group selection harvested, one (1) unit containing four (4) acres must be regeneration harvested, and three (3) units containing fourteen (14) acres must be clearcut for roadside maintenance. This includes nineteen (19) rights-of-way that must be clear-cut.

<u>CUTTING TIME</u> - Contract duration will be forty-eight (48) months for cutting and removal of timber.

<u>ACCESS</u> - Access to the sale area is available via: a public State and County road system through the contract area; existing BLM roads; Right-of-Way and Road Use Agreement M-1538 with Josephine County Forestry Department; 1960 Co-Operative Right-of-Way Agreement (MOU) with Oregon Department of Forestry; and Right-of-Way and Road Use Agreement M-2000 with BTG Pactual PNW FUND IV REIT Inc. (BTG).

Among other conditions, Right-of-Way and Road Use Agreement M-1538 with Josephine County Forestry Department requires, but is not limited to:

- Completion/execution of a license agreement between the Purchaser and the Josephine County Forestry Department.
- Road renovation and maintenance to be completed by the Purchaser.
- Prior to cutting or removing any timber from the road right-of-way between Stations 0+00 and 0+53 on Temporary Route 32-25-D, the Purchaser shall pay Josephine County Forestry Department the total value of that timber based on an agreed upon fair market value price for that timber.
- Prior to cutting or removing any timber from the right-of-way tramway wedge area accessing a portion of Unit 05-01, the Purchaser shall pay Josephine County Forestry Department the total value of that timber based on an agreed upon fair market value price for that timber.

Among other conditions, 1960 Co-Operative Right-of-Way Agreement (MOU) with Oregon Department of Forestry requires, but is not limited to:

- Completion/execution of a license agreement between the Purchaser and the Oregon Department of Forestry.
- Road renovation and maintenance to be completed by the Purchaser.

- Prior to cutting or removing any timber from the road right-of-way between Stations 0+00 and 1+44 on Temporary Route 35-12, the Purchaser shall pay Oregon Department of Forestry the total value of that timber based on an agreed upon fair market value price for that timber.
- Arbitration of conditions of road use. The Permittee has indicated they require a rockwear obligation of \$27.31, based upon the cruised volume listed in the license agreement for the use of the roads listed in the license agreement.

Among other conditions, Right-of-Way and Road Use Agreement M-2000 with BTG Pactual PNW FUND IV REIT Inc. (BTG) requires, but is not limited to:

- Completion/execution of a license agreement between the Purchaser and the BTG Pactual PNW FUND IV REIT Inc.
- Road renovation and maintenance to be completed by the Purchaser.
- Arbitration of conditions of road use. The Permittee has indicated they require a road use obligation of \$1,452.60 for the use of the roads listed in the license agreement.
- Arbitration of conditions of road use. The Permittee has indicated they require a rockwear obligation of \$97.54, based upon the cruised volume listed in the license agreement.

<u>ROAD MAINTENANCE</u> – The Purchaser will be required to maintain all the permanent and temporary roads that they construct, plus 20.80 miles of existing BLM and Third Party (Industry) roads listed in Section 3100 of Exhibit D. A Purchaser maintenance allowance in the amount of \$181,740.88 has been allotted for the final maintenance of these roads. The Purchaser will be required to pay a BLM rockwear fee of \$23,772.85 and maintenance fee of \$0.00 for the use of the roads listed in the contract.

<u>ROAD CONSTRUCTION</u> – The contract will require the Purchaser to renovate 1093.47 stations of existing roads, construct 7.89 stations of new permanent road, and construct/reconstruct 109.56 stations of temporary routes.

<u>DECOMMISSIONING</u> – A Purchaser decommissioning allowance in the amount of \$20,254.66 has been made for decommissioning. Decommissioning work to be performed is described in Section 3500 of Exhibit D.

<u>SOIL DAMAGE PREVENTION</u> - Pursuant to Section 26 of Form 5450-003, Timber Sale Contract, mechanical ground-based harvesting, ground-based yarding, skid trail and landing rehabilitation, machine piling, permanent road construction, permanent road reconstruction, temporary route construction, temporary route reconstruction, or temporary route decommissioning shall be restricted to periods of low moisture (dry conditions). Low soil moisture varies by texture and is based on site-specific considerations. Generally, low soil moisture is 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. Low soil moisture limits will be determined by the Authorized Officer.

Pursuant to Section 26 of Form 5450-003, Timber Sale Contract, log haul shall not be conducted on all natural surface roads that receive one-half (½) inch or more precipitation within a twenty-four (24) hour period. Haul shall not resume for a minimum of forty-eight (48) hours following any storm event, or until road surface is sufficiently dry, as approved by the Authorized Officer. The Purchaser may elect, at their own expense, to apply rock surfacing to these roads to bring them up to wet weather haul standards, as approved by the Authorized Officer.

Pursuant to Section 26 of Form 5450-003, Timber Sale Contract, log haul shall not be conducted on hydrologically connected natural surface or rocked roads during conditions that would result in any of the following: surface displacement such as rutting or ribbons, continuous mud splash or tire slides, fines being pumped through road surfacing from the subgrade resulting in a layer of surface sludge, as directed by the Authorized Officer.

Pursuant to Section 26 of Form 5450-003, Timber Sale Contract, the Purchaser shall, prior to October 15 of the same operating season, winterize and rehabilitate temporary routes, landings, hydrologically connected corridors and skidtrails 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.

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, perform all non-emergency road maintenance as directed by the Authorized Officer.

EQUIPMENT REQUIREMENTS - A yarding tractor equipped with an integral arch capable of one-end log suspension and a winch for lining logs seventy-five (75) feet. A skyline varder with a medium (40-50 foot) tower: capable of one-end log suspension with a minimum lateral varding capability of seventy-five (75) feet while maintaining a fixed position during inhaul; capable of multi-span; and capable of an external varding distance of one thousand five hundred seventy-five (1,575) feet slope distance. A helicopter equipped with a dropline with a minimum length of two hundred (200) feet. A piece of equipment capable of sub-soiling to a depth of twelve (12) inches will be required for fully decommissioning: all landings and skid trails within two hundred feet of streams or waterbodies as shown on Exhibit A; and any landings or skid roads within ground-based units as necessary to achieve no more than twenty (20) percent detrimental soil compaction within the unit. A fire engine of three hundred (300) gallons or more capacity with five hundred (500) feet of 1¹/₂ inch hose (must be adequate length to reach two hundred (200) feet beyond active work sites), six (6) 1¹/₂ inch wyes, six (6) 1¹/₂ inch to 1 inch reducers, three (3) 1¹/₂ inch nozzles and three (3) 1 inch nozzles will be required for fire prevention and control. Each fire engine 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 11/2 inch fire hose. The pump may be either power take off driven or truck-mounted auxiliary engine driven, or portable.

<u>SLASH DISPOSAL</u> – Slash disposal will consist of a combination of lop and scatter, machine pile, cover, and burn machine piles, hand pile, cover, and burn hand piles, pile, cover, and burn landing decks, as described in SD-1, and SD-2 of the Special Provisions. A post logging assessment shall be conducted to determine treatment needs in all units. The initial slash disposal appraisal described in SD-5 prescribed two hundred eighty-seven and one-quarter (287.25) acres of lop and scatter, one hundred twenty and three quarters (120.75) acres of hand pile and cover, forty-four (44) acres of machine pile and cover, and forty-eight and three quarters (48.75) acres of machine pile, cover, and burn landing decks.

<u>BUYOUT SECURITIES (OPTIONAL CONTRIBUTION)</u> – The purchaser will have the option of performing one hundred twenty and three quarters (120.75) acres of hand pile burn and mop up slash disposal requirements or contributing ten thousand nine hundred thirty-six and 33/100 dollars (\$10,936.33) in lieu thereof. The option must be declared upon execution of the contract. The purchaser will have the option of performing forty-four (44) acres of machine pile burn and mop up slash disposal requirements or contributing three thousand four hundred fifty-three and 74/100 dollars (\$3,453.74) in lieu thereof. The option must be declared upon execution of the contract (\$3,453.74) in lieu thereof. The option must be declared upon execution of the contract. The purchaser will have the option of performing forty-eight and three-quarters (48.75) acres of burn and mop up landing decks slash disposal requirements or contributing three thousand two hundred ninety-six and 75/100 dollars (\$3,296.75) in lieu thereof. The option must be declared upon execution of the contract. The optional contribution must be paid in installments payable in the same manner as and together with payments required in Section 3 of the contract.

<u>CONTRACT TERMINATION</u> - 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, or protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Medford District Record of Decision (ROD) and Resource Management Plan (RMP). 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.

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

<u>OTHER</u> –

- 1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
- 2. A revised 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: (1) Comply with the Endangered Species Act or to prevent incidental take of northern spotted owls in accordance with management direction in the Record of Decision (ROD) and Resource Management Plan (RMP), or; (2) Comply with a stay or remedy issued by the Interior Board of Land Appeals or a court order, or; (3) Protect species which were identified for protection in accordance with management direction established in the ROD and RMP.
- 3. No harvest, yarding, or road construction operations within unit 17-3B as shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that northern spotted owl nesting and/or fledging activities are not occurring during the year and/or time of harvest.
- 4. The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting northern spotted owls may not be allowed between March 1 and September 30, both days inclusive.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys to determine whether owls have moved into harvest units. If northern spotted owls are detected in or adjacent to the units, operations would be restricted until northern spotted owl occupancy and nesting status has been determined. If it is determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations in writing. Without this approval, such operations are prohibited from March 1 through June 30 of each year.

- 5. No work in the stream channel shall be conducted between September 15 of one calendar year and June 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- 6. No non-emergency road maintenance shall be conducted from October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- 7. A harvester, feller-processor, or feller-buncher with purpose-built carriers with boom-mounted felling heads and a boom with a minimum lateral reach of twenty (20) feet may be used in the ground-based portion of harvest units. Mechanized equipment as stated above with self-leveling cabs may be used on slopes up to fifty (50) percent, as approved by the Authorized Officer.
- 8. In the Riparian Reserve portion of units 1-1, 1-2, 5-1, 5-21, 5-25, 23-7, 24-2, 31-6, 32-23, 32-24, 32-25, and 35-12 as shown on Exhibit E, the Purchaser shall create a total of fifty-six (56) snags

via girdling. In the Late-Successional Reserve portion of units 1-5A, 1-5B, 1-6, 23-7, 31-7, and 35-12 as shown on Exhibit E, the Purchaser shall create a total of forty (40) snags via girdling. A grand total of ninety-six (96) snags shall be created in the sale area. See Special Provision L-32 and Exhibit E for more details.

- 9. Artificial guyline anchors (equipment or deadmen) may be needed for units 1-2, 1-6, and 32-25. Artificial guyline anchors or yoder yarding may be needed for units 23-7, 30-2, and 30-4.
- 10. In unit 1-2, avoid and/or minimize the number of yarding corridors crossing over the soils concern area shown on Exhibit A. After yarding, waterbar and spread slash over the portion of corridors that went through the soils concern area, as approved by the Authorized Officer.
- 11. In unit 32-24, yarding is not permitted through the botany buffer shown on Exhibit A.
- 12. In units 1-2, 1-5B, 5-1, 17-3A, 17-3B, and 31-6 it is acceptable to have yarding corridors outside of unit boundaries, however not through any resource or stream buffers shown on Exhibit A, as approved by the Authorized Officer.
- 13. In units 1-5A, it is acceptable to utilize the existing skid trails and landings outside of the unit boundaries, as approved by the Authorized Officer.
- 14. In units 1-5B and 1-6 walk yarder into the unit along the cable-tractor swing route as shown on Exhibit A.
- 15. Pipeline requirements for road construction Coordinate construction with the Pipeline Representative and Authorized Officer.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA -

To access Units 1-1, 1-2, 1-4, 1-5A, 1-5B, 1-6, 6-20, and roadside unit C: Take Exit 71 from Interstate 5. Head west onto Sunny Valley Loop for 0.4 miles and cross over the covered bridge. Go straight at the stop sign to continue onto Sunny Valley Loop for another 1.3 miles. Turn right onto Salmon Creek Rd (BLM Road # 34-6-2.0). You will need a BLM gate key to get through the locked gate at the junction of the 34-6-2.0 and 34-6-1.3 roads to access unit 1-4 and part of unit 1-1.

To access Unit 35-12: Take Exit 71 from Interstate 5. Head west onto Sunny Valley Loop for 0.4 miles and cross over the covered bridge. Go straight at the stop sign to continue onto Sunny Valley Loop for another 2.3 miles. Turn right onto the 33-6-35.2 road. You will need a BLM gate key to get through the locked gates at the junction of the 33-6-35.1 and Sunny Valley Loop roads to access unit 35-12.

To access Units 5-1, 5-21, 5-25, 6-1, 30-2, 30-4, 31-6, 31-7, 32-23, 32-25, 32-24 and roadside unit B: Take Exit 76 from Interstate 5. Head east onto Coyote Creek Road for 2.4 miles. Turn right onto Miller Gulch Road (BLM Road # 33-6-24.0).

To access Units 23-7, 23-8, 24-1, and 24-2: Take Exit 76 from Interstate 5. Head north onto Old State Hwy 99 S/Frontage Road for 1.2 miles. Turn right onto Wolf Orch Road (BLM Road # 33-6-14.0).

To access Units 17-3A, 17-3B, and roadside unit A: Take Exit 76 from Interstate 5. Head north onto Old State Hwy 99 S/Frontage Road for 2.5 miles. Turn right onto Speaker Road and continue for 1.5 miles. Turn right onto Board Tree Road, (BLM Road # 33-5-7.0). **You will need a BLM gate key to get through the locked gates at the junction of the 33-5-18.0 and 33-5-17.1 roads to access unit 17-3B.**

<u>ENVIRONMENTAL ASSESSMENT</u> - An environmental assessment DOI-BLM-ORWA-M070-2018-0010-EA and categorical exclusion review BLM-OR-ORWA-M070-2022-0010-CX were prepared for this sale, and a Finding of No Significant Impact has been documented. These documents are available for inspection as background for this sale at the Medford District Office and on the ePlanning website: https:// eplanning.blm.gov/eplanning-ui/home. . 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. 43. 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) <u>AR-1</u> 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) <u>AR-2</u> All timber on the Reserve Areas shown on Exhibit A and all blazed, painted, or posted trees which are on or mark the boundaries of the Reserve Areas, except approximately two thousand five hundred ninety-four (2,594) Douglas-fir, fifty-two (52) ponderosa pine, three (3) sugar pine, and one hundred thirty-three (133) incense-cedar trees marked for cutting heretofore by the Government with blue paint above and below stump height in units 1-5A, 1-5B, 1-6, and Roadside Units A, B, and C as shown on Exhibit A.
- (C) <u>IR-1</u> Approximately eleven thousand six hundred seventy-three (11,673) Douglas-fir, eight hundred twenty-four (824) ponderosa pine, one hundred eighty-five (185) sugar pine, two hundred forty-seven (247) incense-cedar, two (2) fir, one hundred seven (107) oak, six (6) pacific yew, and one hundred thirty (130) other hardwood trees marked with yellow paint above and below stump height in units 1-4, 5-1, 5-21, 5-25, 6-1, 6-20, 17-3A, 17-3B, 23-7, 23-8, 24-1, 24-2, 30-2, 31-6, 31-7, 32-23, 32-24, and 35-12 as on Exhibit A.
- (D) <u>IR-1</u> Approximately five thousand six hundred four (5,604) Douglas-fir, two hundred forty (240) ponderosa pine, sixty-five (65) sugar pine, three hundred fifteen (315) incense-cedar, twenty-five (25) fir, nineteen (19) oak, and two (2) other hardwood trees marked with orange paint above and below stump height in units 1-1, 1-2, 30-4, and 32-25 as on Exhibit A.
- (E) <u>IR-6</u> All Pacific yew trees in the Contract Area shown on Exhibit A.
- (F) <u>IR-13</u> All trees greater than thirty-six (36) inches D.B.H.O.B that were established prior to 1850 in the contract as shown on Exhibit A that are cut for safety or operational purposes shall be retained on site as directed by the Authorized Officer.

SPECIAL PROVISIONS

(G) <u>IR-13</u> All existing snags and coarse woody debris in all units shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer. All snags that are felled for safety reasons, and do not present a safety hazard on the ground, shall be retained on site.

SPECIAL PROVISIONS

Section 44

(A) <u>LOGGING</u>

- (1) <u>L-1</u> 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) <u>L-2</u> 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 prework 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) <u>L-4</u> 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) <u>L-5</u> All conifer trees eight (8) inches or larger D.B.H.O.B., which are not reserved shall be felled in all units shown on Exhibit A.
- (5) <u>L-8</u> In all units as shown on Exhibit A, all trees designated for cutting shall be felled and whole tree yarded or yarded with tops attached except when excessive stand damage occurs as determined by the Authorized Officer. If excessive stand damage occurs, all trees shall be bucked into log lengths not to exceed forty-one (41) feet prior to being yarded.
- (6) <u>L-11</u> No trees may be felled into the stream, spring, or botany buffers designated on Exhibit A.
- (7) <u>L-12</u> In the portion of unit 1-2 that is designated as a "soils concern area" as shown on Exhibit A, ground-based equipment is prohibited and cable corridors crossing over the area shall be minimized as approved by the Authorized Officer. Following use, the cable corridors utilized over this soils concern area shall be water barred and have slash spread over them.

SPECIAL PROVISIONS

(8) <u>L-12</u> In the units shown on Exhibit A, yarding/felling shall be done in accordance with the requirements for the designated area listed below.

Designated Area	Yarding Requirements or Limitations
Roadside Management Units A, B, C	Mechanical felling required with a single-grip felling head (a head that can hold and fully suspend the tree after it is cut). 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.
	Yarding shall be done with a system which will fully suspend both ends of the log clear of the ground during inhaul.
	Landing size shall not exceed one-quarter (1/4) acre, shall be located along existing roads, and shall be approved by the Authorized Officer. No landing creation or expansion shall occur without prior approval from the Authorized Officer. Design landings with adequate drainage.
	Conifer tops and limbs, hardwoods, brush, and other cut vegetation created from the roadway clearing treatment shall be machine piled concurrently with felling operations and shall be treated according to the roadway clearing prescriptions found in Exhibit C19 and according to the machine pile and cover slash disposal stipulations found in Sec. 44(E)(1)(b)(SD- 1b).
	All mechanized equipment shall only operate on existing road surfaces.
	Mechanized felling operations are subject to seasonal operating restrictions as described in Section 44(A)(12)(L-19) of this contract.
	See Exhibits C6B and C12 in the Engineering package for more details on the roadside management requirements.

Designated Area	Yarding Requirements or Limitations
Ground Based Harvest & Ground Based	Mechanized harvesting operations are optional. All ground- based harvest units may be manually felled.
<u>Ground Based</u> (<u>Tractor) Yard Units</u> 1-2, 1-5A, 1-5B, 1- 6, 5-1, 23-7, 31-6, 32-25, 35-12	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.
	Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required.
	The harvest equipment shall walk on existing or created slash as directed by the Authorized Officer. If Purchaser is required to create slash to walk on, then Purchaser shall not be required to whole-tree-yard.
	Non-specialized ground-based equipment (without a self- leveling cab) shall be limited to slopes of thirty-five (35) percent or less. Specialized ground-based equipment (with a self-leveling cab) shall be limited to slopes fifty (50) percent or less. This equipment can operate on steeper ground if it is operating on previously constructed skid trails or accessing isolated ground-based harvest areas requiring short distances over steeper pitches.
	Mechanized ground-based felling and yarding operations are subject to dry condition operating restrictions as described in Section $44(A)(12)(L-19)$ of this contract.
	Yarding tractor shall be equipped with an integral arch and yard with one-end log suspension.

<u>Ground Based</u> <u>Harvest &</u> <u>Ground Based</u> (<u>Tractor) Yard Units</u> <u>Continued</u> 1-2, 1-5A, 1-5B, 1- 6, 5-1, 23-7, 31-6, 32-25, 35-12	Existing skid roads shall be used when possible. 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 from skids trails to less than fifteen (15) percent over the harvest unit and is approved by the Authorized Officer.
	Designate skid trails in locations that do not channel water into waterbodies, floodplains, and wetlands, or unstable areas.
	Rehabilitate utilized skid roads, landings, cable-tractor swing routes, and/or temporary routes as necessary to achieve no more than twenty (20) percent detrimental soil conditions in the ground-based harvest unit, as specified in Sec. $44(C)(12)(E-1)$.
	Block skid trails following use.
	Landing size shall generally not exceed one-quarter (¼) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries, 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.
	Minimize disturbance to existing coarse woody debris. Where skid trails encounter large coarse woody debris, the Purchaser shall buck out a portion for equipment access.
	The use of blades while tractor yarding will be limited, equipment shall walk over as much ground litter as possible.
	In units 1-5A, it is acceptable to utilize the existing skid trails and landings outside of the unit boundaries, as approved by the Authorized Officer.

	In units 1-5B and 1-6 walk yarder into the unit along the cable- tractor swing route as shown on Exhibit A.		
Designated Area	Yarding Requirements or Limitations		
Cable Yard Units 1-1, 1-2, 1-5B, 1-6, 5-1, 5-21, 5-25, 6-1, 17-3A, 17-3B, 23-7, 30-2, 30-4, 31-6, 31- 7, 32-23, 32-24, 32-	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 five hundred seventy-five (1,575) feet slope distance.		
25, 35-12	Skyline equipment shall be capable of yarding in a multispan configuration.		
	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.		
	Yarding corridors will be perpendicular to the contours.		
	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.		
	Existing cable corridors shall be used whenever possible. Yarding corridors shall be approximately one hundred fifty (150) feet apart, measured at the tailholds.		
	Yarding corridor widths shall not exceed six (6) feet either side of the skyline centerline.		
	Landing size shall not exceed one-quarter (¹ / ₄) 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. Short purchaser spurs into units may be necessary to achieve one-end log suspension. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditchline of roads.		

<u>Cable Yard Units</u> <u>Continued</u> 1-1, 1-2, 1-5B, 1-6, 5-1, 5-21, 5-25, 6-1, 17-3A, 17-3B, 23-7, 30-2, 30-4, 31-6, 31- 7, 32-23, 32-24, 32- 25, 35-12	Corridors may be needed across the "soils concern area" of unit boundaries in unit 1-2. Yarding in these corridors shall meet the requirements described in Section 44 (A)(7)(L-12) and shall be approved by the Authorized Officer prior to use. Corridors may be needed outside of unit boundaries in units 1- 2, 1-5B, 5-1, 17-3A, 17-3B, and 31-6. These corridors shall not be located in any of the stream, wetland, nor botany buffers shown on Exhibit A and shall be approved by the Authorized Officer prior to use. Yarding over streams shall be avoided unless it is the only viable option. If yarding is needed over streams shown on Exhibit A, it shall be done with full suspension within fifty (50) feet of and over streams and shall be approved by the Authorized Officer. Any trees cut for the yarding corridor outside of unit boundaries within two hundred (200) feet of streams shown on Exhibit A shall be retained on site as coarse woody debris. Directional falling to the lead and away from streams, and unit boundaries shown on Exhibit A will be required. Cable corridors that are hydrologically connected to streams shown on Exhibit A shall be water-barred and shall have slash placed over them prior to winter rain events to protect water quality.
Designated Area	Yarding Requirements or Limitations
<u>Helicopter Yard</u> <u>Units</u> 1-4, 1-5B, 6-20, 23- 8, 24-1, 24-2	All yarding will be done with an aerial system. Landing size shall not exceed one (1) acre and all landings are to be approved by the Authorized Officer prior to construction. Potential landing locations are shown on Exhibit A.

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Service pads and helispots can be constructed with prior approval of the Authorized Officer and shall not be larger than necessary.
A dropline with a minimum length of two hundred (200) feet is required.
Logs to be yarded will be lifted vertically to a height above the adjacent leave trees without horizontal movement.
All multiple log turns will be vertically lifted from a small enough radius to result in minimal damage to the residual forest stand as determined by the Authorized Officer.

- (9) <u>L-14</u> No falling, yarding or loading is permitted in or through the streams, springs, or botany buffers as shown on Exhibit A.
- (10) <u>L-19</u> No work in the stream channel shall be conducted between September 15 of one calendar year and June 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- (11) <u>L-19</u> No non-emergency road maintenance shall be conducted from October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- (12) <u>L-19</u> No mechanical ground-based harvesting, ground based yarding, skid trail and landing creation and rehabilitation, machine piling, road and temporary route construction, road and temporary route reconstruction, temporary route decommissioning, or non-emergency road maintenance shall be conducted in units 1-2, 1-5A, 1-5B, 1-6, 5-1, 17-3B, 23-7, 31-6, 31-7, 32-25, 35-12, and Roadside Units A, B, and C 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.

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- (13) L-19 No haul on all natural surface roads and rocked roads 33-5-17.1, 33-5-30.0, 33-5-30.2, 33-5-30.3, 33-5-31.1, the portion of 33-5-31.3 road that is west of the junction with the 33-5-32.1 road, 33-5-31.5, 33-5-32.0, 33-6-35.2C, 34-5-5.0, 34-5-6.0, 34-6-1.0, 34-6-1.1, 34-6-1.3, 34-6-2.0 roads shall be conducted 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. Purchaser may also elect to rock these roads at their own expense. 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.
- (14) <u>L-20</u> No harvest, yarding, or road construction operations within unit 17-3B as shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that northern spotted owl nesting and/or fledging activities are not occurring during the year and/or time of harvest.
- (15) <u>L-22</u> During logging operations, the Purchaser shall keep the 33-5-7.0, 33-5-18.0, 33-6-14.0, 33-6-24.0, 34-6-1.3, and 34-6-2.0 Roads, where the road passes through the contract area, clear of trees, rock, dirt, and other debris so far as is practicable. The road shall not be blocked by such operations for more than thirty (30) minutes.
- (16) <u>L-24</u> Before cutting and removing any trees necessary to facilitate logging in the 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. 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 Page 10 of 49

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sold under this contact 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(d) of the contract.
- (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 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

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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 in **units 1-5A**, and 1-6 as shown on Exhibit A 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 Price shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.
- L-32 In harvest units 1-1, 1-2, 5-1, 5-21, 5-25, 23-7, 24-2, 31-6, 32-23, 32-24, 32-(17)25, 35-12 the Purchaser shall create snags via girdling, or other method as approved by the Authorized Officer, within two hundred (200) feet of streams (the Riparian Reserve land use allocation) as shown on Exhibit E. The total number of snags to create in the Riparian Reserve (RR) per unit is as follows: 1-1 (2 snags), 1-2 (2 snags), 5-1 (14 snags), 5-21 (2 snags), 5-25 (2 snags), 23-7 (2 snags), 24-2 (2 snags), 31-6 (6 snags), 32-23 (2 snags), 32-24 (10 snags), 32-25 (10 snags), and 35-12 (2 snags). A total of total of fifty-six (56) snags shall be created in the RR land use allocation portion of units. Of this total, one-half $(\frac{1}{2})$ of the snags required in each unit shall be greater than ten (10) inches diameter at breast height outside bark and one-half $(\frac{1}{2})$ of the snags required in each unit shall be greater than twenty (20) inches diameter at breast height outside bark. All snags created shall come from reserve marked trees as described in Section 43(B)(AR-2), Section 43(C)(IR-1), Section 43(D)(IR-1), or Section 43(E)(IR-13) and shall be distributed in a variety of spatial patterns including aggregated groups and individual trees. No adjustments of volume or value shall be made to meet these requirements. The

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Purchaser shall tally all girdled trees by diameter class and species per unit. At the end of girdling operations, a completed tree tally shall be submitted to the Authorized Officer. Any species of tree available could be used to meet this requirement. The Purchaser shall not create snags in locations that may be hazardous to roads or powerlines.

- L-32 In harvest units 1-5A, 1-5B, 1-6, 23-7, 31-7, and 35-12 the Purchaser shall (18)create snags via girdling, or other method as approved by the Authorized Officer, within the Late-Successional Reserve (LSR) land use allocation as shown on Exhibit E. The total number of snags to create in the LSR per unit is as follows: 1-5A (14 snags), 1-5B (10 snags), 1-6 (8 trees), 23-7 (2 snags), 31-7 (2 snags), and 32-12 (4 snags). A total of total of forty (40) snags shall be created in the LSR land use allocation portion of units. Of this total, one-half $(\frac{1}{2})$ of the snags required in each unit shall be greater than ten (10) inches diameter at breast height outside bark and one-half $(\frac{1}{2})$ of the snags required in each unit shall be greater than twenty (20) inches diameter at breast height outside bark. All snags created shall come from reserve marked trees as described in Section 43(B)(AR-2), Section 43(C)(IR-1), Section 43(D)(IR-1), or Section 43(E)(IR-13) and shall be distributed in a variety of spatial patterns including aggregated groups and individual trees. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all girdled trees by diameter class and species per unit. At the end of girdling operations, a completed tree tally shall be submitted to the Authorized Officer. Any species of tree available could be used to meet this requirement. The Purchaser shall not create snags in locations that may be hazardous to roads or powerlines.
- (19) <u>L-33</u> Purchaser's operations shall facilitate BLM's safe and practical inspection of Purchaser's operations and BLM's conduct of other official duties on 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.

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Unless otherwise specified in writing, when operations are in progress adjacent to or on roads and/or trails in the harvest unit 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) <u>ROAD CONSTRUCTION, MAINTENANCE, AND USE</u>

- (1) <u>R-1</u> 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) <u>R-1a</u> 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) <u>R-1b</u> The Purchaser shall construct, use, and decommission temporary roads TR 01-02-A, TR 01-02-B, TR 17-03B, TR 23-07, TR 31-06-A, TR 31-06-B, TR 31-06-C, TR 31-07, TR 32-25-A, TR 32-25-B, TR 32-25-C, TR 32-25-D, TR 32-25-E, TR 32-25-F, and TR 35-12 by October 15th of the same respective operating season. If temporary roads are used over two dry seasons, temporary routes must be winterized by October 15th.
- (4) <u>R-1c</u> The Purchaser shall construct Road No 33-5-32.1 (New), reconstruct Road No 33-5-30.0 from MP 0.96 to MP 1.10, and construct and/or reconstruct all temporary roads in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof. The Purchaser shall not commence new road construction work until receipt of written notice to do so from the Authorized Officer. Work shall commence no later than thirty (30) days

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after such notice and shall be completed within six (6) months after such notice.

- (5) <u>R-1d</u> Prior to completion and approval of sub-grade construction from all proposed permanent road construction and reconstruction, as well as all temporary road construction and reconstruction, as shown on Exhibit C, all logs shall be removed from the designated right-of-way.
- (6) <u>R-2</u> The Purchaser is authorized to use the road listed and shown on Exhibits C & D for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibits C & D, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 44 (C)(8). Any road listed on Exhibits C & 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/or rockwear fees for the sale of any additional timber under a modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
34-6-2.0 (A-D)	2.04	BLM	AGG	Purchaser
34-6-1.1	1.45	BLM	AGG	Purchaser
34-6-1.4	0.09	BLM	NAT	Purchaser
34-6-1.0	0.45	BLM	AGG	Purchaser
34-6-1.2	0.02	Jo County	NAT	Purchaser
34-6-1.3	0.05	BLM	NAT	Purchaser
33-6-35.1 (A)	0.75	BTG	AGG	Purchaser
33-6-35.1 (B)	0.21	ODF	AGG	Purchaser
33-6-35.1 (C)	0.30	ODF	NAT	Purchaser
33-6-24.0 (A-B2)	3.96	BLM	AGG	Purchaser
33-5-31.7	0.15	BLM	AGG	Purchaser
33-5-31.2 (A-B)	0.73	BLM	AGG	Purchaser
34-5-6.0	0.15	BLM	AGG	Purchaser

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
33-5-31.3 (A-B)	1.96	BLM	AGG	Purchaser
33-5-32.1	0.63	BLM	AGG	Purchaser
34-5-5.0	0.21	BLM	AGG	Purchaser
33-5-32.0	0.39	BLM	AGG	Purchaser
33-5-31.1	0.66	BLM	AGG	Purchaser
33-5-32.2	0.08	Jo County	NAT	Purchaser
33-5-30.0 (A-B)	1.10	BLM	AGG	Purchaser
33-5-31.5	0.40	BLM	AGG	Purchaser
33-5-30.3	0.08	BLM	AGG	Purchaser
33-5-30.2	0.13	BLM	AGG	Purchaser
33-6-14.0 (A-B)	0.71	BLM	AGG	Purchaser
33-5-7.0 (A)	2.23	BLM	AGG	Purchaser
33-5-18.0 (A-B)	1.70	BLM	AGG	Purchaser
33-5-17.1	0.08	BTG	NAT	Purchaser
33-5-32.1 (New)	0.15	BLM	AGG	Purchaser
TR 01-02-A	0.11	BLM	NAT	Purchaser
TR 01-02-В	0.10	BLM	NAT	Purchaser
TR 35-12	0.14	BLM	NAT	Purchaser
TR 31-06-A	0.05	BLM	NAT	Purchaser
TR 31-06-B	0.05	BLM	NAT	Purchaser
TR 31-06-C	0.07	BLM	NAT	Purchaser
TR 32-25-A	0.08	BLM	NAT	Purchaser
ТR 32-25-В	0.05	BLM	NAT	Purchaser
TR 32-25-C	0.29	BLM	NAT	Purchaser
TR 32-25-D	0.05	BLM	NAT	Purchaser
ТR 32-25-Е	0.07	BLM	NAT	Purchaser
TR 32-25-F	0.09	BLM	NAT	Purchaser

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
TR 31-07	0.07	BLM	NAT	Purchaser
TR 23-07	0.17	BLM	NAT	Purchaser
ТR 17-03-В	0.68	BLM	NAT	Purchaser
TOTAL	22.93			

- (7) <u>R-2a</u> With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of roads included in Section 44(C)(6) 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.
- (8) <u>R-2b</u> The Purchaser shall pay the Government a rockwear fee of **twenty-three thousand seven hundred seventy-two and 85/100 dollars (\$23,772.85)** for the transportation of timber included in this contract price over said roads. The above maintenance and rockwear fee amount is for the use of 19.37 miles of BLM owned roads or less. The total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), therefore the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (9) <u>R-2e</u> 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 Officer, to be transported over the roads listed in Section 44(C)(6). 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 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 obligation(s).
- (10) <u>R-2f</u> The Purchaser shall perform any required road repair and maintenance work on roads identified as Purchaser maintenance, under the terms of Exhibit D, Road

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Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.

(11) <u>R-3</u> In the use of Road No. 33-6-14.0, the Purchaser shall comply with the conditions of Access Road Easements RE-M 1081 and RE-M 1082 dated May 27, 1994, between the United States of America and multiple private civilian landowners of Tax lots 1300 and 1200, located in T33S R06W, SW1/4 of Section 14. These documents are available for inspection at the Medford District Office.

These conditions include:

- (a) The road shall be maintained in good repair during periods of use by the Purchaser and is to be left in as good condition prior to such use.
- (b) Grantor, its successors and assigns, reserves title to all timber, now or hereafter growing, standing, or down, within the described right-of-way. The Purchaser may fell timber within the right-of-way and danger trees adjacent to the right-of-way for operation and maintenance of said road. Trees felled of commercial value shall be bucked into standard log lengths and decked adjacent to the right-of-way in a manner suitable for loading with mobile loading equipment.
- (c) DUST ABATEMENT: A form of dust abatement will be used when the Purchaser uses the above-described road for log hauling purposes on an "as needed" basis as determined by the BLM Authorized Officer.
- (d) HAULING REQUIREMENTS: Log hauling on this road will not be allowed during periods of extended wet weather (generally October through March) <u>unless</u> specific road maintenance requirements are addressed to accommodate all weather hauling (sufficient rock).
- (12) <u>R-3</u> In the use of Road No. 33-6-14.0, the Purchaser shall comply with the conditions of Access Road Easements RE-M 1087 dated April 6, 1995, between the United States of America and private civilian landowner of Tax lot 200, located in T33S R06W, NW1/4NE1/4 of Section 23. This document is available for inspection at the Medford District Office.

These conditions include:

(a) The road shall be maintained in good repair during periods of use by the Page 18 of 49

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Purchaser and is to be left in as good condition prior to such use.

- (b) Grantor, its successors and assigns, reserves title to all timber, now or hereafter growing, standing, or down, within the described right-of-way. The Purchaser may fell timber within the right-of-way and danger trees adjacent to the right-of-way for operation and maintenance of said road. Trees felled of commercial value shall be bucked into standard log lengths and decked adjacent to the right-of-way in a manner suitable for loading with mobile loading equipment.
- (c) Sufficient rock will be placed on this road to prevent soil erosion and degradation of the road prism as determined by the BLM Authorized Officer.
- (13) <u>R-3</u> In the use of Road No's. 33-5-32.2 and 34-6-1.2, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-1538, between the United States of America and Josephine County Department of Forestry. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Execution and compliance with the terms and conditions identified in the License Agreement between the Purchaser and Josephine County Department of Forestry.
- (b) Payment of a road use obligation of zero and 00/100 dollars (\$0.00) to Josephine County Department of Forestry, payable at the time indicated on the License Agreement.
- (c) Payment of a road maintenance and/or rockwear obligation of zero and 00/100 dollars (\$0.00) to Josephine County Department of Forestry, payable at the time indicated on the License Agreement.
- (d) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (e) Prior to cutting or removing any timber from the road right-of-way between Stations 0+00 and 0+53 on TR 32-25-D, the Purchaser shall pay to Josephine County Department of Forestry, the owner of the right-of- way timber, the total value of that timber based on an agreed upon fair market Page 19 of 49

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value price for that timber.

- (f) Prior to cutting or removing any timber from the right-of- way tramway wedge area accessing a portion of Unit 05-01, the Purchaser shall pay to Josephine County Department of Forestry, the owner of the right-of- way timber, the total value of that timber based on an agreed upon fair market value price for that timber.
- (g) 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.
- (14) <u>R-3</u> In the use of Road No. 33-6-35.1 Segments B and C, the Purchaser shall comply with the conditions of the 1960 Co-Operative Right-of-Way Agreement (MOU), between the United States of America and State of Oregon Department of Forestry. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Execution and compliance with the terms and conditions identified in the License Agreement between the Purchaser and Oregon Department of Forestry.
- (b) Payment of a road use obligation of zero and 00/100 dollars (\$0.00) to State of Oregon Department of Forestry, payable at the time indicated on the License Agreement.
- (c) Payment of a road maintenance and/or rockwear obligation of twenty-seven and 31/100 dollars (\$27.31) to State of Oregon Department of Forestry, payable at the time indicated on the License Agreement.
- (d) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (e) Prior to cutting or removing any timber from the road right-of-way between Stations 0+00 and 1+44 on TR 35-12, the Purchaser shall pay to State of Oregon Department of Forestry, the owner of the right-of- way timber, the total value of that timber based on an agreed upon fair market value price Page 20 of 49

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for that timber.

- (f) 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.
- (15) <u>R-3</u> In the use of Road No's. 33-6-35.1 Segment A and 33-5-17.1, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000EA, between the United States of America and BTG Pactual PNW FUND IV REIT Inc. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Execution and compliance with the terms and conditions identified in the License Agreement between the Purchaser and BTG Pactual PNW FUND IV REIT Inc.
- (b) Payment of a road use obligation of one thousand four hundred fifty-two and 60/100 dollars (\$1,452.60) to BTG Pactual PNW FUND IV REIT Inc., payable at the time indicated on the License Agreement.
- (c) Payment of a road maintenance and/or rockwear obligation of ninety-seven and 54/100 dollars (\$97.54) to BTG Pactual PNW FUND IV REIT Inc., payable at the time indicated on the License Agreement.
- (d) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (e) 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.
- (16) <u>R-3c</u> 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, the Purchaser shall Page 21 of 49

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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.

(17) <u>R-4</u> 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) 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.

(18) <u>R-5</u> 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

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Authorized Officer when crossing with protective devices.

The Purchaser shall be responsible for 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) <u>E-1</u> In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall restrict non-road, in unit, ground-based equipment used for harvesting, yarding, machine piling, and rehabilitation operations (including temporary routes, tractor swing routes, and landings) to periods of low soil moisture (dry conditions). Low soil moisture varies by texture and is based on site-specific considerations. Generally, low soil moisture is determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks. Low soil moisture limits will be determined by the Authorized Officer. Ground-based equipment shall be allowed to operate when the ground is frozen or adequate snow exists to prevent soil compaction and displacement, as determined by the Authorized Officer.
- (2) <u>E-1</u> In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall not haul on hydrologically connected natural surface or rocked roads during conditions that would result in any of the following: surface displacement such as rutting or ribbons, continuous mud splash or tire slide, fines being pumped through road surfacing from the subgrade resulting in a layer of surface sludge, as directed by the Authorized Officer.
- (3) <u>E-1</u> In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall not haul on all natural surface roads that receive one-half (½) inch or more precipitation within a twenty-four (24) hour period. Haul shall not resume for a minimum of forty-eight (48) hours following any storm event, or until road surface is sufficiently dry, as approved by the Authorized Officer. The Purchaser may elect, at their own expense, to apply rock surfacing to these roads to bring them up to wet weather haul standards, as approved by the Authorized Officer.

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- (4) $\underline{\text{E-1}}$ 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.
- (5) $\underline{\text{E-1}}$ 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 landings (outside of the driving surface), tractor swing routes, temporary routes to provide for adequate drainage, and utilized skid trails within two hundred (200) feet of streams and waterbodies as shown on Exhibit A, 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 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:

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<u>Grasses</u>: Achnatherum lemmonii, Bromus carinatus, Brumus vulgaris, Elymus glaucus, Festuca californica, Festuca roemeri, Koeleria macrantha, Poa secunda, Vulpia microstachys

<u>Forbs</u>: 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 September 1 of one calendar year and March 31 of the following year. 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:

Test	Grasses (%)	<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 Page 25 of 49

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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.

- (6) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan (SPCC) 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. All operators shall have a Spill Containment Kit (SCK) as described in the SPCC plan on-site during any operation with potential for run-off to adjacent waterbodies. The SCK shall be appropriate in size and type for the oil or hazardous material carried by the Purchaser.
- (7) <u>E-1</u> 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 fifty (150) 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 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.
- (8) <u>E-1</u> In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall prevent the delivery of chemical retardant foam or additives to waterbodies, and wetlands. Ignition devices/materials shall be stored and disposed of at least one hundred fifty (150) feet away from streams and wetlands.
- (9) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not locate new landings in areas that contribute eroded fines to streams, wet areas, dry draws and swales. If these landing locations cannot be avoided, ensure Page 26 of 49

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that properly installed sediment control measures are placed and maintained, as needed, to keep eroded material onsite.

- (10) <u>E-1</u> 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 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.
- (11) <u>E-1</u> 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 and rehabilitate temporary routes, landings, hydrologically connected corridors and skidtrails 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.
- (12) <u>E-1</u> In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall decommission: all ground based skid trails utilized within two hundred (200) feet of streams and waterbodies as shown on Exhibit A; and ground based skid trails, and landings outside of the road prism, within ground-based yarding areas as needed to achieve no more than twenty (20) percent detrimental soil compaction within the unit, as directed by the Authorized Officer, by one of the following methods:
 - (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) All rehabilitation shall occur within eighteen (18) months of harvest, during dry conditions, and after pile burning is complete.
- (c) The Purchaser shall simultaneously water bar, seed, mulch, and barricade all operator spurs and all temporary routes.
- (13) <u>E-1</u> 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.
- (14) <u>E-2</u> The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the spacing described in the table below and to the specifications shown on Exhibits C-12 and D-7 which is attached hereto and made a part hereof.

Gradient (Percent)	Water bar Spacing
2-5%	200 feet
6-10%	150 feet
11-15%	100 feet
16-20%	75 feet
21-35%	50 feet
36+%	50 feet

- (15) <u>E-3</u> The Purchaser shall immediately discontinue specified construction or timber 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 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, or to prevent incidental take of northern spotted owls in accordance with management direction in the Record of Decision (ROD) and Resource Management Plan (RMP), 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 -

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have been identified, and a determination is made that continued operations would affect the species or its habitat, or;

- (d) 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;
- (e) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (f) when, in order to comply with a stay or other remedy issued by the Interior Board of Land Appeals (IBLA) the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (g) species have been discovered which were identified for protection in accordance with management direction established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;
- (h) when, in order to protect species which were identified for protection in accordance with management direction 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 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

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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, court-ordered injunctions, or an IBLA issued stay or remedy, 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 modify the contract or terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, prevent incidental take

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of northern spotted owls in accordance with the ROD and RMP, protect species that have been discovered which were identified for protection in accordance with management direction established in the ROD and RMP, or comply with a court order or an IBLA issued stay or remedy. 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, if able to proceed without causing incidental take of northern spotted owls in accordance with the ROD and RMP, if consistent with species protection in accordance with management direction established in the ROD and RMP, or if consistent with a court order or an IBLA issued stay or remedy.

In the event the contract is modified or 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.

(16) <u>E-5</u> The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling,

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bucking, yarding, road construction, or any other activity with the potential to disturb nesting northern spotted owls may not be allowed during this time period.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys to determine whether owls are nesting within 0.25 miles of the harvest units. If it is determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations. Without this approval, such operations are prohibited from March 1 through June 30 of each year.

(D) <u>FIRE PREVENTION</u>

- (1) <u>F-1 Fire Prevention and Control</u>. 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 of the Authorized Officer.
- (2) <u>F-1a Fire Prevention and Control</u>. 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. <u>F-2a</u> Firefighting 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 firefighting 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

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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 (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 $1\frac{1}{2}$ inch hose (must be adequate length to reach 200 feet beyond active work sites), six (6) 1¹/₂ inch wyes, six (6) $1\frac{1}{2}$ inch to 1 inch reducers, three (3) $1\frac{1}{2}$ 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 1¹/₂ inch fire hose. The pump may be either power take off driven or truckmounted 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 1/2 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. <u>F-2c</u> 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. <u>F-2d</u> A pair of headlights capable of being quickly attached to each bulldozer used on the contract area. The headlights shall be adequate

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to provide illumination sufficient to allow use of the bulldozers for firefighting and construction of fire lines at night.

- 5. $\underline{F-2f}$ 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 independent use of the hands. At least one extra set of batteries shall be provided for each such headlight.
- 6. $\underline{\text{F-2f}}$ 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. <u>F-2g</u> 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 bucker 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) <u>F-5</u> 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) <u>F-9</u> During Oregon Department of Forestry regulated use closure, no smoking shall be permitted outside of closed vehicles.
- (E) <u>SLASH DISPOSAL</u>
 - (1) <u>SD-1 Fire Hazard Reduction</u>. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State Page **34** of **49**

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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:

- SD-1a Lop and scatter all slash in units 5-21, 5-25, and 6-20; lop and (a) scatter all slash outside of the skips in unit 24-2; lop and scatter all slash outside of the hand pile and burn treatment areas in units 1-1, 6-1, 17-3B, 24-1, 32-23, and 32-24; lop and scatter all slash outside of the skips and hand pile and burn treatment areas in units 23-8, 31-7, and 32-25; lop and scatter all slash outside of the machine pile and burn treatment areas in unit 23-7; lop and scatter all slash outside of the machine pile and burn treatment areas in unit 35-12; lop and scatter all slash outside of the hand pile and burn treatment areas and machine pile and burn treatment areas in unit 1-2; and lop and scatter all slash outside of the skips, hand pile and burn treatment areas, and machine pile and burn treatment areas in units 5-1, and 31-6 concurrently with normal felling operations as shown on Exhibit S. 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 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) <u>SD-1b</u> Machine pile, cover, and burn all slash in the ground-based portions of units 1-2, 1-5A, 5-1, 23-7, 31-6, 35-12, roadside units A, B, and C, and within the clearing limits of all permanent and temporary route construction as shown on Exhibit S. Slash shall be piled by machine. Piling shall be completed in accordance with Exhibit S as directed by the Authorized Officer. Finished piles shall be tight and free of earth.

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- 1. The BLM will prepare a fire burn plan. Smoke clearance shall be obtained by the BLM the day prior to planned ignition for all burn units.
- 2. 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. Do not pile pieces of slash with a diameter greater than twelve (12) inches.
- 3. All equipment shall be approved by the Authorized Officer. Piling shall be accomplished using a track mounted hydraulic excavator or equivalent with at least a five (5) tooth brush rake. The excavator shall have a minimum reach of twenty (20) feet. The excavator shall be equipped with a hydraulic thumb or rotating controllable grapple head. Finished piles shall be tight and free of dirt and other non-woody debris.
- 4. Piles shall be less than sixteen (16) feet in height and width.
- 5. Machine piling operations are limited to slopes less than thirty five (35) percent slope when using non-specialized equipment (without a self-leveling cab) or to slopes less than fifty (50) percent slope when using specialized equipment (with a self-leveling cab); and to seasonal restrictions as described in Sec. 44(A)(12)(L-19), Sec. 44(A)(14)(L-20), and dry conditions as described in Sec. 44(C)(1)(E-1). All areas that are identified in Exhibit A as ground-based yarding that cannot be machine piled shall be hand piled.
- 6. Machine piles shall be constructed as compactly as possible. There should be an adequate supply of fine fuels located within and under the covered area of the pile to ensure ignition of the larger fuels. Completed piles shall be free of projecting limbs or slash which would interfere with adequate covering of the piles.
- 7. Machine piles shall be adequately covered with a cap of ten (10) feet by ten (10) feet of four (4) mil polyethylene sheeting. The polyethylene sheeting shall be held in place with woody debris or tied with rope or twine to ensure coverage. Coverage shall be

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completed when piles are constructed, or as directed by the Authorized Officer.

- 8. Machine piles shall not be placed within fifteen (15) feet of snags, stumps, reserve trees or large woody debris.
- 9. Machine piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
- 10. The Purchaser is required to furnish the fuel and equipment for machine pile burning.
- (c) <u>SD-1c</u> Hand pile, cover, and burn all slash situated in units 1-4, 1-5B, 1-6, 17-3A, 30-2, and 30-4; hand pile, cover, and burn all slash within one hundred (100) feet of roads 34-6-1.3 and 34-6-2.0 in unit 1-1; hand pile, cover, and burn all slash within one hundred (100) feet of roads 34-6-1.0 and 34-6-1.1 (outside of the machine pile and burn treatment area) in unit 1-2; hand pile, cover, and burn all slash in group selection areas in the helicopter yard portions in units 23-8, 24-1; and hand pile, cover, and burn all slash in group selection areas in the cable yard portions in units 5-1, 6-1, 17-3B, 31-6, 31-7, 32-23, 32-24, and 32-25 as shown on Exhibit S. Slash shall be piled by hand. Finished piles shall be tight and free of earth.
 - 1. The BLM will prepare a fire burn plan. Smoke clearance shall be obtained by the BLM the day prior to planned ignition for all burn units.
 - 2. Slash includes 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.
 - 3. Hand pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds two (2) feet in length, or as directed by the Authorized Officer.
 - 4. Hand piles shall be covered with a large enough piece of four (4) mil polyethylene sheeting to ensure a dry ignition spot, generally five (5) feet by five (5) feet or large enough to cover eighty (80) percent of the pile.

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- 5. Hand piles shall not be placed adjacent to or within ten (10) feet of leave trees or large woody debris.
- 6. Hand piles shall not be located on roadways, turnouts, shoulders, or cut banks, unless authorized by the Authorized Officer.
- (d) <u>SD-1f</u> 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 remove flammable material around each landing 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) mil polyethylene sheeting 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. The BLM will prepare a fire burn plan. Smoke clearance shall be obtained by the BLM the day prior to planned ignition for all burn units.
- Landing piles will be burned in the fall to spring season after one
 (1) or more inches of precipitation have occurred.
- 3. Landing piles will be burned within twenty-four (24) months of harvest completion.
- 4. If purchaser elects to set aside pole/firewood decks and not put the material in landing piles, the purchaser will be required to remove decks before the expiration of cutting rights. Material will be hauled off site for processing. The Authorized Officer will determine location of pole/hardwood decks.

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(2) <u>SD-2</u> Notwithstanding the provisions of Sec. 15 of this contract, the Government shall assume all obligations for disposal or reduction of fire hazards created by Purchaser's operations on Government lands, except for burning and mop up assistance as required herein, and measures required in Sections 44(E)(1)(SD-1) and 44(E)(2)(SD-2). In accordance with written instruction to be issued by the Authorized Officer at least ten (10) days in advance of earliest date of required performance, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in preparing units for burning, mop-up, and patrol by furnishing, at his own expense, the services of personnel and equipment on each unit as shown below.

All crews shall arrive on the project area with radios capable of inter-crew communications and communication with a BLM representative at a ratio of one (1) radio per every five (5) crew members.

- (a) For igniting and burning machine piles in units 1-2, 1-5A, 5-1, 23-7, 31-6, 35-12, roadside units A, B, and C, and within the clearing limits of all permanent roads and temporary routes as shown on Exhibit S:
 - 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
 - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
 - 3. One (1) Wildland Fire Engine Boss.
 - 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System

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requirements. Engine and tank shall be in good working order and shall be filled with water.

- 5. Six (6) drip torches.
- 6. Hand ignition with drip torches is required in machine pile units.
- 7. All ignition personnel will be directly supervised by a BLM representative.
- (b) For mop-up of machine piles in units 1-2, 1-5A, 5-1, 23-7, 31-6, 35-12, roadside units A, B, and C, and within the clearing limits of all permanent roads and temporary routes as shown on Exhibit S:
 - 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
 - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
 - 3. One (1) Wildland Fire Engine Boss.
 - 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1¹/₂) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.
- (c) For igniting and burning hand piles in units 1-1, 1-2, 1-4, 1-5B, 1-6, 5-1, 6-<u>1, 17-3A, 17-3B, 23-8, 24-1, 30-2, 30-4, 31-6, 31-7, 32-23, 32-24, and 32-</u> <u>25 as shown on Exhibit S</u>:

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- 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
- 2. One (1) crew with ten (10) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- 3. One (1) Wildland Fire Engine Boss.
- 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzles acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.
- 5. Ten (10) drip torches.
- 6. Hand ignition with drip torches is required in pile burn units.
- 7. All ignition personnel will be directly supervised by a BLM representative.
- (d) For mop up of hand piles in units 1-1, 1-2, 1-4, 1-5B, 1-6, 5-1, 6-1, 17-3A, <u>17-3B, 23-8, 24-1, 30-2, 30-4, 31-6, 31-7, 32-23, 32-24, and 32-25 as</u> <u>shown on Exhibit S</u>:
 - 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
 - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with

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shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.

- 3. One (1) Wildland Fire Engine Boss.
- 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.

(e) <u>For igniting and burning landing piles</u>:

- 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
- 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- 3. One (1) Wildland Fire Engine Boss.
- 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzles acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.

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(f) For mop-up landing piles:

- 1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
- 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- 3. One (1) Wildland Fire Engine Boss.
- 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.

Aircraft and pilots used for Logging Residue Reduction or the suppression of escaped fires from Logging Residue Reduction operations, shall be acquired from a list of aircraft and pilots approved (i.e., carded for these specific activities) by the Office of Aircraft Services or the U.S. Forest Service. This list is available from BLM District Offices upon request.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. All personnel shall arrive at the project area(s) with the following personal safety equipment: long sleeve natural fabric shirt, full length natural fabric trousers, minimum eight (8)-inch top leather boots, hardhat, and leather gloves. All personnel shall wear long pants and long sleeve shirts, lug-soled leather boots with minimum eight (8)-inch tall uppers that provide ankle support, approved hardhat, and leather gloves. On the day of ignition, clothing shall be of approved aramid fabric, NomexTM or equivalent, and all personnel shall carry an approved fire shelter. Clothing shall be free of diesel fuel oil.

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All listed tools and equipment shall be in good usable condition. All power-driven equipment shall be fully fueled and available for immediate use. During periods of use under this subsection, the Purchaser shall provide fuel and maintenance for all such power- driven equipment.

Except as provided hereafter for fire escapement, the Purchaser shall continue the required assistance in mop up on each hand/machine piled unit and landing decks, four hundred fifty (450) hours as directed by the Authorized Officer within 10 days beginning 8:00 a.m. the day following completion of ignition in that unit or until released from such services by the Authorized Officer, whichever occurs first.

In the event of a fire escapement, Purchaser's personnel and equipment shall, under supervision of the Authorized Officer, take action to suppress, including control and mop-up, the escaped fire until released from such service by the Government. If it becomes necessary to suppress a fire which escapes from the prescribed fire area for a period beyond midnight of ignition day, then the Government shall, at its option:

- (a) reimburse Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for Western Area and at equipment rates shown in current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule, until the Purchaser is released from such service by the Government, or+
- (b) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In situations where an escaped fire is controlled and contained by an adequate fire break (e.g., trail, road, stream, rock formation), the Government may permit the Purchaser to remove personnel for that day; provided that, all mop up work on the escaped fire area is included with mop up work on the prescribed fire area. In such an event, the Purchaser must sign a statement of agreement to complete mop up work on all escaped fire areas concurrently with mop up work on the prescribed fire area.

In case of injury to personnel or damage to equipment furnished by the Purchaser as required by this subsection, liability shall be borne by the Purchaser, unless such injury or damage is caused by Government negligence.

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Time is of the essence in complying with this provision. In the event the Purchaser fails to provide personnel and equipment required herein, the Purchaser shall be responsible for all additional costs incurred by the Government in disposing of slash, including but not limited to the wages and other costs of providing federal employees and others as substitute labor force, the cost of providing substitute equipment, and appropriate additional overhead expenses. If the Purchaser's failure results in deferral of burning and new conditions necessitate additional site preparation work and/or use of additional personnel and equipment to accomplish planned burning, the Purchaser also shall be responsible for such additional costs.

- (3) <u>SD-5</u> The Purchaser shall perform logging residue reduction and site preparation work on approximately five hundred and three quarters (500.75) acres of harvest area located in all 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.

Treatment	Treatment Description	Cost/Acre
Lop and Scatter	0-12 tons/acre	\$48.00
Hand Pile and Cover	0-25 piles/acre	\$545.00
Hand Pile Burn and Mop-up	0-25 piles/acre	\$75.00
Machine Pile and Cover	Cost per acre	\$490.00
Machine Pile Burn and Mop-up	0-20 piles/acre	\$28.00
Cover and Burn Landing Decks	Cost per acre	\$56.00

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

Appraised Treatment	Acres	Cost/Acre	Total Cost Per
			Treatment
Lop and Scatter	287.25	\$48.00	\$13,788.00
Hand Pile and Cover	120.75	\$545.00	\$65,808.75

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Hand Pile Burn and Mop-up	120.75	\$75.00	\$9,056.25
Machine Pile and Cover	44.00	\$490.00	\$21,560.00
Machine Pile Burn and Mop-up	44.00	\$28.00	\$2,860.00
Cover and Burn Landing Decks	48.75	\$56.00	\$2,730.00
Total	500.75		\$115,803.00

- (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 44(E)(3)(SD-5)(a) differs from one hundred fifteen thousand eight hundred three and 00/100 dollars (\$115,803.00), as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 44(E)(4)(SD-5)(a).
- (d) Lop and scatter shall be done in accordance with Section 44(E)(1)(SD-1)(a)(SD-1a); Machine piling shall be done in accordance with Section 44(E)(1)(SD-1)(b)(SD-1b); Hand piling shall be done in accordance with Section 44(E)(1)(SD-1)(c)(SD-1c).

(F) <u>BUYOUT SECURITIES</u>

- (1) <u>B-1</u> The Purchaser shall perform machine pile burning and mop up in accordance with Section 44(E)(2)(SD-2)(a&b). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of three thousand four hundred fiftythree and 74/100 dollars (\$3,453.74), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of execution of this contract, and the Authorized Officer shall establish a required schedule of payments.
- (2) <u>B-1</u> The Purchaser shall perform hand pile burning and mop up in accordance with Section 44(E)(2)(SD-2)(c&d). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of ten thousand nine hundred thirty-six and 33/100 dollars (\$10,936.33), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of

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execution of this contract, and the Authorized Officer shall establish a required schedule of payments.

(3) <u>B-1</u> The Purchaser shall perform landing pile cover, burning, and mop up in accordance with Section 44(E)(2)(SD-2)(e&f). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of three thousand two hundred ninety-six and 75/100 dollars (\$3,296.75), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of execution of this contract, and the Authorized Officer shall establish a required schedule of payments.

(G) <u>LOG EXPORTS</u>

(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 (8³/₄) 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 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.

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- (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 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 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

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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.

Salmon Run Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0014

Unrestricted Period	Operations Restricted To Dry Condition	Operations Restricted While NSO Surv	, , ,

veys Occur, Restriction May Be Extended IF Owls Are Nesting **Operations Restricted**

on, 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.

*** All road maintenance and improvements must be completed before wet season haul can occur on the roads. The Purchaser may elect to make improvements to Dry Condition Haul Roads listed to allow for All Season Haul, as approved by the Authorized Officer. Haul will be suspended if the roads begin to show damage or conditions develop that could cause damage to the road as described in Sec. 42(C)(2&3)(E-1).

Dry Condition Yarding and Temporary Route work- Ground-based harvesting and 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 ribbons 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.

		Jan	Feb	Mar		Apr	May	Jun		Jul	Aug	Sep	d	Oct	Nov	Ŷ	Dec	
Sale Area	Activity	1 15	1 1:	5 1 1	15 1	15	1 15	1	5 1	15	1 15	1	15	15	1	15	1 15	\$
	Manual Falling and Bucking*															_		
Unlinentar Vard	Helicopter Yarding*																	
II mits with All	Landing Construction, and																	
Constan Hault	Rehabilitation Activities Involving															_		
C 10 13 0 14 1 14	Heavy Equipment																	
0-20, 23-0, 24-1, 24-2	0-20, 23-0, 24-1, 24-2 Road Maintenance**																	
	Loading and Hauling***																	
	Manual Falling and Bucking*												-			-		
Cable Yard Units	Cable Yarding*																	
with All Season	Landing Construction, and																_	
Haul:	Rehabilitation Activities Involving																	_
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30-4	Road Maintenance**																	
	Loading and Hauling***																	
	Manual Falling and Bucking*										_		_			-		
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-C-CC) A 33-5-18 ()	Heavy Equipment															_		
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	Kehabilitation Activities Involving Heavy Equipment																				
Cable Yard Units	Road Maintenance**								T	\vdash	\vdash										
with Dry Condition	Loading and Hauling on the 33-5-7.0,																				
& All Season Haul:	33-5-18.0, 33-5-30.2, 33-5-30.3, 33-5-	_																			
1-1, 6-1, 30-2, 32-23,	1-1 , 6-1 , 30-2 , 32-23 , 31.1 , 33-5-31.2 , portion of the 33-5-																				
32-24	31.3 west of junction w/ 33-5-32.1,	_																			
	33-5-32.0, 34-5-6.0, 34-6-1.3, 34-6- 2.0 Rds***																		_		
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	24.0, and all Paved Rds***																				
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31.3, 33-5-31.5, 33-5-	31.3, 33-5-31.5, 33-5- the 35-3-31.5 west of junction w/ 35-		_																		
32.0 & 33-6-24.0),	5-32.1, 33-5-51.5, 33-5-52.0, 34-6-						_														
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Helicopter Yard	Landing Construction, and Rehabilitation Activities Involving																	
<u>'ondition Uoul.</u>	Heavy Equipment		_															_
<u>Condidon haui:</u> 1 A	Road Maintenance**																	
1-4	Loading and Hauling on 34-6-2.0																	
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	Hauling on all Paved Rds***																	
	Manual Falling and Bucking*																	
	Mechanical Ground Based																	
	Harvesting, Yarding & Piling,																	
<u>Cable & Ground</u> Resed Verd Unit	Landing Construction, and																	
<u>with Drv Condition</u>																		
Hanl	Heavy Equipment																	
<u>1-6</u>	Road Maintenance**																	
	Loading and Hauling on 34-6-1.1, 34- 6.2.0 PAc***																	
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	Manual Falling and Bucking*				+				T	+				t			┼	
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	Cable Yarding*																	
Helicopter, Cable-	Mechanical Ground Based																	
Tractor Swing &	Harvesting, Yarding & Piling,				_													
und Based Yard	Ground Based Yard Landing Construction, and				_													
Unit with Dry	Rehabilitation Activities Involving																	
<u>Condition Haul</u> :	Heavy Equipment																	
1-5B	Road Maintenance**																	
	Loading and Hauling on 34-6-2.0 Rd***																	
	Hauling on all Paved Rds***		L		-			╞							-		┢	ŀ

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	Cable Yarding*													\square	\square	\square		\square			
<u>Cable Yard Unit</u> with Road	Landing Construction, and Rehabilitation Activities Involving																				
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<u>Season Haul</u> : 31-7	Loading and Hauling on Temp. Route***																				
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<u>Construction</u> and	Road Maintenance**								\vdash		\vdash										
Dry Condition & All	Loading and Hauling on all Temp.													╞	╞						
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<u>1-2, 5-1, 23-7, 31-6,</u>	31.1, 33-5-31.5, 33-6-35.2 C, 34-5-																				
32-25, 35-12	5.0, 34-6-1.0, 34-6-1.1, 34-6-2.0 D 4***																				
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	Loading and Hauling on 33-5-32.1, 33-5-31 3 33-6-14 0 33-6-24 0 33-6-																				
	35.2 B, 33-6-35.2 A, and all Paved																				
	Rds***																				
	Manual Falling and Bucking*													$\left \right $	$\left \right $						
Cable Yard Unit	Cable Yarding*																				
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<u>Owl Seasonal</u>	Road Maintenance ^{**}															$\left \right $					
<u>Kestrictions, and</u> Dry Condition Haul	Loading and Hauling on Temp. Route											<u> </u>				<u> </u>					
<u>& All Season Haul:</u> 17-3B	Hauling on 33-5-7.0, 33-5-18.0, and		_														 	<u> </u>			
	all Paved Rds***													\neg	\neg	-					



United States Department of the Interior Bureau of Land Management

Timber Appraisal

Sale Name:Salmon Run 2023BLM District:Medford DOContract #:ORM07-TS-2023.0014Sale Type:Advertised

Sale Date:Thursday, July 27, 2023Unit of Measure:16' MBFContract Term:48 monthsContract Mechanise:5450-3
Sale of Timber - Lump Sum

Content

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

Prepared By: Caulfield, David J - 6/21/2023 Approved By: Caulfield, David J - 6/21/2023

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Josephine	335	5W	17	SW¼, S½SE¼	Willamette
O&C	Josephine	335	5W	18	N½SE¼	Willamette
PD	Josephine	335	5W	30	Lot 5, Lot 6, S½NE¼, SE¼	Willamette
0&C	Josephine	335	5W	31	Lot 1, W½NE¼, SE¼NE¼, E½NW¼, SE¼SW¼, NE¼SE¼, S½SE¼	Willamette
O&C	Josephine	335	5W	32	SW¼, W½SE¼	Willamette
O&C	Josephine	335	6W	23	NE¼NE¼	Willamette
0&C	Josephine	335	6W	35	NE¼NE¼	Willamette
PD	Josephine	34S	5W	5	A portion of the Spike Buck claim	Willamette
0&C	Josephine	34S	5W	5	unnumbered lot NE¼NW¼, unnumbered lot NW¼NW¼, S½NW¼	Willamette
PD	Josephine	34S	5W	6	unnumbered lot NE¼NE¼, unnumbered lot NW¼NE¼, SE¼NE¼, SE¼SW¼	Willamette
O&C	Josephine	34S	6W	1	unnumbered lot NE¼NE¼, unnumbered lot NW¼NE¼, unnumbered lot NE¼NW¼, unnumbered lot NW¼NW¼, S½NE¼, S½NW¼, NW¼SE¼	Willamette
O&C	Josephine	335	6W	13	SE¼SW¼, SW¼SE¼	Willamette
PD	Josephine	335	6W	24	NW¼NE¼, E½NW¼, NE¼SW¼, NW¼SE¼	Willamette

Legal Description of Contract Area

Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	8,848.0	9,636.0	10,087.0	149,019	4,768	40,087
Ponderosa Pine	231.0	251.0	251.0	3,342	26	979
White Fir	97.0	106.0	106.0	2,732	0	899
Incense-cedar	95.0	104.0	104.0	1,957	0	690
Sugar Pine	5.0	6.0	6.0	161	0	53
Totals	9,276.0	10,103.0	10,554.0	157,211	4,794	42,708

Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
0.0	501.0	14.0	515.0	18.0

Comments:

*****See Deficit Surplus Sheet for pricing information*****

Logging Costs

Stump to Truck	\$3,116,987.20
Transportation	\$535,661.06
Road Construction	\$1,065,480.15
Maintenance/Rockwear	\$225,893.24
Road Use	\$1,452.60
Other Allowances	\$152,151.00
Total:	\$5,097,625.25
Total Logging Cost per MBF:	\$549.55

Utilization Centers

Location	Distance	% of Net Volume		
Riddle/Glendale	25.0 miles	100 %		

Profit & Risk

Profit	11 %
Risk	1 %
Total Profit & Risk	12 %

Tract Features

15.4 in
64 bf
18.0 mbf
88 %
9,276.0 mbf
0 mbf
0 mbf
11 %
0 %
153 ft
64 %
0 %
246 ft
25 %
0 %
3338 ft

Cruise

Cruise Completed	November 2021
Cruised By	Caulfield, Cannon, Darner
Cruise Method	

The Salmon Run timber sale was cruised using the PCMTRE and 3P cruise methods. The 515 acres of PCMTRE were split into 2 strata, both using a 40BAF and a 1 in 6 sampling frequency. The conventional logging units (Strata 1) had 387 plots covering 398 acres. The Douglas fir (Strata1) had an average of 100 basal area per acre and a VBAR of 162.9. The helicopter logging units (Strata 2) had 91 plots covering 103 acres. The Douglas fir (Strata2) had an average of 104 basal area per acre and a VBAR of 205.4. The 14 Acres of roadside clearing units were cruised using the 3P cruise method resulting in 13 sample trees.

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF		Appraised Value (\$)
Douglas Fir	40,087	8,848.0	\$685.94	\$82.31	\$549.55	\$1.09	\$68.60	*	\$606,972.80
Ponderosa Pine	979	231.0	\$300.34	\$36.04	\$549.55	\$0.00	\$30.10	*	\$6,953.10
White Fir	899	97.0	\$465.54	\$55.86	\$549.55	\$0.00	\$46.60	*	\$4,520.20
Incense- cedar	690	95.0	\$454.74	\$54.57	\$549.55	\$0.00	\$45.50	*	\$4,322.50
Sugar Pine	53	5.0	\$300.00	\$36.00	\$549.55	\$0.00	\$30.00	*	\$150.00
Totals	42,708	9,276.0							\$622,918.60

Stumpage Computation

* 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 %	53.0 %	38.0 %	5.0 %	

Comments: Used average Douglas fir pricing due to several months of increasing prices.

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine				64.0 %	33.0 %	3.0 %	

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir				22.0 %	66.0 %	12.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar				37.0 %	53.0 %	10.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine				8.0 %	80.0 %	12.0 %	

Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull
Douglas Fir	42	31

Salmon Run 2023

Unit Summary

ORM07-TS-2023.0014

Unit: 1-1

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	262.0	286.0	299.0	1,330
White Fir	4.0	4.0	4.0	36
Ponderosa Pine	4.0	4.0	4.0	28
Incense-cedar	3.0	3.0	3.0	21
Totals:	273.0	297.0	310.0	1,415

Net Volume/Acre: 17.1 MBF

Regeneration Harvest	0.0
Partial Cut	16.0
Right of Way	0.0
Total Acres:	16.0

Unit: 1-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	556.0	609.0	636.0	2,826
White Fir	8.0	9.0	9.0	76
Ponderosa Pine	7.0	8.0	8.0	61
Incense-cedar	6.0	7.0	7.0	46
Totals:	577.0	633.0	660.0	3,009

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	34.0
Right of Way	0.0
Total Acres:	34.0

Unit: 1-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	85.0	91.0	97.0	233
Ponderosa Pine	5.0	6.0	6.0	9
Incense-cedar	1.0	1.0	1.0	1
Totals:	91.0	98.0	104.0	243

Net Volume/Acre: 22.8 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

Unit: 1-5A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	114.0	125.0	131.0	582
White Fir	2.0	2.0	2.0	16
Ponderosa Pine	2.0	2.0	2.0	12
Incense-cedar	1.0	1.0	1.0	9
Totals:	119.0	130.0	136.0	619

Unit: 1-5B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	88.0	94.0	99.0	390
Ponderosa Pine	2.0	2.0	2.0	9
White Fir	1.0	1.0	1.0	9
Incense-cedar	1.0	1.0	1.0	5
Totals:	92.0	98.0	103.0	413

Unit: 1-6

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	65.0	72.0	75.0	332
White Fir	1.0	1.0	1.0	9
Incense-cedar	1.0	1.0	1.0	5
Ponderosa Pine	1.0	1.0	1.0	7
Totals:	68.0	75.0	78.0	353

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	7.0

Net Volume/Acre: 18.4 MBF

Regeneration Harvest	0.0
Partial Cut	5.0
Right of Way	0.0
Total Acres:	5.0

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	1,128.0	1,235.0	1,291.0	5,735
White Fir	17.0	18.0	18.0	155
Ponderosa Pine	15.0	17.0	17.0	123
Incense-cedar	13.0	15.0	15.0	92
Sugar Pine	1.0	1.0	1.0	8
Totals:	1,174.0	1,286.0	1,342.0	6,113

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	69.0
Right of Way	0.0
Total Acres:	69.0

Unit: 5-21

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	114.0	125.0	131.0	582
White Fir	2.0	2.0	2.0	16
Ponderosa Pine	2.0	2.0	2.0	12
Incense-cedar	1.0	1.0	1.0	9
Totals:	119.0	130.0	136.0	619

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	7.0

Unit: 5-25

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	65.0	72.0	75.0	332
White Fir	1.0	1.0	1.0	9
Incense-cedar	1.0	1.0	1.0	5
Ponderosa Pine	1.0	1.0	1.0	7
Totals:	68.0	75.0	78.0	353

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	441.0	483.0	505.0	2,244
White Fir	7.0	7.0	7.0	61
Ponderosa Pine	6.0	7.0	7.0	48
Incense-cedar	5.0	6.0	6.0	36
Totals:	459.0	503.0	525.0	2,389

Unit: 6-20

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	128.0	137.0	145.0	349
Ponderosa Pine	8.0	9.0	9.0	13
Incense-cedar	1.0	1.0	1.0	1
Totals:	137.0	147.0	155.0	363

Unit: 17-3A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	65.0	72.0	75.0	332
White Fir	1.0	1.0	1.0	9
Incense-cedar	1.0	1.0	1.0	5
Ponderosa Pine	1.0	1.0	1.0	7
Totals:	68.0	75.0	78.0	353

Unit: 17-3B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	262.0	286.0	299.0	1,330
Ponderosa Pine	4.0	4.0	4.0	28
White Fir	4.0	4.0	4.0	36
Incense-cedar	3.0	3.0	3.0	21
Totals:	273.0	297.0	310.0	1,415

Net Volume/Acre: 17.0 MBF

Right of Way Total Acres:	27.0
Partial Cut	27.0
Regeneration Harvest	0.0

Net Volume/Acre: 22.8 MBF

Regeneration Harvest	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

Net Volume/Acre: 17.1 MBF

Regeneration Harvest	0.0
Partial Cut	16.0
Right of Way	0.0
Total Acres:	16.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	180.0	197.0	206.0	914
White Fir	3.0	3.0	3.0	25
Incense-cedar	2.0	2.0	2.0	15
Ponderosa Pine	2.0	3.0	3.0	20
Totals:	187.0	205.0	214.0	974

Unit: 23-8

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	831.0	892.0	942.0	2,268
Ponderosa Pine	53.0	57.0	57.0	84
Incense-cedar	5.0	6.0	6.0	8
Totals:	889.0	955.0	1,005.0	2,360

Unit: 24-1

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	852.0	915.0	966.0	2,326
Ponderosa Pine	53.0	57.0	57.0	84
Incense-cedar	5.0	6.0	6.0	9
Totals:	910.0	978.0	1,029.0	2,419

Unit: 24-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	277.0	297.0	314.0	756
Ponderosa Pine	18.0	19.0	19.0	28
Incense-cedar	2.0	2.0	2.0	3
Totals:	297.0	318.0	335.0	787

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	11.0
Right of Way	0.0
Total Acres:	11.0

Net Volume/Acre: 22.8 MBF

Regeneration Harvest	0.0
Partial Cut	39.0
Right of Way	0.0
Total Acres:	39.0

Net Volume/Acre: 22.8 MBF

Regeneration Harvest	0.0
Partial Cut	40.0
Right of Way	0.0
Total Acres:	40.0

Net Volume/Acre: 22.8 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	98.0	107.0	112.0	499
White Fir	1.0	2.0	2.0	13
Ponderosa Pine	1.0	1.0	1.0	11
Incense-cedar	1.0	1.0	1.0	8
Totals:	101.0	111.0	116.0	531

Unit: 30-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	16.0	18.0	19.0	83
Totals:	16.0	18.0	19.0	83

Unit: 31-6

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	654.0	716.0	748.0	3,325
White Fir	10.0	11.0	11.0	90
Ponderosa Pine	9.0	10.0	10.0	71
Incense-cedar	8.0	8.0	8.0	54
Totals:	681.0	745.0	777.0	3,540

Unit: 31-7

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	572.0	627.0	655.0	2,909
White Fir	9.0	9.0	9.0	79
Ponderosa Pine	8.0	8.0	8.0	68
Incense-cedar	7.0	7.0	7.0	47
Totals:	596.0	651.0	679.0	3,103

Net Volume/Acre: 16.8 MBF

Regeneration Harvest	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

Net Volume/Acre: 16.0 MBF

Regeneration Harvest	0.0
Partial Cut	1.0
Right of Way	0.0
Total Acres:	1.0

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	40.0
Right of Way	0.0
Total Acres:	40.0

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	35.0
Right of Way	0.0
Total Acres:	35.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	180.0	197.0	206.0	914
White Fir	3.0	3.0	3.0	25
Incense-cedar	2.0	2.0	2.0	15
Ponderosa Pine	2.0	3.0	3.0	20
Totals:	187.0	205.0	214.0	974

Unit: 32-24

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	262.0	286.0	299.0	1,330
White Fir	4.0	4.0	4.0	36
Ponderosa Pine	4.0	4.0	4.0	28
Incense-cedar	3.0	3.0	3.0	21
Totals:	273.0	297.0	310.0	1,415

Unit: 32-25

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	1,259.0	1,381.0	1,439.0	6,402
White Fir	17.0	22.0	22.0	179
Ponderosa Pine	17.0	19.0	19.0	137
Incense-cedar	15.0	18.0	18.0	110
Sugar Pine	3.0	4.0	4.0	41
Totals:	1,311.0	1,444.0	1,502.0	6,869

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	11.0
Right of Way	0.0
Total Acres:	11.0

Net Volume/Acre: 17.1 MBF

Partial Cut	16.0
Right of Way	0.0
Total Acres:	16.0

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	77.0
Right of Way	0.0
Total Acres:	77.0

Unit: 35-12

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	147.0	161.0	168.0	748
White Fir	2.0	2.0	2.0	20
Incense-cedar	2.0	2.0	2.0	12
Ponderosa Pine	2.0	2.0	2.0	16
Totals:	153.0	167.0	174.0	796

Unit: A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	10.0	11.0	11.0	63
Totals:	10.0	11.0	11.0	63

Unit: B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	97.0	102.0	102.0	690
Incense-cedar	5.0	5.0	5.0	132
Ponderosa Pine	2.0	2.0	2.0	27
Totals:	104.0	109.0	109.0	849

Unit: C

Species	Net Gross Merch		Gross	# of Trees
Douglas Fir	40.0	42.0	42.0	263
Ponderosa Pine	2.0	2.0	2.0	21
Sugar Pine	1.0	1.0	1.0	4
Totals:	43.0	45.0	45.0	288

Comments:

Unit volumes are calculated by using the average mbf/acre over the entire sale and multiplying that average by the unit acres. Individual unit volumes may vary depending on how close they are to the sale average mbf/acre.

Net Volume/Acre: 17.0 MBF

Regeneration Harvest	0.0
Partial Cut	9.0
Right of Way	0.0
Total Acres:	9.0

Net Volume/Acre: 10.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Net Volume/Acre: 11.6 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	9.0
Total Acres:	9.0

Net Volume/Acre: 10.8 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	4.0
Total Acres:	4.0

Salmon Run 2023

Stump to Truck Costs

Total Stump To Truck	Net Volume	\$/MBF
\$3,116,987.20	9,276.0	\$336.03

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

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Helicopter	GM MBF	2,516.0	\$500.00	\$1,258,000.00	
Tractor Swing	GM MBF	58.0	\$279.68	\$16,221.44	
Cable: Medium Yarder	GM MBF	6,448.0	\$239.44	\$1,543,909.12	
Feller Buncher/Skidder	GM MBF	1,081.0	\$195.94	\$211,811.14	
Subtotal				\$3,029,941.70	

Additional Costs

ltem	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Deadman Anchor	Each	10.0	\$450.00	\$4,500.00	
Intermediate Support	Each	65.0	\$181.00	\$11,765.00	
Lift Tree	Each	134.0	\$181.00	\$24,254.00	
Directional Falling	Hour	235.5	\$91.00	\$21,430.50	
Snag Creation	Each	96.0	\$21.00	\$2,016.00	
Subtotal				\$63,965.50	

Additional Moves

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable: Medium Yarder	Hour	16.0	\$169.00	\$2,704.00	
Loader	Hour	40.0	\$169.00	\$6,760.00	
Processor	Hour	48.0	\$169.00	\$8,112.00	
Feller Buncher	Hour	16.0	\$138.00	\$2,208.00	
Track Skidder	Hour	16.0	\$111.00	\$1,776.00	
Tractor	Hour	16.0	\$95.00	\$1,520.00	
Subtotal				\$23,080.00	

Salmon Run 2023

Transportation

Total	Net Volume	\$/MBF
\$535,661.06	9,276.0	\$57.75

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
Riddle/Glendale	25.0	All Species	GM MBF	10,103.0	\$53.02	\$535,661.06	100 %

Comments:

Averaged miles to utilization center between Riddle and Glendale.

Engineering Allowances

Total	Net Volume	\$/MBF
\$1,292,825.99	9,276.0	\$139.37

Cost Item	Total Cost
Road Construction:	\$1,065,480.15
Road Maintenance/Rockwear:	\$225,893.24
Road Use Fees:	\$1,452.60

Other Allowances

Total	Net Volume	\$/MBF
\$152,151.00	9,276.0	\$16.40

Environmental Protection

Cost item	Total Cost
Equipment Washing	\$720.00
Waterbar Corridors	\$1,400.00
Barricade Skid Trails, Temp Routes, Swings	\$1,300.00
Waterbar Skids	\$1,200.00
Seed and Mulch	\$684.00
Ripping	\$1,684.00
Subtotal	\$6,988.00

Logging

Cost item	Total Cost
Skid Location	\$1,120.00
Corridor Location	\$2,240.00
Landing Construction	\$13,000.00
Subtotal	\$16,360.00

Miscellaneous

Cost item	Total Cost
Fuels Adjustment	\$36.20
Subtotal	\$36.20

Slash Disposal & Site Prep

¢12 705 CO
\$13,785.60
\$2,727.20
\$2,860.00
\$9,052.50

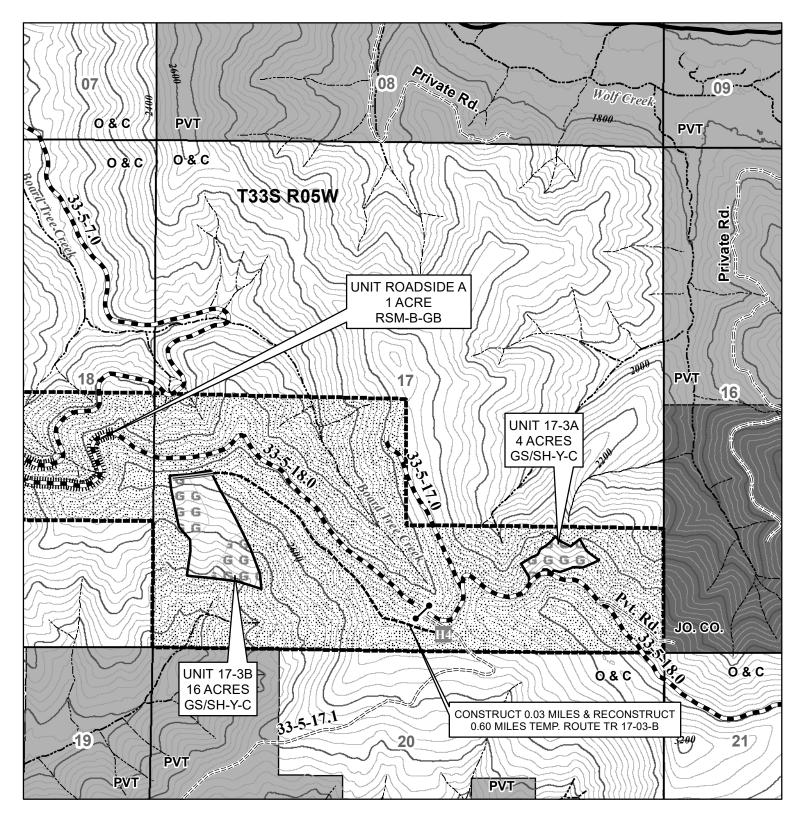
Landing Clean-up	\$13,000.00
Machine Pile and Cover	\$21,560.00
Handpile and Cover	\$65,781.50
Subtotal	\$128,766.80

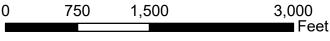
Comments:

Fuels adjustment of \$36.20 is needed because Timber Appraisal System doesn't work to the hundredth of an acre as in the fuels appraisal.

U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 1 OF 15





1 inch = 1,000 feet

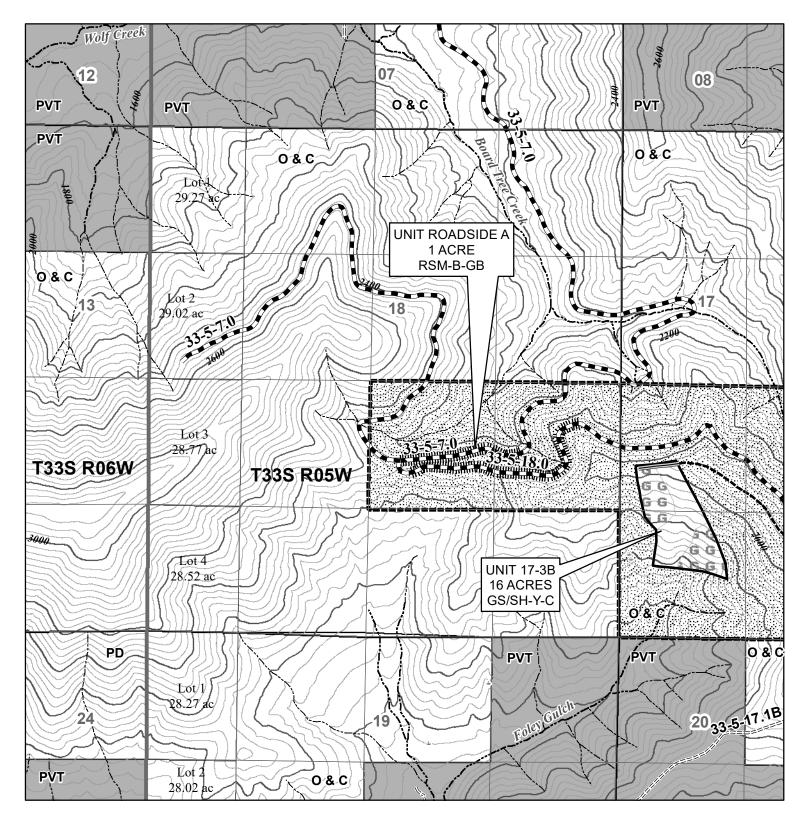
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 2 OF 15





1 inch = 1,000 feet

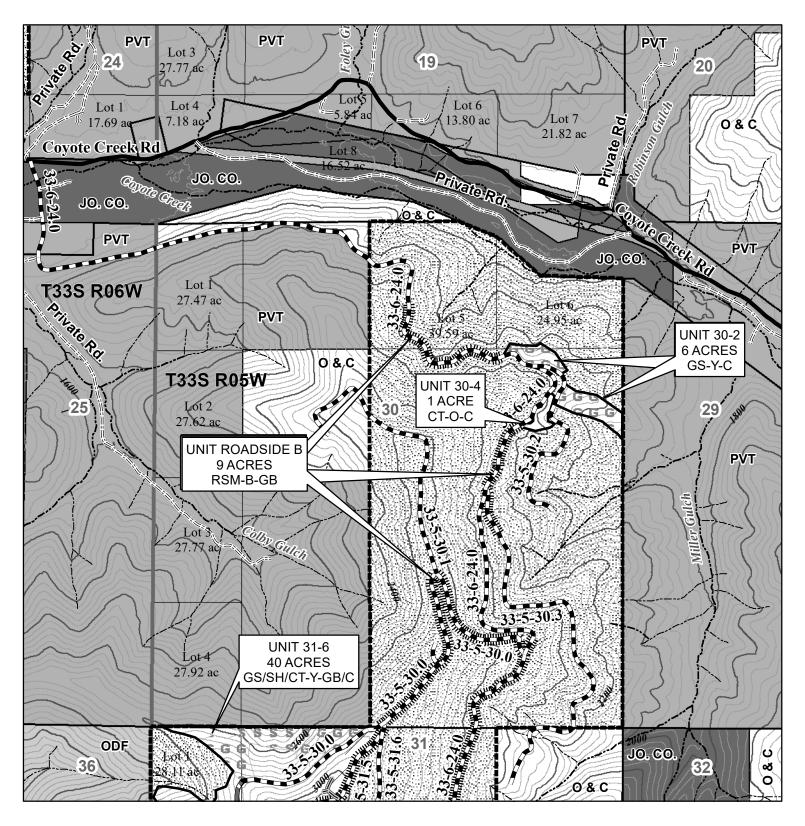
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 3 OF 15





1 inch = 1,000 feet

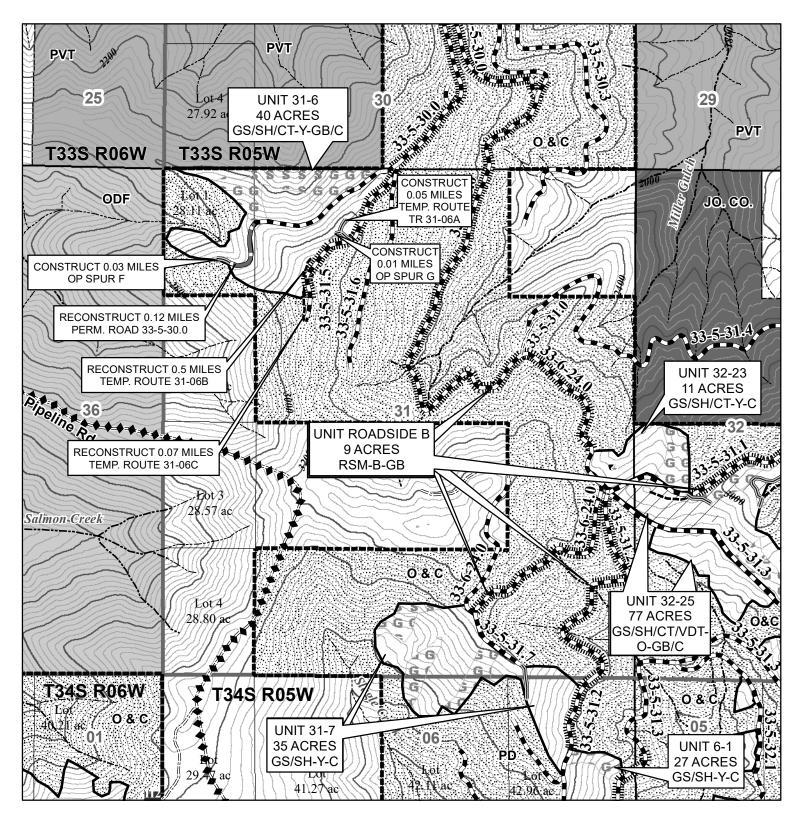
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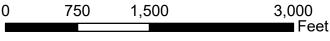
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 4 OF 15





1 inch = 1,000 feet

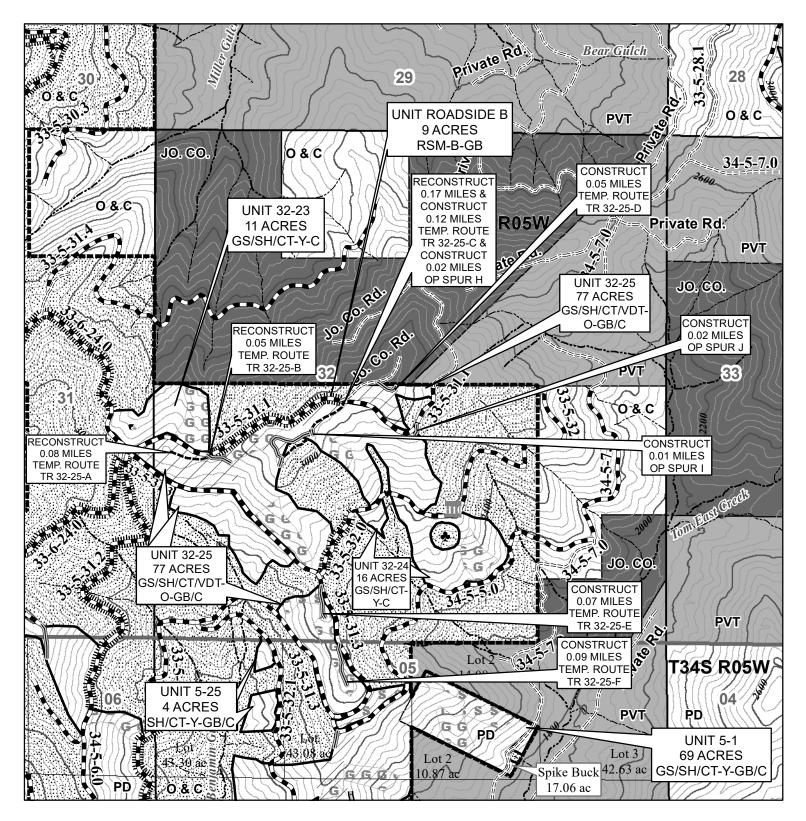
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 5 OF 15



0 750 1,500 3,000

1 inch = 1,000 feet

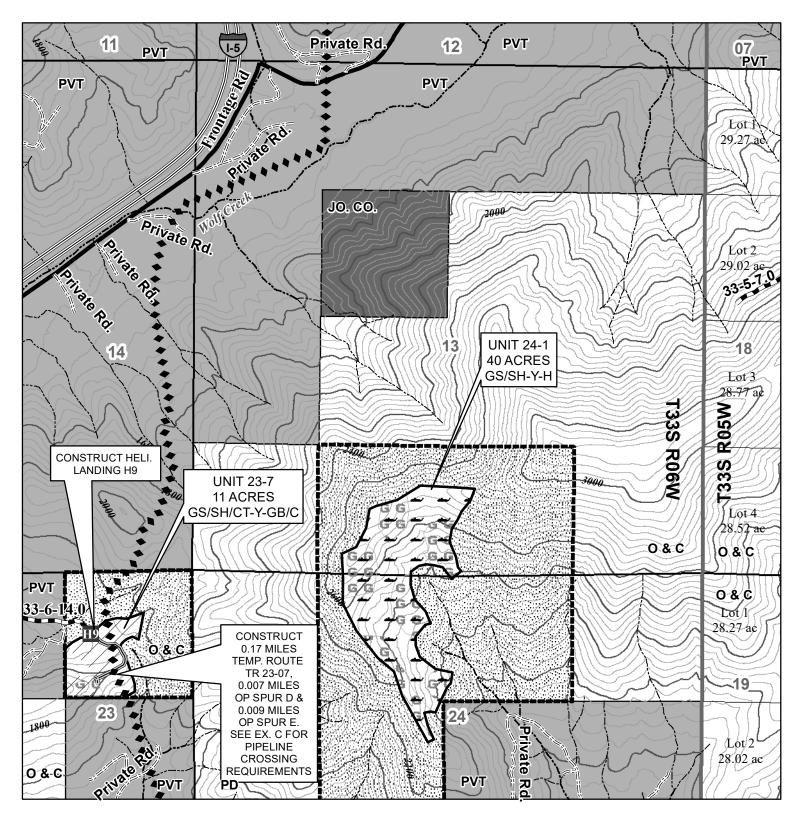
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 6 OF 15



0 750 1,500 3,000

1 inch = 1,000 feet

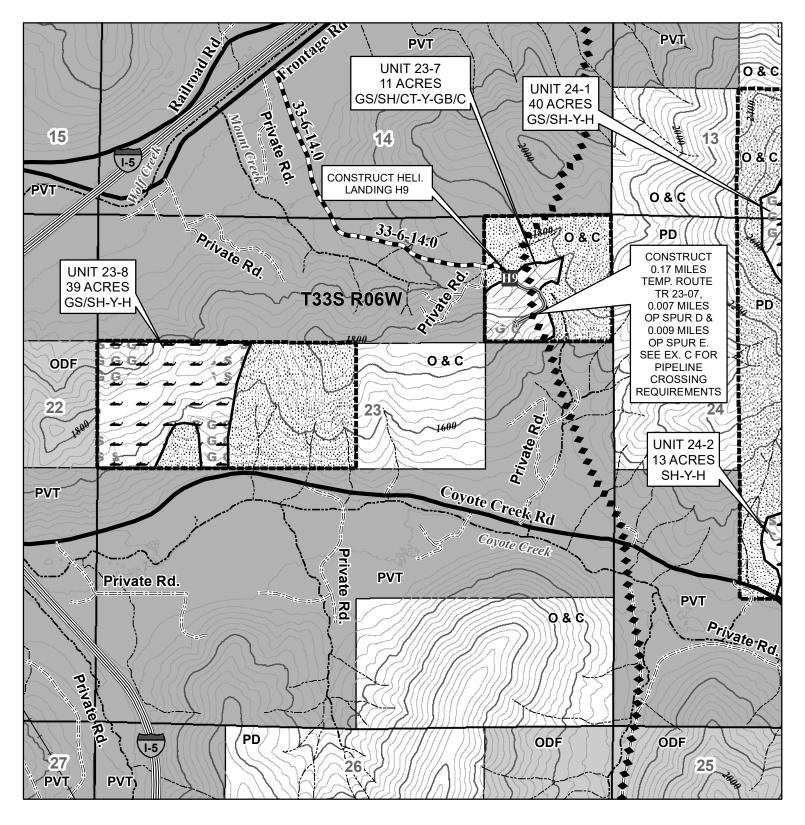
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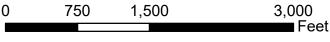
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 7 OF 15





1 inch = 1,000 feet

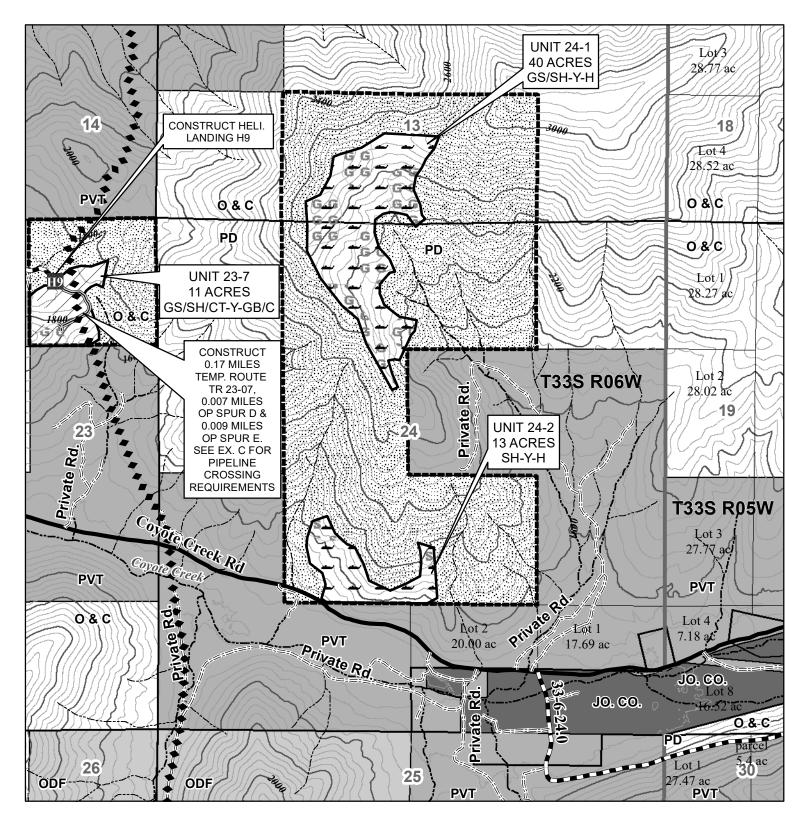
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 8 OF 15





1 inch = 1,000 feet

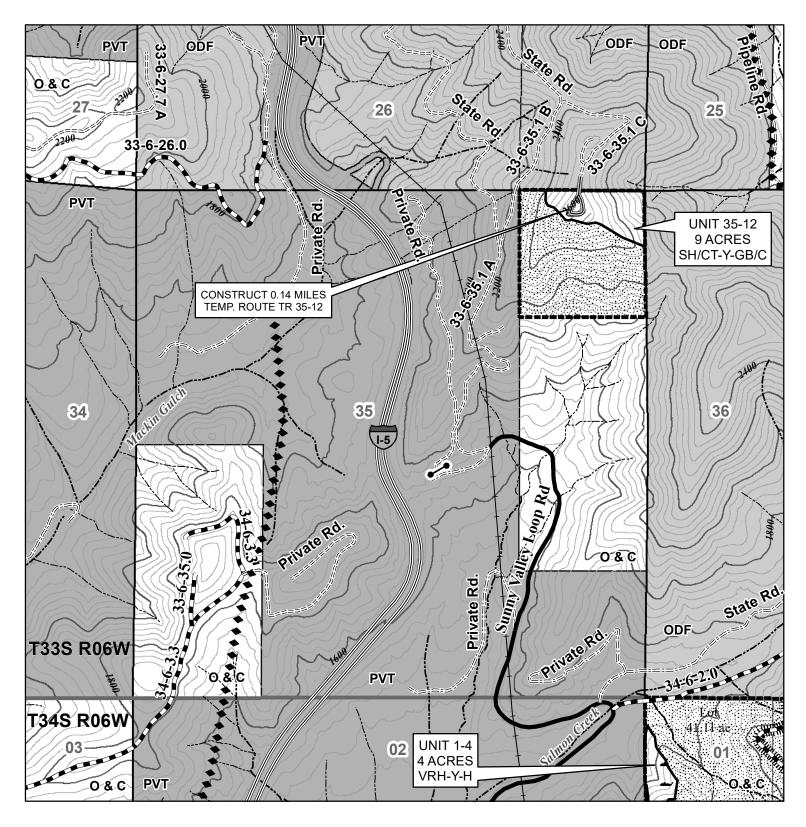
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 9 OF 15





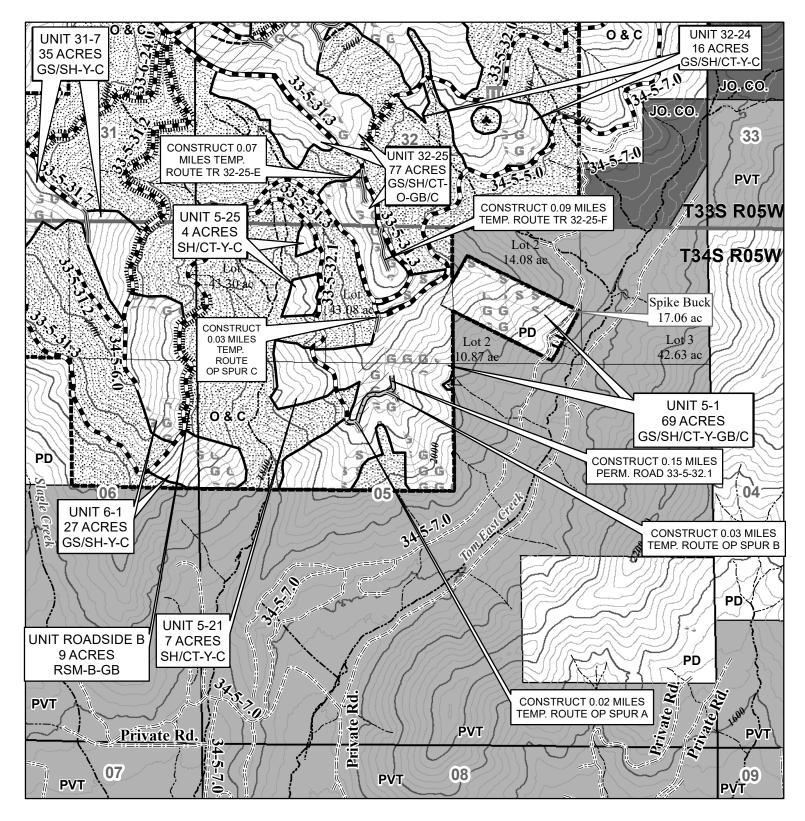
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 10 OF 15





1 inch = 1,000 feet

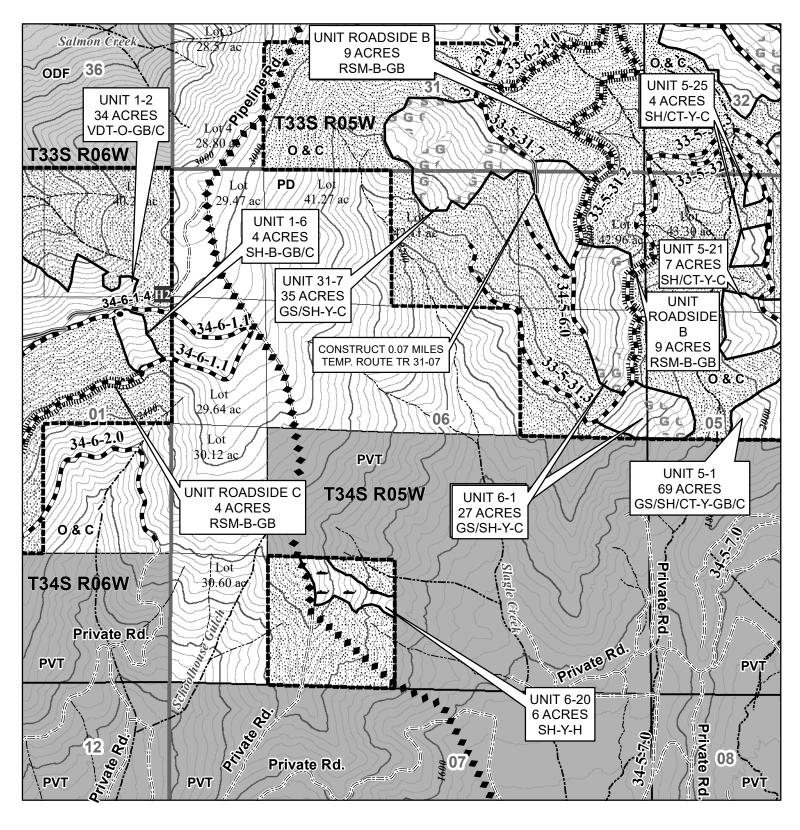
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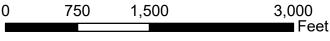
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 11 OF 15





1 inch = 1,000 feet

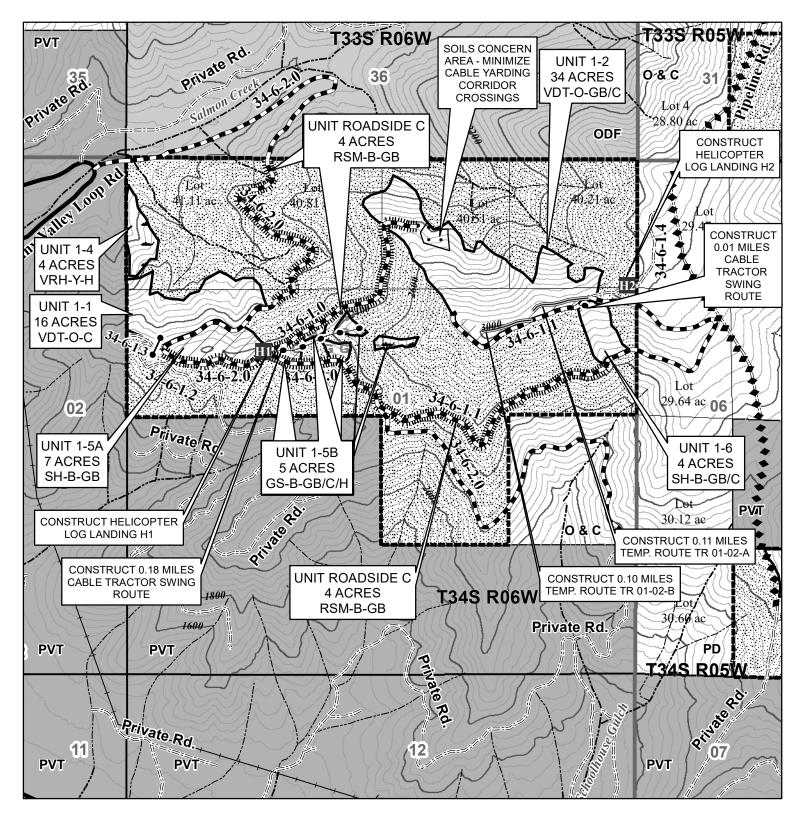
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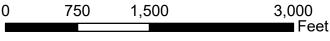
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TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 12 OF 15





1 inch = 1,000 feet

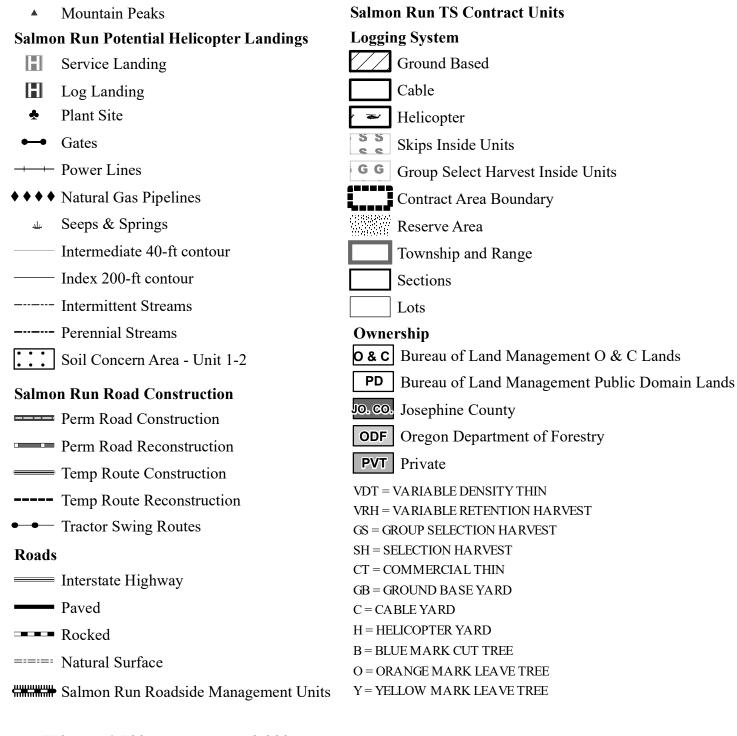
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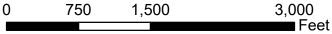
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U.S.D.I. BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17, 18, 19, 30, 31, 32; T. 33 S. R. 6 W., SEC. 13, 23, 24, 35; T. 34 S., R. 5 W., SEC. 5, 6; T. 34 S., R. 6 W., SEC. 1, WILL. MER. JOSEPHINE COUNTY

Legend





1 inch = 1,000 feet

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40 FOOT CONTOUR INTERVAL

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LEGEND

UNIT	UNIT ACRES	PRESCRIPTION-PAINT COLOR-LOGGING SYSTEM
1-1	16	VDT-O-C
1-2	34	VDT-O-GB/C
1-4	4	VRH-Y-H
1-5A	7	SH-B-GB
1-5B	5	GS-B-GB/C/H
1-6	4	SH-B-GB/C
5-1	69	GS/SH/CT-Y-GB/C
5-21	7	SH/CT-Y-C
5-25	4	SH/CT-Y-C
6-1	27	GS/SH-Y-C
6-20	6	SH-Y-H
17-3A	4	GS/SH-Y-C
17 - 3B	16	GS/SH-Y-C
23-7	11	GS/SH/CT-Y-GB/C
23-8	39	GS/SH-Y-H
24-1	40	GS/SH-Y-H
24-2	13	SH-Y-H
30-2	6	GS-Y-C
30-4	1	CT-O-C
31-6	40	GS/SH/CT-Y-GB/C
31-7	35	GS/SH-Y-C
32-23	11	GS/SH/CT-Y-C
32-24	16	GS/SH/CT-Y-C
32-25	77	GS/SH/CT/VDT-O-GB/C
35-12	9	SH/CT-Y-GB/C
Roadside A	1	RSM-B-GB
Roadside B	9	RSM-B-GB
Roadside C	4	RSM-B-GB
TOTAL	515	

VDT = VARIABLE DENSITY THIN

- VRH = VARIABLE RETENTION HARVEST
- GS = GROUP SELECTION HARVEST
- SH = SELECTION HARVEST
- CT = COMMERCIAL THIN
- GB = GROUND BASE YARD
- C = CABLE YARD
- H = HELICOPTER YARD
- B = BLUE MARK CUT TREE
- O = ORANGE MARK LEAVE TREE
- Y = YELLOW MARK LEAVE TREE

1,500

750

3,000

Feet

1 inch = 1,000 feet

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40 FOOT CONTOUR INTERVAL

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 14 OF 15

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17, 18, 19, 30, 31, 32; T. 33 S. R. 6 W., SEC. 13, 23, 24, 35; T. 34 S., R. 5 W., SEC. 5, 6; T. 34 S., R. 6 W., SEC. 1, WILL. MER. JOSEPHINE COUNTY

CT-O-C	COMMERCIAL THIN - ORANGE MARK LEAVE TREE - CABLE YARD (UNIT 30-4)	1 ACRE
VDT-O-C	VARIABLE DENSITY THIN - ORANGE MARK LEAVE TREE - CABLE YARD (UNIT 1-1)	16 ACRES
VDT-O-GB/C	VARIABLE DENSITY THIN - ORANGE MARK LEAVE TREE - GROUND BASE & CABLE YARD (UNIT 1-2)	34 ACRES
VRH-Y-H	VARIABLE RETENTION HARVEST - YELLOW MARK LEAVE TREE - HELICOPTER YARD (UNIT 1-4)	4 ACRES
SH-B-GB	SELECTION HARVEST - BLUE MARK CUT TREE - GROUND BASE YARD (UNIT 1-5A)	7 ACRES
SH-B-GB/C	SELECTION HARVEST - BLUE MARK CUT TREE - GROUND BASE & CABLE YARD (UNITS 1-6)	4 ACRES
SH-Y-H	SELECTION HARVEST - YELLOW MARK LEAVE TREE - HELICOPTER YARD (UNITS 6-20, 24-2)	19 ACRES
SH/CT-Y-C	SELECTION HARVEST & COMMERCIAL THIN - YELLOW MARK LEAVE TREE - CABLE YARD (UNITS 5-21, 5-25)	11 ACRES
SH/CT-Y-GB/C	SELECTION HARVEST & COMMERCIAL THIN - YELLOW MARK LEAVE TREE - GROUND BASE & CABLE YARD (UNIT 35-12)	9 ACRES
GS-Y-C	GROUP SELECTION - YELLOW MARK LEAVE TREE - CABLE YARD (UNIT 30-2)	6 ACRES
GS-B-GB/C/H	GROUP SELECTION - BLUE MARK CUT TREE - GROUND BASE, CABLE & HELICOPTER YARD (UNIT 1-5B)	5 ACRES
GS/SH-Y-C	GROUP SELECTION & SELECTION HARVEST - YELLOW MARK LEAVE TREE - CABLE YARD (UNITS 6-1, 17-3A, 31-7)	66 ACRES
GS/SH-Y-H	GROUP SELECTION & SELECTION HARVEST - YELLOW MARK LEAVE TREE - HELICOPTER YARD (UNITS 23-8, 24-1)	79 ACRES
GS/SH/CT-Y-C	GROUP SELECTION, SELECTION HARVEST & COMMERCIAL THIN - YELLOW MARK LEAVE TREE - CABLE YARD (UNITS 17-3B, 32-23, 32-24)	43 ACRES
GS/SH/CT-Y-GB/C	GROUP SELECTION, SELECTION HARVEST & COMMERCIAL THIN - YELLOW MARK LEAVE TREE - GROUND BASE & CABLE YARD (UNITS 5-1, 23-7, 31-6)	120 ACRES
GS/SH/CT/VDT-O- GB/C	GROUP SELECTION, SELECTION HARVEST, COMMERCIAL THIN & VARIABLE DENSITY THIN - ORANGE MARK LEAVE TREE - GROUND BASE & CABLE YARD (UNIT 32-25)	77 ACRES
RSM-B-GB	ROADSIDE MANAGEMENT - BLUE MARK CUT TREE - GROUND BASE YARD (UNITS ROADSIDE A, B & C)	14 ACRES
	TOTAL TIMBER SALE UNIT AREA	515 ACRES
	RESERVE AREA	1,888.80 ACRES
	TOTAL CONTRACT AREA	2,403.80 ACRES

SUMMARY

0	750	1,500	

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

40 FOOT CONTOUR INTERVAL



1 inch = 1,000 feet

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.

3,000

Feet

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

BOKEAU OF LAND MANAGEMENI	Version: 8.0.0.14
Construction: 7.89 sta	Updated: 11/4/2022 Date: July 2023 6/16/2023 2:19:04 PM
Improve: 0.00 sta Renov: 1093.47 sta Decom: 0.00 sta Temp:	109.56 Sta
200 Clearing and Grubbing: 16.6 acres	\$80,145.95
300 Excavation: 16692 cy Haul < 500 ft: 375 sta-yds Haul > 500 ft: 0 yd-mi	\$75,751.26
400 Drainage: Culvert: 1,548.00 lf DownSpout: 170.00 lf PolyPipe: 0.00 lf	\$115 , 155.70
500 Renovation: Blading 20.71 mi Slide Removal 21.00 cy	\$73,404.29
700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi 10,133.00 LCY Commercial Quarry Name: Commercial 4" Minus 1,996.00 LCY	\$615 , 928.84
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 85.00 cy	\$3,751.59
1800 Soil Stabilization: 8.90 acres Includes Small Quantity Factor of 1.07	\$9,042.11
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: Manual Brushing: 18.38 acres Mechanical Brushing: 1.74 acres	\$46,643.27
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$30,034.64
Mobilization: Const. \$11,600.50 Surf. \$4,022.00	\$15,622.50
Quarry Development:	\$0.00

Total: 9,276 mbf @ \$114.864/mbf =

\$1,065,480.15

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

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-17.1 A Road Name: Jackpot Mine Road Renovation: 0.08 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.08 mi	\$1,027.57
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.08 acres	\$147.26
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$12.98 Surf. \$0.00	\$12.98
Quarry Development:	\$0.00

Total: \$1,187.81

Notes:

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-5-17.1 A Road Name: Jackpot Mine Section 500 Renovation: Scarification: \$1118.88/mi x 0.08 mi = \$89.51 Blading w/o Ditches: \$559.44/mi x 0.08 mi = \$44.76 Compaction: \$415.02/mi x 0.08 mi = \$33.20 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35 Heavy road renovation Tractor: D7 with rippers 3 hr x \$250.25/hr = \$750.75 Subtotal: \$1,027.57 Section 700-1200 Surfacing: Surfacing: Section 2100 Roadside Brushing: Manual Brushing Brushing width Left: 4ft. Right: 4ft. RoadSide Brushing Light: \$474.30/acre x 0.08 acres = \$37.94 Chipping for Roadside Brushing Brush Chipper 1 hr x \$109.32/hr = \$109.32 Subtotal: \$147.26 Mobilization: Construction - 0.11% of total Costs = \$12.98 Subtotal: \$12.98 Total: \$1,187.81

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-18.0 A-B Road Name: Board Tree Sp Road Renovation: 1.7 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$999.17
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 1.70 mi	\$5,175.20
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 4.00 cy	\$164.95
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):1.65 acres	\$3,423.63
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$110.12 Surf. \$0.00	\$110.12
Quarry Development:	\$0.00

Notes:

Total: \$10,076.27

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

Road Construction Worksheet Road Number: 33-5-18.0 A-B Road Name: Board Tree Sp Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor:2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.2 = \$999.17 Subtotal: \$999.17 Section 500 Renovation: Blading: \$923.61/mi x 1.40 mi = \$1,293.05 Scarification: \$1118.88/mi x 0.40 mi = \$447.55 Blading w/o Ditches: \$559.44/mi x 0.30 mi = \$167.83 Compaction: \$415.02/mi x 1.70 mi = \$705.53 Clean Culverts: \$501.63/mi x 1.40 mi = \$702.28 Water for Compaction Water Truck 3000 Gal 17 hr x \$109.35/hr = \$1,858.95 Subtotal: \$5,175.20 Section 1400 Slope Protection: Comment: MP 0.79 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 7.00 mi= \$17.08 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.32 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $1.22/cy \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 7.00 mi= \$17.08 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$164.95 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.20 acres = 112.79 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.20 acres = \$26.40 + Mulch Cost: \$320.00/acre x 0.20 acres = \$64.00 Subtotal: \$203.19 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 1.65 acres = \$1,565.19 Chipping for Roadside Brushing Brush Chipper 17 hr x \$109.32/hr = \$1,858.44 Subtotal: \$3,423.63 Mobilization: Construction - 0.95% of total Costs = \$110.12Subtotal: \$110.12 Total: \$10,076.27

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-30.0 A-B Road Name: Colby-Miller Sp Road Renovation: 1.1 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 1.00 acres	\$4,995.87
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 1.10 mi	\$5,345.55
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.50 acres Includes Small Quantity Factor of 1.07	\$507.98
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):1.07 acres	\$3,232.52
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$155.60 Surf. \$0.00	\$155.60
Quarry Development:	\$0.00

Total: \$14,237.53

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

```
Road Construction Worksheet
Road Number: 33-5-30.0 A-B Road Name: Colby-Miller Sp
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.17 x Total Acres: 1.0 = $4,995.87
                                                                  Subtotal: $4,995.87
Section 500 Renovation:
  Blading: $923.61/mi x 0.64 mi = $591.11
  Scarification: $1118.88/mi x 0.46 mi = $514.68
  Blading w/o Ditches: $559.44/mi x 0.46 mi = $257.34
  Compaction: $415.02/mi x 1.10 mi = $456.52
  Clean Culverts: $501.63/mi x 0.64 mi = $321.04
  Water for Compaction
  Water Truck 3000 Gal 11 hr x $109.35/hr = $1,202.85
  Road Reconstruction
   Tractor: D7 with rippers 8 hr x $250.25/hr = $2,002.00
                                                                  Subtotal: $5,345.55
Section 700-1200 Surfacing:
Surfacing:
Section 1800 Soil Stabilization:
  Dry Method with Mulch: 563.97/acre \times 0.50 acres = $281.98
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.50 acres = $66.00
        + Mulch Cost: $320.00/acre x 0.50 acres = $160.00
                                                                  Subtotal: $507.98
Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Heavy: $1897.20/acre x 1.07 acres = $2,030.00
  Chipping for Roadside Brushing
   Brush Chipper 11 hr x $109.32/hr = $1,202.52
                                                                  Subtotal: $3,232.52
Mobilization:
  Construction - 1.34\% of total Costs = $155.60
                                                                  Subtotal: $155.60
```

Total: \$14,237.53

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-30.2 Road Name: Miller Mobile Road Renovation: 0.13 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.13 mi	\$603.39
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.13 acres	\$465.28
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$500.50
Mobilization: Const. \$17.34 Surf. \$0.00	\$17.34
Quarry Development:	\$0.00

Total: \$1,586.50

Notes:

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

Road Construction Worksheet		
Road Number: 33-5-30.2 Road Name: Miller Mobile		
<pre>Section 500 Renovation: Blading: \$923.61/mi x 0.13 mi = \$120.07 Scarification: \$1118.88/mi x 0.13 mi = \$145.45 Compaction: \$415.02/mi x 0.13 mi = \$53.95 Clean Culverts: \$501.63/mi x 0.13 mi = \$65.21 Water for Compaction Water Truck 3000 Gal 2 hr x \$109.35/hr = \$218.70</pre>	Subtotal:	\$603.39
<pre>Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.13 acres = \$246.64 Chipping for Roadside Brushing Brush Chipper 2 hr x \$109.32/hr = \$218.64</pre>	Subtotal:	\$465.28
Section 8000 Miscellaneous: Remove Existing Berm/Barricade Tractor: D7 with rippers 2 hr x \$250.25/hr = \$500.50	Subtotal:	\$500.50
Mobilization: Construction - 0.15% of total Costs = \$17.34	Subtotal:	\$17.34
	Total:	\$1,586.50

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-30.3 Road Name: Miller Mobile 1 Road Renovation: 0.08 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.10 acres	\$499.59
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.08 mi	\$346.08
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.08 acres	\$261.10
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$13.35 Surf. \$0.00	\$13.35
Quarry Development:	\$0.00
Total:	\$1,221.71

Notes:

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

Road Construction Worksheet		
Road Number: 33-5-30.3 Road Name: Miller Mobile 1		
<pre>Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor:2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Ac</pre>	res: 0.1 = Subtotal:	
<pre>Section 500 Renovation: Blading: \$923.61/mi x 0.08 mi = \$73.89 Scarification: \$1118.88/mi x 0.08 mi = \$89.51 Compaction: \$415.02/mi x 0.08 mi = \$33.20 Clean Culverts: \$501.63/mi x 0.08 mi = \$40.13 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35</pre>	Subcocur.	¥155.55
	Subtotal:	\$346.08
<pre>Section 1800 Soil Stabilization: Dry Method with Mulch: \$563.97/acre x 0.10 acres = \$56.40 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.10 acres = \$13.20 + Mulch Cost: \$320.00/acre x 0.10 acres = \$32.00</pre>	Subtotal:	\$101.60
Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.08 acres = \$151.78 Chipping for Roadside Brushing Brush Chipper 1 hr x \$109.32/hr = \$109.32		
	Subtotal:	\$261.10
Mobilization: Construction - 0.12% of total Costs = \$13.35	Subtotal:	\$13.35
	Total:	\$1,221.71

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-31.1 Road Name: Miller Gulch S. Sp Road Renovation: 0.66 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$999.17
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.66 mi	\$2,203.80
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.64 acres	\$1,979.45
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$59.51 Surf. \$0.00	\$59.51
Quarry Development:	\$0.00

Total: \$5,445.12

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

```
Road Construction Worksheet
Road Number: 33-5-31.1 Road Name: Miller Gulch S. Sp
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.2 = $999.17
                                                                  Subtotal: $999.17
Section 500 Renovation:
  Blading: $923.61/mi x 0.66 mi = $609.58
  Scarification: $1118.88/mi x 0.20 mi = $223.78
  Compaction: $415.02/mi x 0.66 mi = $273.91
  Clean Culverts: $501.63/mi x 0.66 mi = $331.08
  Water for Compaction
  Water Truck 3000 Gal 7 hr x $109.35/hr = $765.45
                                                                  Subtotal: $2,203.80
Section 1800 Soil Stabilization:
  Dry Method with Mulch: 563.97/acre \times 0.20 acres = $112.79
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.20 acres = $26.40
        + Mulch Cost: $320.00/acre x 0.20 acres = $64.00
                                                                  Subtotal: $203.19
Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Heavy: $1897.20/acre \times 0.64 acres = $1,214.21
  Chipping for Roadside Brushing
  Brush Chipper 7 hr x 109.32/hr = 765.24
                                                                  Subtotal: $1,979.45
Mobilization:
  Construction - 0.51\% of total Costs = $59.51
                                                                  Subtotal: $59.51
                                                                  Total: $5,445.12
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-31.2 A-B Road Name: Miller Mobile 2 Road Renovation: 0.73 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.40 acres	\$1,998.35
300 Excavation:	\$0.00
400 Drainage: Culvert: 82.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$5,179.12
500 Renovation:Blading 0.73 mi	\$2,497.91
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 30.00 LCY	\$1,711.20
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 4.00 cy	\$174.71
1800 Soil Stabilization: 0.40 acres Includes Small Quantity Factor of 1.07	\$406.39
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.71 acres	\$2 , 221.57
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$276.68
Mobilization: Const. \$159.84 Surf. \$9.95	\$169.79
Quarry Development:	\$0.00

Total: \$14,635.72

Notes: Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-5-31.2 A-B Road Name: Miller Mobile 2 Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.4 = \$1,998.35 Subtotal: \$1,998.35 Section 400 Drainage: Aluminized MP 0.06 24 inch 16 ga 36 lf x \$63.16/lf = \$2,273.76 Aluminized MP 0.37 24 inch 16 ga 46 lf x \$63.16/lf = \$2,905.36 Subtotal: \$5,179.12 Section 500 Renovation: Blading: \$923.61/mi x 0.73 mi = \$674.24 Scarification: \$1118.88/mi x 0.25 mi = \$279.72 Compaction: \$415.02/mi x 0.73 mi = \$302.96 Clean Culverts: \$501.63/mi x 0.73 mi = \$366.19 Water for Compaction Water Truck 3000 Gal 8 hr x \$109.35/hr = \$874.80 Subtotal: \$2,497.91 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.06 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 15.00 LCY = 285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 13.00 mi= \$235.95 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 13.00 mi= \$33.15 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.37 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 15.00 LCY = 285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 13.00 mi= \$235.95 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 13.00 mi= \$33.15 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Subtotal: \$1,711.20

Road Number: 33-5-31.2 A-B Miller Mobile 2 Continued Section 1400 Slope Protection: Comment: MP 0.06 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 9.00 mi= \$21.96 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Comment: MP 0.37 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 9.00 mi= \$21.96 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$174.71 Section 1800 Soil Stabilization: Dry Method with Mulch: $$563.97/acre \times 0.40 acres = 225.59 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.40 acres = \$52.80 + Mulch Cost: \$320.00/acre x 0.40 acres = \$128.00 Subtotal: \$406.39 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.71 acres = \$1,347.01 Chipping for Roadside Brushing Brush Chipper 8 hr x \$109.32/hr = \$874.56 Subtotal: \$2,221.57 Section 8000 Miscellaneous: BMP Installation at MP 0.25 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 Subtotal: \$276.68 Mobilization: Construction - 1.38% of total Costs = \$159.84 Surfacing - 0.25% by rock volume = \$9.95Subtotal: \$169.79 Total: \$14,635.72

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-31.3 A Road Name: Miller Benjamin Rd Road Renovation: 1.96 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$999.17
300 Excavation:	\$0.00
400 Drainage: Culvert: 242.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$19,483.16
500 Renovation: Blading 1.96 mi Slide Removal 9.00 cy	\$7,174.42
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 1,842.00 LCY	\$110,151.60
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 16.00 cy	\$754.95
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):1.90 acres	\$5,791.08
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$830.04
Mobilization: Const. \$1,606.47 Surf. \$610.81	\$2,217.28
Quarry Development:	\$0.00

Total: \$147,604.91

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

Notes:

```
Road Construction Worksheet
Road Number: 33-5-31.3 A Road Name: Miller Benjamin Rd
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.2 = $999.17
                                                                  Subtotal: $999.17
Section 400 Drainage:
                                        18 inch 16 ga 34 lf x $56.92/lf = $1,935.28
 Aluminized MP 0.70
 Aluminized MP 1.32
                                        48 inch 14 ga 60 lf x $136.67/lf = $8,200.20
                                        24 inch 16 ga 34 lf x 63.16/1f = 2,147.44
 Aluminized MP 1.41
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
 Aluminized MP 1.47
 Aluminized MP 1.53
                                        24 inch 16 ga 34 lf x $63.16/lf = $2,147.44
 Aluminized MP 1.62
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
                                                                  Subtotal: $19,483.16
Section 500 Renovation:
 Slide Removal 9.00 cy
  Front End Loader $114.30/hr x 3.00 hr = $342.90
 Dump Truck: $103.09/hr x 3.00 hr = $309.27
  Laborer: \frac{56.30}{hr} \times 3.00 hr = \frac{168.90}{hr}
 Blading: $923.61/mi x 1.96 mi = $1,810.28
 Scarification: $1118.88/mi x 0.50 mi = $559.44
 Compaction: $415.02/mi x 1.96 mi = $813.44
 Clean Culverts: $501.63/mi x 1.96 mi = $983.19
 Water for Compaction
  Water Truck 3000 Gal 20 hr x $109.35/hr = $2,187.00
                                                                  Subtotal: $7,174.42
Section 700-1200 Surfacing:
Commercial Quarry Name: Commercial 1-1/2" Mi
 Comment: MP 0.70
 Length TopW
               BotW Depth CWid #TOs Width F.W.L Taper
                                                                 Other
                                                                  15 LCY
 Rock Volume = 15.00 LCY
 Purchase Price / Royalty: $19.00/LCY x 15.00 LCY = $285.00
 Processing: $1.20/LCY x 15.00 LCY = $18.00
 Compaction: $1.38/LCY x 15.00 LCY = $20.70
 Grid Rolling: $3.02/LCY x 15.00 LCY = $45.30
 T11 & T27 Testing: $0.10/LCY x 15.00 LCY = $1.50
 Basic Rock Haul cost: $0.81/LCY x 15.00 LCY = $12.15
 Rock Haul -15% grades: $1.21/LCY-mi x 15.00 LCY x 15.00 mi= $272.25
 Rock Haul St& Co Roads: $0.54/LCY-mi x 15.00 LCY x 20.00 mi= $162.00
 Basic Water Haul cost: 0.79/LCY \times 15.00 LCY = 11.85
 Water Haul -15% grades: $0.17/LCY-mi x 15.00 LCY x 15.00 mi= $38.25
 Water Haul St&Co Roads: $0.10/LCY-mi x 15.00 LCY x 20.00 mi= $30.00
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Road Number: 33-5-31.3 A Miller Benjamin Rd Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.32 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 20.00 LCY = 380.00 Processing: \$1.20/LCY x 20.00 LCY = \$24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 15.00 mi= \$363.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 15.00 mi= \$51.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.41 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.47 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-5-31.3 A Miller Benjamin Rd Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.53 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.62 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.00-1.24 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 1.24mi 14ft 4in 10% 5 10ft 50ft 25ft 14.5ft Rock Volume = 1,747.00 LCY Purchase Price / Royalty: \$19.00/LCY x 1,747.00 LCY = \$33,193.00 Processing: \$1.20/LCY x 1,747.00 LCY = \$2,096.40 Compaction: \$1.38/LCY x 1,747.00 LCY = \$2,410.86 Grid Rolling: \$3.02/LCY x 1,747.00 LCY = \$5,275.94 T11 & T27 Testing: \$0.10/LCY x 1,747.00 LCY = \$174.70 Basic Rock Haul cost: \$0.81/LCY x 1,747.00 LCY = \$1,415.07 Rock Haul -15% grades: \$1.21/LCY-mi x 1,747.00 LCY x 15.00 mi= \$31,708.05 Rock Haul St& Co Roads: \$0.54/LCY-mi x 1,747.00 LCY x 20.00 mi= \$18,867.60 Basic Water Haul cost: \$0.79/LCY x 1,747.00 LCY = \$1,380.13 Water Haul -15% grades: \$0.17/LCY-mi x 1,747.00 LCY x 15.00 mi= \$4,454.85 Water Haul St&Co Roads: \$0.10/LCY-mi x 1,747.00 LCY x 20.00 mi= \$3,494.00 Subtotal:\$110,151.60 Section 1400 Slope Protection: Comment: MP 1.17 Rock Source: Commercial CL2 Purchase Price / Royalty: $$17.00/cy \times 3.00cy = 51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 12.00 mi= \$43.92 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03

Road Number: 33-5-31.3 A Miller Benjamin Rd Continued Comment: MP 0.70 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{cy} \times 2.00cy = \frac{2.44}{cy}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 11.00 mi= \$26.84 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.32 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 3.00cy = \$51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 12.00 mi= \$43.92 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03 Comment: MP 1.41 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $1.22/cy \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.47 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.53 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.62 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Subtotal: \$754.95 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.20 acres = 112.79 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.20 acres = \$26.40 + Mulch Cost: \$320.00/acre x 0.20 acres = \$64.00 Subtotal: \$203.19 Road Number: 33-5-31.3 A Miller Benjamin Rd Continued Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: $$1897.20/acre \times 1.90 acres = $3,604.68$ Chipping for Roadside Brushing Brush Chipper 20 hr x \$109.32/hr = \$2,186.40 Subtotal: \$5,791.08 Section 8000 Miscellaneous: BMP Installation at MP 1.13 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 1.17 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 1.32 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 Subtotal: \$830.04 Mobilization: Construction - 13.85% of total Costs = \$1,606.47Surfacing - 15.19% by rock volume = \$610.81 Subtotal: \$2,217.28

Total: \$147,604.91

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-31.5 Road Name: Miller Gulch J Sp Road Renovation: 0.4 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$999.17
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.40 mi	\$939.07
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.39 acres	\$1,177.19
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$36.67 Surf. \$0.00	\$36.67
Quarry Development:	\$0.00

Total: \$3,355.30

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

Notes:

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Road Construction Worksheet
Road Number: 33-5-31.5 Road Name: Miller Gulch J Sp
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.2 = $999.17
                                                                  Subtotal: $999.17
Section 500 Renovation:
  Scarification: $1118.88/mi x 0.10 mi = $111.89
  Blading w/o Ditches: $559.44/mi x 0.40 mi = $223.78
  Compaction: $415.02/mi x 0.40 mi = $166.01
  Water for Compaction
   Water Truck 3000 Gal 4 hr x $109.35/hr = $437.40
                                                                  Subtotal: $939.07
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.20 acres = $112.79
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.20 acres = $26.40
        + Mulch Cost: $320.00/acre x 0.20 acres = $64.00
                                                                  Subtotal: $203.19
Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Heavy: $1897.20/acre x 0.39 acres = $739.91
  Chipping for Roadside Brushing
   Brush Chipper 4 hr x $109.32/hr = $437.28
                                                                  Subtotal: $1,177.19
Mobilization:
  Construction - 0.32\% of total Costs = \$36.67
                                                                  Subtotal: $36.67
                                                                  Total: $3,355.30
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-31.7 Road Name: Miller Gulch S Spur Road Renovation: 0.15 mi 16 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.15 mi	\$532.70
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.15 acres	\$503.22
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$11.45 Surf. \$0.00	\$11.45
Quarry Development:	\$0.00

Total: \$1,047.37

Notes:

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

Road Construction Worksheet		
Road Number: 33-5-31.7 Road Name: Miller Gulch S Spur		
<pre>Section 500 Renovation: Scarification: \$1118.88/mi x 0.15 mi = \$167.83 Blading w/o Ditches: \$559.44/mi x 0.15 mi = \$83.92 Compaction: \$415.02/mi x 0.15 mi = \$62.25 Water for Compaction Water Truck 3000 Gal 2 hr x \$109.35/hr = \$218.70</pre>	Subtotal:	\$532.70
<pre>Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.15 acres = \$284.58 Chipping for Roadside Brushing Brush Chipper 2 hr x \$109.32/hr = \$218.64</pre>		
	Subtotal:	\$503.22
Mobilization: Construction - 0.10% of total Costs = \$11.45		
	Subtotal:	\$11.45
	Total:	\$1,047.37

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-32.0 Road Name: Miller Gulch X Sp Road Renovation: 0.39 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.10 acres	\$499.59
300 Excavation:	\$0.00
400 Drainage: Culvert: 80.00 lf DownSpout: 20.00 lf PolyPipe: 0.00 lf	\$5,921.60
500 Renovation: Blading 0.39 mi	\$1,266.99
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 30.00 LCY	\$1,669.80
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 2.00 cy	\$94.67
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.38 acres	\$797.75
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$114.39 Surf. \$9.95	\$124.33
Quarry Development:	\$0.00

Total: \$10,476.33

Notes: Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-5-32.0 Road Name: Miller Gulch X Sp Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.1 = \$499.59 Subtotal: \$499.59 Section 400 Drainage: Aluminized MP 0.14 24 inch 16 ga 40 lf x 63.16/1f = 2,526.40Aluminized MP 0.23 24 inch 16 ga 40 lf x 63.16/1f = 2,526.4030 inch 20 lf x 43.44/1f = 8868.80Full Round MP 0.14 Subtotal: \$5,921.60 Section 500 Renovation: Blading: \$923.61/mi x 0.39 mi = \$360.21 Scarification: \$1118.88/mi x 0.10 mi = \$111.89 Compaction: \$415.02/mi x 0.39 mi = \$161.86 Clean Culverts: \$501.63/mi x 0.39 mi = \$195.64 Water for Compaction Water Truck 3000 Gal 4 hr x \$109.35/hr = \$437.40 Subtotal: \$1,266.99 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.14 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 12.00 mi= \$217.80 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 12.00 mi= \$30.60 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-5-32.0 Miller Gulch X Sp Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.23 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 12.00 mi= \$217.80 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 12.00 mi= \$30.60 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Subtotal: \$1,669.80 Section 1400 Slope Protection: Comment: MP 0.23 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$94.67 Section 1800 Soil Stabilization: Dry Method with Mulch: \$563.97/acre x 0.10 acres = \$56.40 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.10 acres = \$13.20 + Mulch Cost: \$320.00/acre x 0.10 acres = \$32.00 Subtotal: \$101.60 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 0.38 acres = \$360.47 Chipping for Roadside Brushing Brush Chipper 4 hr x \$109.32/hr = \$437.28 Subtotal: \$797.75 Mobilization: Construction - 0.99% of total Costs = \$114.39Surfacing - 0.25% by rock volume = \$9.95Subtotal: \$124.33 Total: \$10,476.33

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-32.1 Road Name: Valley View Rd Road Renovation: 0.63 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 330.00 lf DownSpout: 40.00 lf PolyPipe: 0.00 lf	\$26,337.52
500 Renovation:Blading 0.63 mi	\$2,092.65
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 1,003.00 LCY	\$59,979.40
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 10.00 cy	\$509.97
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.61 acres	\$1,922.53
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$553.36
Mobilization: Const. \$1,009.88 Surf. \$332.60	\$1,342.48
Quarry Development:	\$0.00

Notes:

Total: \$92,737.91

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-5-32.1 Road Name: Valley View Rd Section 400 Drainage: Aluminized MP 0.08 30 inch 14 ga 60 lf x \$80.75/lf = \$4,845.0030 inch 14 ga 60 lf x \$80.75/lf = \$4,845.00Aluminized MP 0.10 Aluminized MP 0.16 24 inch 16 ga 65 lf x 63.16/1f = 44,105.4024 inch 16 ga 35 lf x 63.16/1f = 2,210.60Aluminized MP 0.24 24 inch 16 ga 40 lf x 63.16/1f = 2,526.40Aluminized MP 0.30 30 inch 14 ga 70 lf x \$80.75/lf = \$5,652.50 Aluminized MP 0.41 Full Round MP 0.24 30 inch 20 lf x 43.44/lf = 868.80MP 0.30 30 inch 20 lf x 43.44/lf = 868.80Full Round Repair Downspout at MP 0.34 General Laborer 3 hr x 56.30/hr = 168.90Crew Cab or 3/4 Ton Pickup 3 hr x \$82.04/hr = \$246.12 Subtotal: \$26,337.52 Section 500 Renovation: Blading: \$923.61/mi x 0.63 mi = \$581.87 Scarification: \$1118.88/mi x 0.15 mi = \$167.83 Compaction: \$415.02/mi x 0.63 mi = \$261.46 Clean Culverts: \$501.63/mi x 0.63 mi = \$316.03 Water for Compaction Water Truck 3000 Gal 7 hr x \$109.35/hr = \$765.45 Subtotal: \$2,092.65 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.08 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: \$19.00/LCY x 20.00 LCY = \$380.00 Processing: $$1.20/LCY \times 20.00 LCY = 24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 15.00 mi= \$363.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 15.00 mi= \$51.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.10 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 20.00 LCY = 380.00 Processing: $$1.20/LCY \times 20.00 LCY = 24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 15.00 mi= \$363.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 15.00 mi= \$51.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00

Road Number: 33-5-32.1 Valley View Rd Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.16 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 20.00 LCY = 380.00 Processing: \$1.20/LCY x 20.00 LCY = \$24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 15.00 mi= \$363.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 15.00 mi= \$51.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.24 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.30 BotW Length TopW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 15.00 mi= \$272.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 15.00 mi= \$38.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-5-32.1 Valley View Rd Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.41 Depth CWid #TOs Width F.W.L Taper Length TopW BotW Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: \$19.00/LCY x 20.00 LCY = \$380.00 Processing: \$1.20/LCY x 20.00 LCY = \$24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 15.00 mi= \$363.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 15.00 mi= \$51.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: Surface Course <u>#TOs</u> <u>Width</u> <u>F.W.L</u> <u>Taper</u> Length TopW BotW Depth CWid Other 10ft 50ft 25ft 0.63mi 14ft 14.5ft 4in 10% 3 Rock Volume = 893.00 LCY Purchase Price / Royalty: \$19.00/LCY x 893.00 LCY = \$16,967.00 Processing: \$1.20/LCY x 893.00 LCY = \$1,071.60 Compaction: \$1.38/LCY x 893.00 LCY = \$1,232.34 Grid Rolling: \$3.02/LCY x 893.00 LCY = \$2,696.86 T11 & T27 Testing: \$0.10/LCY x 893.00 LCY = \$89.30 Basic Rock Haul cost: \$0.81/LCY x 893.00 LCY = \$723.33 Rock Haul -15% grades: \$1.21/LCY-mi x 893.00 LCY x 15.00 mi= \$16,207.95 Rock Haul St& Co Roads: \$0.54/LCY-mi x 893.00 LCY x 20.00 mi= \$9,644.40 Basic Water Haul cost: \$0.79/LCY x 893.00 LCY = \$705.47 Water Haul -15% grades: \$0.17/LCY-mi x 893.00 LCY x 15.00 mi= \$2,277.15 Water Haul St&Co Roads: \$0.10/LCY-mi x 893.00 LCY x 20.00 mi= \$1,786.00 Subtotal: \$59,979.40 Section 1400 Slope Protection: Comment: MP 0.41 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 0.10 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 0.16 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $1.22/cy \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35

Road Number: 33-5-32.1 Valley View Rd Continued Comment: MP 0.41 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 2.00cy = \$2.44 Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 0.08 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$509.97 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.61 acres = \$1,157.29 Chipping for Roadside Brushing Brush Chipper 7 hr x \$109.32/hr = \$765.24 Subtotal: \$1,922.53 Section 8000 Miscellaneous: BMP Installation at MP 0.08 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 0.10 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 Subtotal: \$553.36 Mobilization: Construction - 8.71% of total Costs = \$1,009.88Surfacing - 8.27% by rock volume = \$332.60Subtotal: \$1,342.48

Total: \$92,737.91

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-32.1 NEW Road Name: Valley View Road Road Construction: 0.15 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.90 acres	\$4,334.54
300 Excavation: Standard cy Haul < 500 ft: 375.00 sta-yds	\$7 , 785.71
400 Drainage: Culvert: 78.00 lf DownSpout: 20.00 lf PolyPipe: 0.00 lf	\$5,118.36
500 Renovation:	\$0.00
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 291.00 LCY Quarry Name: Commercial 4" Minus 609.00 LCY	\$52,602.00
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 2.00 cy	\$101.99
1800 Soil Stabilization: 0.40 acres Includes Small Quantity Factor of 1.07	\$406.39
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,250.58
Mobilization: Const. \$791.15 Surf. \$298.44	\$1,089.59
Quarry Development:	\$0.00

Total: \$72,689.16

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

Notes:

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Road Construction Worksheet
Road Number: 33-5-32.1 NEW Road Name: Valley View Road
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  31-45% (Avg Side Slopes): Adjustment Factor (0.2)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  greater than 40' (Avg Clearing Widths): Adjustment Factor (0)
  Total Adjustment Factor: 2.54 + 0.2 + 1.28 + 0 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.9 = $4,334.54
                                                                    Subtotal: $4,334.54
Section 300 Excavation:
  Excavation - Common: $2.66/cy x 1,405.00 cy = $3,737.30
 Excavation - Rippable: $5.31/cy x 156.00 cy = $828.36
 Embankment Placement & Compaction 306.f - Common: $0.39/cy x 1,405.00 cy = $547.95
 Embankment Placement & Compaction 306.f - Rock: $0.39/cy x 156.00 cy = $60.84
 Subgrade Compaction: 4 Sta/hr 34.59/sta. x 7.9 sta = 272.92
 Slope Rounding: $0.40/lf x 789.00 lf = $315.60
 Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 1,405.00 cy = 1,629.80
 Embankment Placement & Compaction 306.a - Rock: $1.09/cy x 156.00 cy = $170.04
 End Hauling - 100 to 500 ft: $0.21/sta-yd x 375.00 sta-yd = $78.75
 Blading with ditch: 18.27/station x 7.89 stations = 144.15
                                                                    Subtotal: $7,785.71
Section 400 Drainage:
 Aluminized STA 0+40
                                        18 inch 16 ga 42 lf x $56.92/lf = $2,390.64
18 inch 16 ga 36 lf x $56.92/lf = $2,049.12
 Aluminized STA 4+60
 Full Round
                  STA 4+60
                                                 24 inch 20 lf x 33.93/1f = 678.60
                                                                    Subtotal: $5,118.36
Section 700-1200 Surfacing:
Commercial Quarry Name: Commercial 1-1/2" Mi
 Comment: Surface Course
                        \frac{\text{Depth}}{4\text{in}} \frac{\text{CWid}}{10\%}
  Length TopW BotW
                                        <u>#TOs Width</u> F.W.L Taper
                                                                   Other
 0.15mi 14ft
                                       2 10ft 50ft 25ft
                 14.5ft
 Rock Volume = 228.00 LCY
 Purchase Price / Royalty: $19.00/LCY x 228.00 LCY = $4,332.00
 Processing: $1.20/LCY x 228.00 LCY = $273.60
 Compaction: $1.38/LCY x 228.00 LCY = $314.64
 Grid Rolling: $3.02/LCY x 228.00 LCY = $688.56
 T11 & T27 Testing: $0.10/LCY x 228.00 LCY = $22.80
 Basic Rock Haul cost: $0.81/LCY x 228.00 LCY = $184.68
 Rock Haul -15% grades: $1.21/LCY-mi x 228.00 LCY x 15.00 mi= $4,138.20
 Rock Haul St& Co Roads: $0.54/LCY-mi x 228.00 LCY x 20.00 mi= $2,462.40
 Basic Water Haul cost: $0.79/LCY x 228.00 LCY = $180.12
 Water Haul -15% grades: $0.17/LCY-mi x 228.00 LCY x 15.00 mi= $581.40
 Water Haul St&Co Roads: $0.10/LCY-mi x 228.00 LCY x 20.00 mi= $456.00
```

Road Number: 33-5-32.1 NEW Valley View Road Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: Landing Surface Course BotW Length TopW Depth CWid #TOs Width F.W.L Taper Other 63 LCY Rock Volume = 63.00 LCY Purchase Price / Royalty: \$19.00/LCY x 63.00 LCY = \$1,197.00 Processing: \$1.20/LCY x 63.00 LCY = \$75.60 Compaction: \$1.38/LCY x 63.00 LCY = \$86.94 Grid Rolling: \$3.02/LCY x 63.00 LCY = \$190.26 T11 & T27 Testing: \$0.10/LCY x 63.00 LCY = \$6.30 Basic Rock Haul cost: \$0.81/LCY x 63.00 LCY = \$51.03 Rock Haul -15% grades: \$1.21/LCY-mi x 63.00 LCY x 15.00 mi= \$1,143.45 Rock Haul St& Co Roads: \$0.54/LCY-mi x 63.00 LCY x 20.00 mi= \$680.40 Basic Water Haul cost: \$0.79/LCY x 63.00 LCY = \$49.77 Water Haul -15% grades: \$0.17/LCY-mi x 63.00 LCY x 15.00 mi= \$160.65 Water Haul St&Co Roads: \$0.10/LCY-mi x 63.00 LCY x 20.00 mi= \$126.00 Commercial Quarry Name: Commercial 4" Minus Comment: Base Course $\frac{\text{Depth}}{8\text{in}} \frac{\text{CWid}}{10\%} \qquad \frac{\#\text{TOs}}{2} \frac{\text{Width}}{10\text{ft}} \frac{\text{F.W.L}}{50\text{ft}} \frac{\text{Taper}}{25\text{ft}}$ Length TopW BotW Other 0.15mi 15ft 15.5ft 8in Rock Volume = 484.00 LCY Purchase Price / Royalty: \$17.00/LCY x 484.00 LCY = \$8,228.00 Processing: \$1.20/LCY x 484.00 LCY = \$580.80 Compaction: \$1.38/LCY x 484.00 LCY = \$667.92 Grid Rolling: \$3.02/LCY x 484.00 LCY = \$1,461.68 T11 & T27 Testing: \$0.10/LCY x 484.00 LCY = \$48.40 Basic Rock Haul cost: \$0.81/LCY x 484.00 LCY = \$392.04 Rock Haul -15% grades: \$1.21/LCY-mi x 484.00 LCY x 15.00 mi= \$8,784.60 Rock Haul St& Co Roads: \$0.54/LCY-mi x 484.00 LCY x 20.00 mi= \$5,227.20 Basic Water Haul cost: \$0.79/LCY x 484.00 LCY = \$382.36 Water Haul -15% grades: \$0.17/LCY-mi x 484.00 LCY x 15.00 mi= \$1,234.20 Water Haul St&Co Roads: \$0.10/LCY-mi x 484.00 LCY x 20.00 mi= \$968.00 Quarry Name: Commercial 4" Minus Commercial Comment: Landing Base Course BotW Length TopW Depth CWid #TOs Width F.W.L Taper Other 125 LCY Rock Volume = 125.00 LCY Purchase Price / Royalty: \$17.00/LCY x 125.00 LCY = \$2,125.00 Processing: \$1.20/LCY x 125.00 LCY = \$150.00 Compaction: \$1.38/LCY x 125.00 LCY = \$172.50 Grid Rolling: \$3.02/LCY x 125.00 LCY = \$377.50 T11 & T27 Testing: \$0.10/LCY x 125.00 LCY = \$12.50 Basic Rock Haul cost: \$0.81/LCY x 125.00 LCY = \$101.25 Rock Haul -15% grades: \$1.21/LCY-mi x 125.00 LCY x 15.00 mi= \$2,268.75 Rock Haul St& Co Roads: \$0.54/LCY-mi x 125.00 LCY x 20.00 mi= \$1,350.00 Basic Water Haul cost: \$0.79/LCY x 125.00 LCY = \$98.75 Water Haul -15% grades: \$0.17/LCY-mi x 125.00 LCY x 15.00 mi= \$318.75 Water Haul St&Co Roads: \$0.10/LCY-mi x 125.00 LCY x 20.00 mi= \$250.00 Subtotal: \$52,602.00

Road Number: 33-5-32.1 NEW Valley View Road Continued		
<pre>Section 1400 Slope Protection: Comment: STA 0+40 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 2.00cy = \$2.44 Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 15.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35</pre>	Subtotal:	\$101.99
<pre>Section 1800 Soil Stabilization: Dry Method with Mulch: \$563.97/acre x 0.40 acres = \$225.59 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.40 acres = \$52.80 + Mulch Cost: \$320.00/acre x 0.40 acres = \$128.00</pre>	Subtotal:	\$406.39
Section 8000 Miscellaneous: Construct Truck Turn-around Excavator - Large (3 CY) 3 hr x \$166.61/hr = \$499.83 Tractor: D7 with rippers 3 hr x \$250.25/hr = \$750.75	Subtotal:	\$1,250.58
Mobilization: Construction - 6.82% of total Costs = \$791.15 Surfacing - 7.42% by rock volume = \$298.44	Subtotal:	\$1,089.59
	Total:	\$72 , 689.16

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-32.2 Road Name: Miller Time Road Renovation: 0.08 mi 12 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.08 mi	\$276.82
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Mechanical):0.08 acres	\$169.67
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$4.93 Surf. \$0.00	\$4.93
Quarry Development:	\$0.00

Total: \$451.42

Notes:

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

Road Construction Worksheet		
Road Number: 33-5-32.2 Road Name: Miller Time		
<pre>Section 500 Renovation: Scarification: \$1118.88/mi x 0.08 mi = \$89.51 Blading w/o Ditches: \$559.44/mi x 0.08 mi = \$44.76 Compaction: \$415.02/mi x 0.08 mi = \$33.20 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35</pre>	Subtotal:	\$276.82
<pre>Section 2100 Roadside Brushing: Mechanical Brushing RoadSide Brushing Heavy: \$754.42/acre x 0.08 acres = \$60.35 Chipping for Roadside Brushing Brush Chipper 1 hr x \$109.32/hr = \$109.32</pre>	Subtotal:	\$169.67
Mobilization: Construction - 0.04% of total Costs = \$4.93	Subtotal:	\$4.93
	Total:	\$451.42

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-5-7.0 A Road Name: Board Tree Road Renovation: 2.23 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$999.17
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 2.23 mi	\$7,234.21
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 2.00 cy	\$77.59
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):2.16 acres	\$4,563.34
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,106.72
Mobilization: Const. \$156.73 Surf. \$0.00	\$156.73
Quarry Development:	\$0.00

Notes:

Total: \$14,340.96

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

Road Construction Worksheet Road Number: 33-5-7.0 A Road Name: Board Tree Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.2 = \$999.17 Subtotal: \$999.17 Section 500 Renovation: Blading: \$923.61/mi x 2.23 mi = \$2,059.65 Scarification: \$1118.88/mi x 0.55 mi = \$615.38 Compaction: \$415.02/mi x 2.23 mi = \$925.49 Clean Culverts: \$501.63/mi x 2.23 mi = \$1,118.63 Water for Compaction Water Truck 3000 Gal 23 hr x \$109.35/hr = \$2,515.05 Subtotal: \$7,234.21 Section 1400 Slope Protection: Comment: MP 1.55 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 5.00 mi= \$12.20 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (33.57/\text{cy} \times 1.03) = 7.35 Subtotal: \$77.59 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.20 acres = 112.79 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.20 acres = \$26.40 + Mulch Cost: \$320.00/acre x 0.20 acres = \$64.00 Subtotal: \$203.19 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 2.16 acres = \$2,048.98 Chipping for Roadside Brushing Brush Chipper 23 hr x \$109.32/hr = \$2,514.36 Subtotal: \$4,563.34 Section 8000 Miscellaneous: BMP Installation at MP 0.04 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 1.33 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 1.55 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08

Road Number: 33-5-7.0 A Board Tree Continued		
Section 8000 Miscellaneous Continued: BMP Installation at MP 1.59 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08		
	Subtotal:	\$1,106.72
Mobilization: Construction - 1.35% of total Costs = \$156.73	Subtotal:	\$156.73

Total: \$14,340.96

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-6-14.0 A-B Road Name: Wolf Orchard Road Renovation: 0.71 mi 12 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.80 acres	\$3 , 757.08
300 Excavation: Standard cy	\$5 , 008.65
400 Drainage: Culvert: 30.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$1,707.60
500 Renovation: Blading 0.71 mi	\$2 , 163.39
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 881.00 LCY Quarry Name: Commercial 4" Minus 563.00 LCY	\$57,327.12
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.69 acres	\$1,419.77
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$3,361.14
Mobilization: Const. \$825.90 Surf. \$478.83	\$1,304.73
Quarry Development:	\$0.00

Notes:

Total: \$76,049.49

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-6-14.0 A-B Road Name: Wolf Orchard Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 1-15% (Avg Side Slopes): Adjustment Factor (0) Pile and Burn (Slash): Adjustment Factor (1.28) 20-40' (Avg Clearing Widths): Adjustment Factor (0.1) Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.1 = 3.92 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 3.92 x Total Acres: 0.8 = \$3,757.08 Subtotal: \$3,757.08 Section 300 Excavation: Excavation - Common: $$2.66/cy \times 1,284.00 cy = $3,415.44$ Subgrade Compaction: 4 Sta/hr \$34.59/sta. x 3.0 sta = \$103.77 Embankment Placement & Compaction 306.a - Common: $1.16/cy \times 1,284.00 cy = 1,489.44$ Subtotal: \$5,008.65 Section 400 Drainage: Aluminized MP 0.03 18 inch 16 ga 30 lf x \$56.92/lf = \$1,707.60Subtotal: \$1,707.60 Section 500 Renovation: Blading: \$923.61/mi x 0.50 mi = \$461.81 Scarification: \$1118.88/mi x 0.15 mi = \$167.83 Blading w/o Ditches: \$559.44/mi x 0.21 mi = \$117.48 Compaction: \$415.02/mi x 0.71 mi = \$294.66 Clean Culverts: \$501.63/mi x 0.71 mi = \$356.16 Water for Compaction Water Truck 3000 Gal 7 hr x \$109.35/hr = \$765.45 Subtotal: \$2,163.39 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.03 culvert replacement Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 1.00 mi= \$18.15 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 1.00 mi= \$2.55 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-6-14.0 A-B Wolf Orchard Continued

Commercial Quarry Name: Commercial 1-1/2" Mi Comment: Surface Course Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 0.71mi 12ft 12.5ft 4in 10% 10ft 50ft 25ft 3 Rock Volume = 866.00 LCY Purchase Price / Royalty: \$19.00/LCY x 866.00 LCY = \$16,454.00 Processing: \$1.20/LCY x 866.00 LCY = \$1,039.20 Compaction: \$1.38/LCY x 866.00 LCY = \$1,195.08 Grid Rolling: \$3.02/LCY x 866.00 LCY = \$2,615.32 T11 & T27 Testing: \$0.10/LCY x 866.00 LCY = \$86.60 Basic Rock Haul cost: \$0.81/LCY x 866.00 LCY = \$701.46 Rock Haul -15% grades: \$1.21/LCY-mi x 866.00 LCY x 1.00 mi= \$1,047.86 Rock Haul St& Co Roads: \$0.54/LCY-mi x 866.00 LCY x 20.00 mi= \$9,352.80 Basic Water Haul cost: \$0.79/LCY x 866.00 LCY = \$684.14 Water Haul -15% grades: \$0.17/LCY-mi x 866.00 LCY x 1.00 mi= \$147.22 Water Haul St&Co Roads: \$0.10/LCY-mi x 866.00 LCY x 20.00 mi= \$1,732.00 Commercial Quarry Name: Commercial 4" Minus Comment: Heli-Landing Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 563 LCY Rock Volume = 563.00 LCY Purchase Price / Royalty: \$17.00/LCY x 563.00 LCY = \$9,571.00 Processing: \$1.20/LCY x 563.00 LCY = \$675.60 Compaction: \$1.38/LCY x 563.00 LCY = \$776.94 Grid Rolling: \$3.02/LCY x 563.00 LCY = \$1,700.26 T11 & T27 Testing: \$0.10/LCY x 563.00 LCY = \$56.30 Basic Rock Haul cost: \$0.81/LCY x 563.00 LCY = \$456.03 Rock Haul -15% grades: \$1.21/LCY-mi x 563.00 LCY x 1.00 mi= \$681.23 Rock Haul St& Co Roads: \$0.54/LCY-mi x 563.00 LCY x 20.00 mi= \$6,080.40 Basic Water Haul cost: \$0.79/LCY x 563.00 LCY = \$444.77 Water Haul -15% grades: \$0.17/LCY-mi x 563.00 LCY x 1.00 mi= \$95.71 Water Haul St&Co Roads: \$0.10/LCY-mi x 563.00 LCY x 20.00 mi= \$1,126.00 Subtotal: \$57,327.12 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 0.69 acres = \$654.53 Chipping or Roadside Brushing Brush Chipper 7 hr x \$109.32/hr = \$765.24 Subtotal: \$1,419.77 Section 8000 Miscellaneous: Construct Heli-Landing Tractor: D7 with rippers 6 hr x \$250.25/hr = \$1,501.50 Excavator -Small (1.5 CY) 6 hr x \$125.58/hr = \$753.48 Motor Grader 14M 6 hr x \$184.36/hr = \$1,106.16 Subtotal: \$3,361.14 Mobilization: Construction - 7.12% of total Costs = \$825.90Surfacing - 11.91% by rock volume = \$478.83Subtotal: \$1,304.73

Total: \$76,049.49

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-6-24.0 A-B2 Road Name: Miller Gulch Road Renovation: 3.96 mi 18 ft Subgrade 3 ft ditch
200 Clearing and Grubbing: 1.10 acres \$5,495.46
300 Excavation: \$0.00
400 Drainage: \$40,316.47 Culvert: 547.00 lf DownSpout: 90.00 lf PolyPipe: 0.00 lf
500 Renovation: \$12,780.31 Blading 3.96 mi
700-1200 Surfacing:\$144,242.66 Quarry Name: Commercial 1-1/2" Mi 2,669.00 LCY
1300 Geotextiles: \$0.00
1400 Slope Protection: \$1,098.27 Gradation Class 2: 24.00 cy
1800 Soil Stabilization: 1.10 acres \$1,117.56 Includes Small Quantity Factor of 1.07
1900 Cattleguards: \$0.00
2100 RoadSide Brushing (Manual):3.84 acres \$8,141.00
2300 Engineering: 0.00 sta\$0.00
2400 Minor Concrete: \$0.00
2500 Gabions: \$0.00
8000 Miscellaneous: \$830.04
Mobilization: Const. \$2,364.85 Surf. \$885.05 \$3,249.90
Quarry Development: \$0.00

Total: \$217,271.67

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

```
Road Construction Worksheet
Road Number: 33-6-24.0 A-B2 Road Name: Miller Gulch
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.17 x Total Acres: 1.1 = $5,495.46
                                                                  Subtotal: $5,495.46
Section 400 Drainage:
                                         24 inch 16 ga 40 lf x $63.16/lf = $2,526.40
 Aluminized MP 1.03
 Aluminized MP 1.08
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
 Aluminized MP 1.21
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
 Aluminized MP 1.64
 Aluminized MP 1.76
                                        24 inch 16 ga 34 lf x $63.16/lf = $2,147.44
 Aluminized MP 1.84
                                        24 inch 16 ga 40 lf x 63.16/1f = 2,526.40
 Aluminized MP 2.10
                                        24 inch 16 ga 34 lf x 63.16/1f = 2,147.44
 Aluminized MP 2.27
                                        24 inch 16 ga 36 lf x 63.16/1f = 2,273.76
                                        24 inch 16 ga 34 lf x 63.16/1f = 2,147.44
 Aluminized MP 2.36
                                        24 inch 16 ga 34 lf x $63.16/lf = $2,147.44
36 inch 14 ga 65 lf x $91.75/lf = $5,963.75
 Aluminized MP 2.55
 Aluminized MP 2.92
                                        24 inch 16 ga 34 lf x $63.16/lf = $2,147.44
 Aluminized MP 2.99
                                       24 inch 16 ga 40 lf x 63.16/lf = 2,526.40
 Aluminized MP 3.73
 Aluminized MP 3.88
                                       24 inch 16 ga 36 lf x 63.16/1f = 2,273.76
 Full RoundMP 1.21Full RoundMP 1.84Full RoundMP 2.10Full RoundMP 2.99
                                                30 inch 30 lf x 43.44/1f = 1,303.20
                                               30 inch 20 lf x $43.44/lf = $868.80
                                               30 inch 20 lf x $43.44/lf = $868.80
                                               30 inch 20 lf x $43.44/lf = $868.80
                                                                  Subtotal: $40,316.47
Section 500 Renovation:
 Blading: $923.61/mi x 3.96 mi = $3,657.50
 Scarification: $1118.88/mi x 1.00 mi = $1,118.88
 Compaction: $415.02/mi x 3.96 mi = $1,643.48
 Clean Culverts: $501.63/mi x 3.96 mi = $1,986.45
 Water for Compaction
  Water Truck 3000 Gal 40 hr x $109.35/hr = $4,374.00
                                                                  Subtotal: $12,780.31
Section 700-1200 Surfacing:
Commercial Quarry Name: Commercial 1-1/2" Mi
Comment: MP 1.03
 Length TopW
                BotW
                      Depth CWid #TOs Width F.W.L Taper
                                                                 Other
                                                                  15 LCY
 Rock Volume = 15.00 LCY
 Purchase Price / Royalty: $19.00/LCY x 15.00 LCY = $285.00
 Processing: $1.20/LCY x 15.00 LCY = $18.00
 Compaction: $1.38/LCY x 15.00 LCY = $20.70
 Grid Rolling: $3.02/LCY x 15.00 LCY = $45.30
 T11 & T27 Testing: $0.10/LCY x 15.00 LCY = $1.50
 Basic Rock Haul cost: $0.81/LCY x 15.00 LCY = $12.15
 Rock Haul -15% grades: $1.21/LCY-mi x 15.00 LCY x 10.00 mi= $181.50
 Rock Haul St& Co Roads: $0.54/LCY-mi x 15.00 LCY x 20.00 mi= $162.00
 Basic Water Haul cost: $0.79/LCY x 15.00 LCY = $11.85
 Water Haul -15% grades: $0.17/LCY-mi x 15.00 LCY x 10.00 mi= $25.50
 Water Haul St&Co Roads: $0.10/LCY-mi x 15.00 LCY x 20.00 mi= $30.00
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Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.08 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 15.00 LCY = 285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 10.00 mi= \$181.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 10.00 mi= \$25.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.21 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 10.00 mi= \$181.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 10.00 mi= \$25.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.64 Length TopW Depth CWid #TOs Width F.W.L Taper Other BotW 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 10.00 mi= \$181.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 10.00 mi= \$25.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.76 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 10.00 mi= \$181.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 10.00 mi= \$25.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.84 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 10.00 mi= \$181.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 10.00 mi= \$25.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.10 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 11.00 mi= \$199.65 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 11.00 mi= \$28.05 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.27 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 11.00 mi= \$199.65 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 11.00 mi= \$28.05 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.36 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 11.00 mi= \$199.65 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 11.00 mi= \$28.05 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.55 Length TopW Depth CWid #TOs Width F.W.L Taper Other BotW 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 11.00 mi= \$199.65 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 11.00 mi= \$28.05 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.92 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 20 LCY Rock Volume = 20.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 20.00 LCY = 380.00 Processing: \$1.20/LCY x 20.00 LCY = \$24.00 Compaction: $$1.38/LCY \times 20.00 LCY = 27.60 Grid Rolling: \$3.02/LCY x 20.00 LCY = \$60.40 T11 & T27 Testing: \$0.10/LCY x 20.00 LCY = \$2.00 Basic Rock Haul cost: \$0.81/LCY x 20.00 LCY = \$16.20 Rock Haul -15% grades: \$1.21/LCY-mi x 20.00 LCY x 12.00 mi= \$290.40 Rock Haul St& Co Roads: \$0.54/LCY-mi x 20.00 LCY x 20.00 mi= \$216.00 Basic Water Haul cost: \$0.79/LCY x 20.00 LCY = \$15.80 Water Haul -15% grades: \$0.17/LCY-mi x 20.00 LCY x 12.00 mi= \$40.80 Water Haul St&Co Roads: \$0.10/LCY-mi x 20.00 LCY x 20.00 mi= \$40.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 2.99 Length TopW Depth CWid #TOs Width F.W.L Taper BotW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 12.00 mi= \$217.80 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 12.00 mi= \$30.60 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 3.73 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 13.00 mi= \$235.95 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 13.00 mi= \$33.15 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 3.88 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 13.00 mi= \$235.95 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 13.00 mi= \$33.15 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.00-1.00 $\frac{\text{Depth}}{4\text{in}} \frac{\text{CWid}}{10\%} \qquad \frac{\text{\#TOs}}{4}$ Length TopW BotW #TOs Width F.W.L Taper Other 1.00mi 18ft 18.5ft 10ft 50ft 25ft 4in Rock Volume = 1,790.00 LCY Purchase Price / Royalty: \$19.00/LCY x 1,790.00 LCY = \$34,010.00 Processing: \$1.20/LCY x 1,790.00 LCY = \$2,148.00 Compaction: $$1.38/LCY \times 1,790.00 LCY = $2,470.20$ Grid Rolling: \$3.02/LCY x 1,790.00 LCY = \$5,405.80 T11 & T27 Testing: \$0.10/LCY x 1,790.00 LCY = \$179.00 Basic Rock Haul cost: \$0.81/LCY x 1,790.00 LCY = \$1,449.90 Rock Haul -15% grades: \$1.21/LCY-mi x 1,790.00 LCY x 10.00 mi= \$21,659.00 Rock Haul St& Co Roads: \$0.54/LCY-mi x 1,790.00 LCY x 20.00 mi= \$19,332.00 Basic Water Haul cost: \$0.79/LCY x 1,790.00 LCY = \$1,414.10 Water Haul -15% grades: \$0.17/LCY-mi x 1,790.00 LCY x 10.00 mi= \$3,043.00 Water Haul St&Co Roads: \$0.10/LCY-mi x 1,790.00 LCY x 20.00 mi= \$3,580.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 3.52-3.96 Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 2 15.5ft 4in 10% 10ft 50ft 25ft 0.44mi 15ft Rock Volume = 664.00 LCY Purchase Price / Royalty: \$19.00/LCY x 664.00 LCY = \$12,616.00 Processing: \$1.20/LCY x 664.00 LCY = \$796.80 Compaction: \$1.38/LCY x 664.00 LCY = \$916.32 Grid Rolling: \$3.02/LCY x 664.00 LCY = \$2,005.28 T11 & T27 Testing: \$0.10/LCY x 664.00 LCY = \$66.40 Basic Rock Haul cost: \$0.81/LCY x 664.00 LCY = \$537.84 Rock Haul -15% grades: \$1.21/LCY-mi x 664.00 LCY x 13.00 mi= \$10,444.72 Rock Haul St& Co Roads: \$0.54/LCY-mi x 664.00 LCY x 20.00 mi= \$7,171.20 Basic Water Haul cost: \$0.79/LCY x 664.00 LCY = \$524.56 Water Haul -15% grades: \$0.17/LCY-mi x 664.00 LCY x 13.00 mi= \$1,467.44 Water Haul St&Co Roads: \$0.10/LCY-mi x 664.00 LCY x 20.00 mi= \$1,328.00 Subtotal:\$144,242.66 Section 1400 Slope Protection: Comment: MP 1.30 Rock Source: Commercial CL2 Purchase Price / Royalty: $$17.00/cy \times 3.00cy = 51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 10.00 mi= \$36.60 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40

Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Comment: MP 1.03 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{cy} \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 10.00 mi= \$24.40 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.08 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 10.00 mi= \$24.40 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.64 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 2.00cy = \$2.44 Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 10.00 mi= \$24.40 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.76 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 10.00 mi= \$24.40 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 2.27 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 11.00 mi= \$26.84 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 2.36 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 11.00 mi= \$26.84 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 2.55 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $1.22/cy \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 11.00 mi= \$26.84 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35

Road Number: 33-6-24.0 A-B2 Miller Gulch Continued Comment: MP 2.92 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 3.00cy = \$51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 11.00 mi= \$40.26 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03 Comment: MP 3.73 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Comment: MP 3.88 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 2.00cy = \$2.44 Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 12.00 mi= \$29.28 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$1,098.27 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 1.10 acres = 5620.36$ Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 1.10 acres = \$145.20 + Mulch Cost: \$320.00/acre x 1.10 acres = \$352.00 Subtotal: \$1,117.56 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 3.84 acres = \$3,642.62 Chipping for Roadside Brushing Brush Chipper 40 hr x \$109.32/hr = \$4,372.80 Remove down tree-downspout-MP Excavator -Small (1.5 CY) 1 hr x \$125.58/hr = \$125.58 Subtotal: \$8,141.00 Section 8000 Miscellaneous: BMP Installation at MP 0.04 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 2.82 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 2.92 General Laborer 2 hr x \$56.30/hr = \$112.60Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 Subtotal: \$830.04 Mobilization: Construction - 20.39% of total Costs = \$2,364.85Surfacing - 22.01% by rock volume = \$885.05Subtotal: \$3,249.90 Total: \$217,271.67

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 33-6-35.1 A-C Road Name: Pvt Road Road Renovation: 1.26 mi 15 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 1.26 mi	\$3,418.75
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Mechanical):1.22 acres	\$920.39
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$47.95 Surf. \$0.00	\$47.95
Quarry Development:	\$0.00

Total: \$4,387.09

Notes:

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 33-6-35.1 A-C Road Name: Pvt Roads Section 500 Renovation: Scarification: \$1118.88/mi x 0.32 mi = \$358.04 Blading w/o Ditches: \$559.44/mi x 1.26 mi = \$704.89 Compaction: \$415.02/mi x 1.26 mi = \$522.93 Clean Culverts: \$501.63/mi x 0.82 mi = \$411.34 Water for Compaction Water Truck 3000 Gal 13 hr x \$109.35/hr = \$1,421.55 Subtotal: \$3,418.75 Section 2100 Roadside Brushing: Mechanical Brushing Comment: Do Not Damage Private Merch Trees RoadSide Brushing Heavy: \$754.42/acre x 1.22 acres = \$920.39 Subtotal: \$920.39 Mobilization: Construction - 0.41% of total Costs = \$47.95Subtotal: \$47.95 Total: \$4,387.09

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-5-5.0 Road Name: Miller Mobile Road Renovation: 0.21 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.21 mi	\$661.10
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.20 acres	\$408.36
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$11.82 Surf. \$0.00	\$11.82
Quarry Development:	\$0.00

Total: \$1,081.28

Notes:

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 34-5-5.0 Road Name: Miller Mobile Section 500 Renovation: Blading: \$923.61/mi x 0.21 mi = \$193.96 Scarification: \$1118.88/mi x 0.05 mi = \$55.94 Compaction: \$415.02/mi x 0.21 mi = \$87.15 Clean Culverts: \$501.63/mi x 0.21 mi = \$105.34 Water for Compaction Water Truck 3000 Gal 2 hr x \$109.35/hr = \$218.70 Subtotal: \$661.10 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 0.20 acres = \$189.72 Chipping for Roadside Brushing Brush Chipper 2 hr x \$109.32/hr = \$218.64 Subtotal: \$408.36 Mobilization: Construction - 0.10% of total Costs = \$11.82Subtotal: \$11.82 Total: \$1,081.28

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-5-6.0 Road Name: Miller Gulch N Spur Road Renovation: 0.15 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation: Blading 0.15 mi Slide Removal 3.00 cy	\$881.64
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.15 acres	\$503.22
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$15.30 Surf. \$0.00	\$15.30
Quarry Development:	\$0.00

Total: \$1,400.16

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

Notes:

Road Construction Worksheet		
Road Number: 34-5-6.0 Road Name: Miller Gulch N Spur		
<pre>Section 500 Renovation: Slide Removal 3.00 cy Front End Loader \$114.30/hr x 1.00 hr = \$114.30 Dump Truck: \$103.09/hr x 1.00 hr = \$103.09 Laborer: \$56.30/hr x 1.00 hr = \$56.30 Scarification: \$1118.88/mi x 0.15 mi = \$167.83 Blading w/o Ditches: \$559.44/mi x 0.15 mi = \$83.92 Compaction: \$415.02/mi x 0.15 mi = \$62.25 Clean Culverts: \$501.63/mi x 0.15 mi = \$75.24 Water for Compaction Water Truck 3000 Gal 2 hr x \$109.35/hr = \$218.70</pre>	Subtotal:	\$881.64
Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.15 acres = \$284.58 Chipping for Roadside Brushing		
Brush Chipper 2 hr x \$109.32/hr = \$218.64	Subtotal:	\$503.22
Mobilization: Construction - 0.13% of total Costs = \$15.30		
	Subtotal:	\$15.30
	Total:	\$1,400.16

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-1.0 Road Name: Salmon Ck Sp Road Renovation: 0.45 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.50 acres	\$2,497.93
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.45 mi	\$1,488.75
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 9.00 cy	\$360.15
1800 Soil Stabilization: 0.50 acres Includes Small Quantity Factor of 1.07	\$507.98
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Mechanical):0.44 acres	\$878.54
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,663.16
Mobilization: Const. \$81.73 Surf. \$0.00	\$81.73
Quarry Development:	\$0.00

Notes:

Total: \$7,478.26

Road Construction Worksheet Road Number: 34-6-1.0 Road Name: Salmon Ck Sp Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.5 = \$2,497.93 Subtotal: \$2,497.93 Section 500 Renovation: Scarification: \$1118.88/mi x 0.45 mi = \$503.50 Blading w/o Ditches: \$559.44/mi x 0.45 mi = \$251.75 Compaction: \$415.02/mi x 0.45 mi = \$186.76 Water for Compaction Water Truck 3000 Gal 5 hr x \$109.35/hr = \$546.75 Subtotal: \$1,488.75 Section 1400 Slope Protection: Comment: Water dip outfall armoring at MP 0.05 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 3.00cy = \$51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 6.00 mi= \$21.96 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03 Comment: Water dip outfall armoring at MP 0.26 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 3.00cy = \$51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 6.00 mi= \$21.96 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03 Comment: Water dip outfall armoring at MP 0.34 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 3.00cy = \$51.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 3.00cy = \$3.66 Rock Haul -15% grades: \$1.22/cy-mi x 3.00cy x 6.00 mi= \$21.96 Rock Haul St& Co Roads: \$0.54/cy-mi x 3.00cy x 20.00 mi= \$32.40 Placement on Fill slopes: 3.00cy x (\$3.57/cy x 1.03) = \$11.03 Subtotal: \$360.15 Section 1800 Soil Stabilization: Dry Method with Mulch: $$563.97/acre \times 0.50 acres = 281.98 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.50 acres = \$66.00 + Mulch Cost: \$320.00/acre x 0.50 acres = \$160.00 Subtotal: \$507.98

Road Number: 34-6-1.0 Salmon Ck Sp Continued		
<pre>Section 2100 Roadside Brushing: Mechanical Brushing RoadSide Brushing Heavy: \$754.42/acre x 0.44 acres = \$331.94 Chipping for Roadside Brushing Brush Chipper 5 hr x \$109.32/hr = \$546.60</pre>	Subtotal:	\$878.54
Section 8000 Miscellaneous: Reconstruct water dip MP 0.05 Tractor: D5 with winch 2 hr x \$138.24/hr = \$276.48		
Reconstruct water dip MP 0.26 Tractor: D5 with winch 2 hr x \$138.24/hr = \$276.48 Reconstruct water dip MP 0.34		
Tractor: D5 with winch 2 hr x \$138.24/hr = \$276.48 Reconstruct turnaround/landing		
Tractor: D7 with rippers 2 hr x \$250.25/hr = \$500.50 Excavator - Large (3 CY) 2 hr x \$166.61/hr = \$333.22		
	Subtotal:	\$1,663.16
Mobilization: Construction - 0.70% of total Costs = \$81.73	Subtotal:	\$81.73
	Total:	\$7 , 478.26

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-1.1 Road Name: Aiko Aiko Rd Road Renovation: 1.45 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,498.76
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation: Blading 1.45 mi Slide Removal 6.00 cy	\$5,950.34
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 1,117.00 LCY	\$54,464.92
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.30 acres Includes Small Quantity Factor of 1.07	\$304.79
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):1.41 acres	\$2 , 977.33
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$833.72
Mobilization: Const. \$729.60 Surf. \$370.40	\$1,100.00
Quarry Development:	\$0.00

Total: \$67,129.86

Road Construction Worksheet Road Number: 34-6-1.1 Road Name: Aiko Aiko Rd Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) less than 20' (Avg Clearing Widths): Adjustment Factor (0.25) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.25 = 4.17 Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.17 x Total Acres: 0.3 = \$1,498.76 Subtotal: \$1,498.76 Section 500 Renovation: Slide Removal 6.00 cy Front End Loader $114.30/hr \times 2.00 hr = 228.60$ Dump Truck: \$103.09/hr x 2.00 hr = \$206.18 Laborer: $56.30/hr \times 2.00 hr = 112.60 Scarification: \$1118.88/mi x 1.45 mi = \$1,622.38 Blading w/o Ditches: \$559.44/mi x 1.45 mi = \$811.19 Compaction: \$415.02/mi x 1.45 mi = \$601.78 Clean Culverts: \$501.63/mi x 1.45 mi = \$727.36 Water for Compaction Water Truck 3000 Gal 15 hr x \$109.35/hr = \$1,640.25 Subtotal: \$5,950.34 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 1.14mi 13ft 13.5ft 3in 10% 4 10ft 50ft 25ft Rock Volume = 1, 117.00 LCY Purchase Price / Royalty: \$19.00/LCY x 1,117.00 LCY = \$21,223.00 Processing: \$1.20/LCY x 1,117.00 LCY = \$1,340.40 Compaction: $$1.38/LCY \times 1,117.00 LCY = $1,541.46$ Grid Rolling: \$3.02/LCY x 1,117.00 LCY = \$3,373.34 T11 & T27 Testing: \$0.10/LCY x 1,117.00 LCY = \$111.70 Basic Rock Haul cost: \$0.81/LCY x 1,117.00 LCY = \$904.77 Rock Haul -15% grades: \$1.21/LCY-mi x 1,117.00 LCY x 7.00 mi= \$9,460.99 Rock Haul St& Co Roads: \$0.54/LCY-mi x 1,117.00 LCY x 20.00 mi= \$12,063.60 Basic Water Haul cost: \$0.79/LCY x 1,117.00 LCY = \$882.43 Water Haul -15% grades: \$0.17/LCY-mi x 1,117.00 LCY x 7.00 mi= \$1,329.23 Water Haul St&Co Roads: \$0.10/LCY-mi x 1,117.00 LCY x 20.00 mi= \$2,234.00 Subtotal: \$54,464.92 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.30 acres = 169.19 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.30 acres = \$39.60 + Mulch Cost: \$320.00/acre x 0.30 acres = \$96.00 Subtotal: \$304.79 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 1.41 acres = \$1,337.53 Chipping for Roadside Brushing Brush Chipper 15 hr x \$109.32/hr = \$1,639.80 Subtotal: \$2,977.33

Road Number: 34-6-1.1 Aiko Aiko Rd Continued		
Section 8000 Miscellaneous: Reconstruct turnaround/landing Tractor: D7 with rippers 2 hr x \$250.25/hr = \$500.50		
Excavator - Large (3 CY) 2 hr x \$166.61/hr = \$333.22	Subtotal:	\$833.72
Mobilization: Construction - 6.29% of total Costs = \$729.60		
Surfacing - 9.21% by rock volume = \$370.40	Subtotal:	\$1,100.00
	Total:	\$67 , 129.86

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-1.2 Road Name: Salmon School Rd Road Renovation: 0.02 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.02 mi	\$151.22
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.02 acres	\$128.29
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$3.09 Surf. \$0.00	\$3.09
Quarry Development:	\$0.00
Total:	\$282.60

Notes:

Road Construction Worksheet		
Road Number: 34-6-1.2 Road Name: Salmon School Rd		
<pre>Section 500 Renovation: Scarification: \$1118.88/mi x 0.02 mi = \$22.38 Blading w/o Ditches: \$559.44/mi x 0.02 mi = \$11.19 Compaction: \$415.02/mi x 0.02 mi = \$8.30 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35</pre>	Subtotal:	\$151.22
Section 2100 Roadside Brushing: Manual Brushing		
RoadSide Brushing Medium: \$948.60/acre x 0.02 acres = \$18.97 Chipping for Roadside Brushing		
Brush Chipper 1 hr x \$109.32/hr = \$109.32	Subtotal:	\$128.29
Mobilization:		
Construction - 0.03% of total Costs = \$3.09	Subtotal:	\$3.09
	Total:	\$282.60

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-1.3 Road Name: No Name Spur Road Renovation: 0.05 mi 12 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.00 acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:Blading 0.05 mi	\$214.02
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.05 acres	\$156.75
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$4.10 Surf. \$0.00	\$4.10
Quarry Development:	\$0.00

Total: \$374.86

Notes:

Road Construction Worksheet		
Road Number: 34-6-1.3 Road Name: No Name Spur		
<pre>Section 500 Renovation: Scarification: \$1118.88/mi x 0.05 mi = \$55.94 Blading w/o Ditches: \$559.44/mi x 0.05 mi = \$27.97 Compaction: \$415.02/mi x 0.05 mi = \$20.75 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35</pre>	Subtotal:	\$214.02
<pre>Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 0.05 acres = \$47.43 Chipping for Roadside Brushing Brush Chipper 1 hr x \$109.32/hr = \$109.32</pre>	Subtotal:	\$156.75
Mobilization:		,
Construction - 0.04% of total Costs = \$4.10	Subtotal:	\$4.10
	Total:	\$374.86

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-1.4 Road Name: Pipeline Access Rd Road Renovation: 0.09 mi 15 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.50 acres	\$2,288.28
300 Excavation: Standard cy	\$2,029.05
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation: Blading 0.09 mi	\$798.25
700-1200 Surfacing: Quarry Name: Commercial 1-1/2" Mi 57.00 LCY Quarry Name: Commercial 4" Minus 449.00 LCY	\$23 , 774.56
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.00 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):0.09 acres	\$280.07
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$2,240.76
Mobilization: Const. \$347.08 Surf. \$167.79	\$514.87
Quarry Development:	\$0.00

Notes:

Total: \$31,925.83

Road Construction Worksheet Road Number: 34-6-1.4 Road Name: Pipeline Access Rd Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 1-15% (Avg Side Slopes): Adjustment Factor (0) Pile and Burn (Slash): Adjustment Factor (1.28) greater than 40' (Avg Clearing Widths): Adjustment Factor (0) Total Adjustment Factor: 2.54 + 0 + 1.28 + 0 = 3.82Base Cost/Acre: \$1,198.05 x Adjustment Factor: 3.82 x Total Acres: 0.5 = \$2,288.28 Subtotal: \$2,288.28 Section 300 Excavation: Excavation - Common: $$2.66/cy \times 504.00 \ cy = $1,340.64$ Subgrade Compaction: 4 Sta/hr \$34.59/sta. x 3.0 sta = \$103.77 Embankment Placement & Compaction 306.a - Common: \$1.16/cy x 504.00 cy = \$584.64 Subtotal: \$2,029.05 Section 500 Renovation: Scarification: \$1118.88/mi x 0.09 mi = \$100.70 Blading w/o Ditches: \$559.44/mi x 0.09 mi = \$50.35 Compaction: \$415.02/mi x 0.09 mi = \$37.35 Water for Compaction Water Truck 3000 Gal 1 hr x \$109.35/hr = \$109.35 Heavy blading Tractor: D7 with rippers 2 hr x \$250.25/hr = \$500.50 Subtotal: \$798.25 Section 700-1200 Surfacing: Commercial Quarry Name: Commercial 1-1/2" Mi Comment: Surface Course Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 0.06mi 13ft 13.5ft 3in 10% Rock Volume = 57.00 LCY Purchase Price / Royalty: \$19.00/LCY x 57.00 LCY = \$1,083.00 Processing: $$1.20/LCY \times 57.00 LCY = 68.40 Compaction: $$1.38/LCY \times 57.00 LCY = 78.66 Grid Rolling: \$3.02/LCY x 57.00 LCY = \$172.14 T11 & T27 Testing: \$0.10/LCY x 57.00 LCY = \$5.70 Basic Rock Haul cost: \$0.81/LCY x 57.00 LCY = \$46.17 Rock Haul -15% grades: \$1.21/LCY-mi x 57.00 LCY x 7.00 mi= \$482.79 Rock Haul St& Co Roads: \$0.54/LCY-mi x 57.00 LCY x 20.00 mi= \$615.60 Basic Water Haul cost: \$0.79/LCY x 57.00 LCY = \$45.03 Water Haul -15% grades: \$0.17/LCY-mi x 57.00 LCY x 7.00 mi= \$67.83 Water Haul St&Co Roads: \$0.10/LCY-mi x 57.00 LCY x 20.00 mi= \$114.00 Quarry Name: Commercial 4" Minus Commercial Comment: Heli-Landing Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 375 LCY Rock Volume = 375.00 LCY Purchase Price / Royalty: \$17.00/LCY x 375.00 LCY = \$6,375.00 Processing: $$1.20/LCY \times 375.00 LCY = 450.00 Compaction: \$1.38/LCY x 375.00 LCY = \$517.50 Grid Rolling: \$3.02/LCY x 375.00 LCY = \$1,132.50 T11 & T27 Testing: \$0.10/LCY x 375.00 LCY = \$37.50 Basic Rock Haul cost: \$0.81/LCY x 375.00 LCY = \$303.75 Rock Haul -15% grades: \$1.21/LCY-mi x 375.00 LCY x 7.00 mi= \$3,176.25 Rock Haul St& Co Roads: \$0.54/LCY-mi x 375.00 LCY x 20.00 mi= \$4,050.00 Basic Water Haul cost: $$0.79/LCY \times 375.00 LCY = 296.25 Water Haul -15% grades: \$0.17/LCY-mi x 375.00 LCY x 7.00 mi= \$446.25 Water Haul St&Co Roads: \$0.10/LCY-mi x 375.00 LCY x 20.00 mi= \$750.00

Road Number: 34-6-1.4 Pipeline Access Rd Continued Commercial Quarry Name: Commercial 4" Minus Comment: Base Course LengthTopWBotWDepth0.06mi14ft14.5ft4in Depth CWid #TOs Width F.W.L Taper Other Rock Volume = 74.00 LCY Purchase Price / Royalty: \$17.00/LCY x 74.00 LCY = \$1,258.00 Processing: \$1.20/LCY x 74.00 LCY = \$88.80 Compaction: \$1.38/LCY x 74.00 LCY = \$102.12 Grid Rolling: \$3.02/LCY x 74.00 LCY = \$223.48 T11 & T27 Testing: \$0.10/LCY x 74.00 LCY = \$7.40 Basic Rock Haul cost: \$0.81/LCY x 74.00 LCY = \$59.94 Rock Haul -15% grades: \$1.21/LCY-mi x 74.00 LCY x 7.00 mi= \$626.78 Rock Haul St& Co Roads: \$0.54/LCY-mi x 74.00 LCY x 20.00 mi= \$799.20 Basic Water Haul cost: \$0.79/LCY x 74.00 LCY = \$58.46 Water Haul -15% grades: \$0.17/LCY-mi x 74.00 LCY x 7.00 mi= \$88.06 Water Haul St&Co Roads: \$0.10/LCY-mi x 74.00 LCY x 20.00 mi= \$148.00 Subtotal: \$23,774.56 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Heavy: \$1897.20/acre x 0.09 acres = \$170.75 Chipping for Roadside Brushing Brush Chipper 1 hr x \$109.32/hr = \$109.32 Subtotal: \$280.07 Section 8000 Miscellaneous: Construct Heli-Landing Tractor: D7 with rippers 4 hr x \$250.25/hr = \$1,001.00 Excavator -Small (1.5 CY) 4 hr x \$125.58/hr = \$502.32 Motor Grader 14M 4 hr x \$184.36/hr = \$737.44 Subtotal: \$2,240.76 Mobilization: Construction - 2.99% of total Costs = \$347.08Surfacing - 4.17% by rock volume = \$167.79Subtotal: \$514.87 Total: \$31,925.83

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T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: 34-6-2.0 A-D Road Name: Salmon Crk Road Renovation: 2.04 mi 15 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: 1.00 acres	\$4,816.16
300 Excavation: Standard cy	\$4,748.89
400 Drainage: Culvert: 159.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$11,091.87
500 Renovation: Blading 2.04 mi Slide Removal 3.00 cy	\$8,180.18
700-1200 Surfacing:\$ Quarry Name: Commercial 1-1/2" Mi 2,213.00 LCY Quarry Name: Commercial 4" Minus 375.00 LCY	110,005.58
1300 Geotextiles:	\$0.00
1400 Slope Protection: Gradation Class 2: 12.00 cy	\$414.33
1800 Soil Stabilization: 0.50 acres Includes Small Quantity Factor of 1.07	\$507.98
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (Manual):1.98 acres	\$4,173.95
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$3,070.80
Mobilization: Const. \$1,624.40 Surf. \$858.19	\$2,482.58
Quarry Development:	\$0.00

Total: \$149,492.32

```
Road Construction Worksheet
Road Number: 34-6-2.0 A-D Road Name: Salmon Crk
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 1.0 = $4,816.16
                                                                  Subtotal: $4,816.16
Section 300 Excavation:
 Comment: Heli-Landing construction
 Excavation - Common: $2.66/cy \times 1,216.00 cy = $3,234.56
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 3.0 sta = $103.77
 Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 1,216.00 cy = 1,410.56
                                                                  Subtotal: $4,748.89
Section 400 Drainage:
 Aluminized MP 0.10
                                        36 inch 14 ga 45 lf x $91.75/lf = $4,128.75
 Aluminized MP 0.21
                                        24 inch 16 ga 38 lf x 63.16/1f = 2,400.08
                                        24 inch 16 ga 38 lf x $63.16/lf = $2,400.08
 Aluminized MP 0.72
 Aluminized MP 1.27
                                        18 inch 16 ga 38 lf x $56.92/lf = $2,162.96
                                                                  Subtotal: $11,091.87
Section 500 Renovation:
 Slide Removal 3.00 cy
  Front End Loader $114.30/hr x 1.00 hr = $114.30
 Dump Truck: $103.09/hr x 1.00 hr = $103.09
  Laborer: $56.30/hr x 1.00 hr = $56.30
 Blading: $923.61/mi x 2.04 mi = $1,884.16
 Scarification: $1118.88/mi x 2.04 mi = $2,282.52
 Compaction: $415.02/mi x 2.04 mi = $846.64
 Clean Culverts: $501.63/mi x 2.04 mi = $1,023.33
 Watering for Compaction
  Water Truck 3000 Gal 21 hr x $89.04/hr = $1,869.84
                                                                  Subtotal: $8,180.18
Section 700-1200 Surfacing:
Commercial Quarry Name: Commercial 1-1/2" Mi
 Comment: MP 0.10 at culvert replacement
  Length TopW
                BotW
                        Depth CWid #TOs Width F.W.L Taper
                                                                 Other
                                                                  15 LCY
 Rock Volume = 15.00 LCY
  Purchase Price / Royalty: $19.00/LCY x 15.00 LCY = $285.00
 Processing: $1.20/LCY x 15.00 LCY = $18.00
 Compaction: $1.38/LCY x 15.00 LCY = $20.70
 Grid Rolling: $3.02/LCY x 15.00 LCY = $45.30
  T11 & T27 Testing: $0.10/LCY x 15.00 LCY = $1.50
 Basic Rock Haul cost: $0.81/LCY x 15.00 LCY = $12.15
 Rock Haul -15% grades: $1.21/LCY-mi x 15.00 LCY x 6.00 mi= $108.90
 Rock Haul St& Co Roads: $0.54/LCY-mi x 15.00 LCY x 20.00 mi= $162.00
 Basic Water Haul cost: $0.79/LCY x 15.00 LCY = $11.85
 Water Haul -15% grades: $0.17/LCY-mi x 15.00 LCY x 6.00 mi= $15.30
 Water Haul St&Co Roads: $0.10/LCY-mi x 15.00 LCY x 20.00 mi= $30.00
```

Road Number: 34-6-2.0 A-D Salmon Crk Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.21 at culvert replacement BotW Depth CWid Length TopW #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: $$19.00/LCY \times 15.00 LCY = 285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 6.00 mi= \$108.90 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 6.00 mi= \$15.30 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 0.72 at culvert replacement Length TopW Depth <u>CWid</u> BotW #TOs Width F.W.L Taper Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 6.00 mi= \$108.90 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 6.00 mi= \$15.30 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00 Commercial Quarry Name: Commercial 1-1/2" Mi Comment: MP 1.27 at culvert installation BotW Depth CWid #TOs Width F.W.L Taper Length TopW Other 15 LCY Rock Volume = 15.00 LCY Purchase Price / Royalty: \$19.00/LCY x 15.00 LCY = \$285.00 Processing: \$1.20/LCY x 15.00 LCY = \$18.00 Compaction: \$1.38/LCY x 15.00 LCY = \$20.70 Grid Rolling: \$3.02/LCY x 15.00 LCY = \$45.30 T11 & T27 Testing: \$0.10/LCY x 15.00 LCY = \$1.50 Basic Rock Haul cost: \$0.81/LCY x 15.00 LCY = \$12.15 Rock Haul -15% grades: \$1.21/LCY-mi x 15.00 LCY x 7.00 mi= \$127.05 Rock Haul St& Co Roads: \$0.54/LCY-mi x 15.00 LCY x 20.00 mi= \$162.00 Basic Water Haul cost: \$0.79/LCY x 15.00 LCY = \$11.85 Water Haul -15% grades: \$0.17/LCY-mi x 15.00 LCY x 7.00 mi= \$17.85 Water Haul St&Co Roads: \$0.10/LCY-mi x 15.00 LCY x 20.00 mi= \$30.00

Road Number: 34-6-2.0 A-D Salmon Crk Continued Commercial Quarry Name: Commercial 1-1/2" Mi Comment: Surface Course $\frac{\text{Length}}{2.04\text{mi}} \frac{\text{TopW}}{14\text{ft}} \qquad \frac{\text{BotW}}{14.5\text{ft}} \qquad \frac{\text{Depth}}{3\text{in}} \frac{\text{CWid}}{10\%} \qquad \frac{\#\text{TOs}}{8} \frac{\text{Width}}{10\text{ft}} \frac{\text{F.W.L}}{50\text{ft}} \frac{\text{Taper}}{25\text{ft}}$ Other Rock Volume = 2,153.00 LCY Purchase Price / Royalty: \$19.00/LCY x 2,153.00 LCY = \$40,907.00 Processing: \$1.20/LCY x 2,153.00 LCY = \$2,583.60 Compaction: \$1.38/LCY x 2,153.00 LCY = \$2,971.14 Grid Rolling: \$3.02/LCY x 2,153.00 LCY = \$6,502.06 T11 & T27 Testing: \$0.10/LCY x 2,153.00 LCY = \$215.30 Basic Rock Haul cost: \$0.81/LCY x 2,153.00 LCY = \$1,743.93 Rock Haul -15% grades: \$1.21/LCY-mi x 2,153.00 LCY x 2.00 mi= \$5,210.26 Rock Haul St& Co Roads: \$0.54/LCY-mi x 2,153.00 LCY x 20.00 mi= \$23,252.40 Basic Water Haul cost: \$0.79/LCY x 2,153.00 LCY = \$1,700.87 Water Haul -15% grades: \$0.17/LCY-mi x 2,153.00 LCY x 2.00 mi= \$732.02 Water Haul St&Co Roads: \$0.10/LCY-mi x 2,153.00 LCY x 20.00 mi= \$4,306.00 Commercial Quarry Name: Commercial 4" Minus Comment: Heli-Landing Length TopW BotW Depth CWid #TOs Width F.W.L Taper Other 375 LCY Rock Volume = 375.00 LCY Purchase Price / Royalty: \$17.00/LCY x 375.00 LCY = \$6,375.00 Processing: \$1.20/LCY x 375.00 LCY = \$450.00 Compaction: \$1.38/LCY x 375.00 LCY = \$517.50 Grid Rolling: \$3.02/LCY x 375.00 LCY = \$1,132.50 T11 & T27 Testing: \$0.10/LCY x 375.00 LCY = \$37.50 Basic Rock Haul cost: \$0.81/LCY x 375.00 LCY = \$303.75 Rock Haul -15% grades: \$1.21/LCY-mi x 375.00 LCY x 6.00 mi= \$2,722.50 Rock Haul St& Co Roads: \$0.54/LCY-mi x 375.00 LCY x 20.00 mi= \$4,050.00 Basic Water Haul cost: \$0.79/LCY x 375.00 LCY = \$296.25 Water Haul -15% grades: \$0.17/LCY-mi x 375.00 LCY x 6.00 mi= \$382.50 Water Haul St&Co Roads: \$0.10/LCY-mi x 375.00 LCY x 20.00 mi= \$750.00 Subtotal:\$110,005.58 Section 1400 Slope Protection: Comment: MP 1.91 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 2.00 mi= \$4.88 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 0.21 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 1.00 mi= \$2.44 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 0.72 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $1.22/cy \times 2.00cy = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 1.00 mi= \$2.44 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35

Road Number: 34-6-2.0 A-D Salmon Crk Continued Comment: MP 0.85 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: \$1.22/cy x 2.00cy = \$2.44 Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 1.00 mi= \$2.44 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: 2.00cy x (\$3.57/cy x 1.03) = \$7.35 Comment: MP 1.27 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = 2.44$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 2.00 mi= \$4.88 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Comment: MP 1.91 Rock Source: Commercial CL2 Purchase Price / Royalty: \$17.00/cy x 2.00cy = \$34.00 Furnish Class 2 type rock Basic Rock Haul cost: $\frac{1.22}{\text{cy}} \times 2.00 \text{cy} = \frac{2.44}{2}$ Rock Haul -15% grades: \$1.22/cy-mi x 2.00cy x 2.00 mi= \$4.88 Rock Haul St& Co Roads: \$0.54/cy-mi x 2.00cy x 20.00 mi= \$21.60 Placement on Fill slopes: $2.00 \text{ cy} \times (\$3.57/\text{cy} \times 1.03) = \7.35 Subtotal: \$414.33 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.50 acres = 281.98 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.50 acres = \$66.00 + Mulch Cost: \$320.00/acre x 0.50 acres = \$160.00 Subtotal: \$507.98 Section 2100 Roadside Brushing: Manual Brushing RoadSide Brushing Medium: \$948.60/acre x 1.98 acres = \$1,878.23 Chipping for Roadside Brushing Brush Chipper 21 hr x \$109.32/hr = \$2,295.72 Subtotal: \$4,173.95 Section 8000 Miscellaneous: BMP Installation at MP 0.10 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 0.29 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 BMP Installation at MP 0.85 General Laborer 2 hr x \$56.30/hr = \$112.60 Crew Cab or 3/4 Ton Pickup 2 hr x \$82.04/hr = \$164.08 Construct Heli-Landing Tractor: D7 with rippers 4 hr x \$250.25/hr = \$1,001.00 Excavator -Small (1.5 CY) 4 hr x \$125.58/hr = \$502.32 Motor Grader 14M 4 hr x \$184.36/hr = \$737.44 Subtotal: \$3,070.80 Road Number: 34-6-2.0 A-D Salmon Crk Continued
Mobilization:
 Construction - 14.00% of total Costs = \$1,624.40
 Surfacing - 21.34% by rock volume = \$858.19

Subtotal: \$2,482.58

Total: \$149,492.32

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 01-02-A Road Name: TEMP ROUTE Temporary Road: 0.11 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.60 acres	\$2,889.70
300 Excavation: Standard cy	\$4,960.06
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.30 acres Includes Small Quantity Factor of 1.07	\$304.79
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$98.40 Surf. \$0.00	\$98.40
Quarry Development:	\$0.00

Total: \$9,003.69

Notes:

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Road Construction Worksheet
Road Number: TR 01-02-A Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.6 = $2,889.70
                                                                  Subtotal: $2,889.70
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 1,156.00 cy = $3,074.96
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 6.1 sta = $209.27
  Slope Rounding: $0.40/lf x 605.00 lf = $242.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 1,156.00 cy = 1,340.96
  Blading without ditch: $15.35/station x 6.05 stations = $92.87
                                                                  Subtotal: $4,960.06
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.30 acres = $169.19
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.30 acres = $39.60
        + Mulch Cost: $320.00/acre x 0.30 acres = $96.00
                                                                  Subtotal: $304.79
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.85\% of total Costs = \$98.40
                                                                  Subtotal: $98.40
                                                                  Total: $9,003.69
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 01-02-B Road Name: TEMP ROUTE Temporary Road: 0.1 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.50 acres	\$2,408.08
300 Excavation: Standard cy	\$4,346.34
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$85.17 Surf. \$0.00	\$85.17
Quarry Development:	\$0.00

Total: \$7,793.54

Notes:

Road Construction Worksheet Road Number: TR 01-02-B Road Name: TEMP ROUTE Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) 20-40' (Avg Clearing Widths): Adjustment Factor (0.1) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.5 = \$2,408.08 Subtotal: \$2,408.08 Section 300 Excavation: Excavation - Common: $$2.66/cy \times 1,013.00 cy = $2,694.58$ Subgrade Compaction: 4 Sta/hr \$34.59/sta. x 5.3 sta = \$183.33 Slope Rounding: \$0.40/lf x 530.00 lf = \$212.00 Embankment Placement & Compaction 306.a - Common: $1.16/cy \times 1,013.00 cy = 1,175.08$ Blading without ditch: 15.35/station x 5.30 stations = 81.36Subtotal: \$4,346.34 Section 1800 Soil Stabilization: Dry Method with Mulch: $$563.97/acre \times 0.20 acres = 112.79 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.20 acres = \$26.40 + Mulch Cost: \$320.00/acre x 0.20 acres = \$64.00 Subtotal: \$203.19 Section 8000 Miscellaneous: Construct Truck Turnaround Tractor: D7 with rippers 3 hr x \$250.25/hr = \$750.75 Subtotal: \$750.75 Mobilization: Construction - 0.73% of total Costs = \$85.17Subtotal: \$85.17 Total: \$7,793.54

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 17-03B Road Name: TEMP ROUTE Temporary Road: 0.68 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 2.50 acres	\$11,740.89
300 Excavation: Standard cy	\$13,356.34
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.20 acres Includes Small Quantity Factor of 1.07	\$1,219.16
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,251.25
Mobilization: Const. \$304.61 Surf. \$0.00	\$304.61
Quarry Development:	\$0.00

Total: \$27,872.26

Notes:

```
Road Construction Worksheet
Road Number: TR 17-03B Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.1 = 3.92
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.92 x Total Acres: 2.5 = $11,740.89
                                                                  Subtotal: $11,740.89
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 2,650.00 \ cy = $7,049.00
  Subgrade Compaction: 4 Sta/hr 34.59/sta. x 36.0 sta = 1,243.51
  Slope Rounding: $0.40/lf x 3,595.00 lf = $1,438.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 2,650.00 cy = 33,074.00
  Blading without ditch: $15.35/station x 35.95 stations = $551.83
                                                                  Subtotal: $13,356.34
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 1.20 acres = $676.76
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 1.20 acres = $158.40
        + Mulch Cost: $320.00/acre x 1.20 acres = $384.00
                                                                  Subtotal: $1,219.16
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
  Remove Existing Berm/Barricade
   Tractor: D7 with rippers 2 hr x $250.25/hr = $500.50
                                                                  Subtotal: $1,251.25
Mobilization:
  Construction - 2.63% of total Costs = $304.61
                                                                  Subtotal: $304.61
                                                                  Total: $27,872.26
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 23-07 Road Name: TEMP ROUTE Temporary Road: 0.17 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.60 acres	\$2,889.70
300 Excavation: Standard cy	\$3,306.39
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.30 acres Includes Small Quantity Factor of 1.07	\$304.79
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$3,757.39
Mobilization: Const. \$113.35 Surf. \$0.00	\$113.35
Quarry Development:	\$0.00

Total: \$10,371.61

Notes:

```
Road Construction Worksheet
Road Number: TR 23-07 Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.6 = $2,889.70
                                                                  Subtotal: $2,889.70
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 656.00 \ cy = $1,744.96
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 8.9 sta = $307.85
  Slope Rounding: $0.40/lf x 890.00 lf = $356.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 656.00 cy = 760.96
  Blading without ditch: $15.35/station \times 8.90 stations = $136.62
                                                                  Subtotal: $3,306.39
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.30 acres = $169.19
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.30 acres = $39.60
        + Mulch Cost: $320.00/acre x 0.30 acres = $96.00
                                                                  Subtotal: $304.79
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
  Ramp Over Natural Gas Pipeline
   Tractor: D7 with rippers 8 hr x $250.25/hr = $2,002.00
   Excavator -Small (1.5 CY) 8 hr x $125.58/hr = $1,004.64
                                                                  Subtotal: $3,757.39
Mobilization:
  Construction - 0.98\% of total Costs = $113.35
                                                                  Subtotal: $113.35
                                                                             $10,371.61
                                                                  Total:
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 31-06-A Road Name: TEMP ROUTE Temporary Road: 0.05 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$939.27
300 Excavation: Standard cy	\$1,038.75
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$31.27 Surf. \$0.00	\$31.27
Quarry Development:	\$0.00

Total: \$2,861.64

Notes:

```
Road Construction Worksheet
Road Number: TR 31-06-A Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.1 = 3.92
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.92 x Total Acres: 0.2 = $939.27
                                                                  Subtotal: $939.27
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 206.00 cy = $547.96
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 2.8 sta = $96.85
  Slope Rounding: $0.40/lf x 280.00 lf = $112.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 206.00 cy = 238.96
  Blading without ditch: $15.35/station x 2.80 stations = $42.98
                                                                  Subtotal: $1,038.75
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.27\% of total Costs = \$31.27
                                                                  Subtotal: $31.27
                                                                  Total: $2,861.64
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 31-06-B Road Name: TEMP ROUTE Temporary Road: 0.05 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$963.23
300 Excavation: Standard cy	\$937.17
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$30.42 Surf. \$0.00	\$30.42
Quarry Development:	\$0.00

Total: \$2,783.16

Notes:

```
Road Construction Worksheet
Road Number: TR 31-06-B Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.2 = $963.23
                                                                 Subtotal: $963.23
Section 300 Excavation:
 Excavation - Common: $2.66/cy x 186.00 cy = $494.76
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 2.5 sta = $87.17
 Slope Rounding: $0.40/lf x 252.00 lf = $100.80
 Embankment Placement & Compaction 306.a - Common: $1.16/cy x 186.00 cy = $215.76
 Blading without ditch: $15.35/station x 2.52 stations = $38.68
                                                                 Subtotal: $937.17
Section 1800 Soil Stabilization:
  Dry Method with Mulch: 563.97/acre \times 0.10 acres = 56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                 Subtotal: $101.60
Section 8000 Miscellaneous:
 Reconstruct Truck Turnaround
  Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                 Subtotal: $750.75
Mobilization:
 Construction - 0.26\% of total Costs = \$30.42
                                                                 Subtotal: $30.42
                                                                 Total: $2,783.16
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 31-06-C Road Name: TEMP ROUTE Temporary Road: 0.07 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,444.85
300 Excavation: Standard cy	\$1,411.37
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,251.25
Mobilization: Const. \$46.51 Surf. \$0.00	\$46.51
Quarry Development:	\$0.00

Total: \$4,255.58

Notes:

```
Road Construction Worksheet
Road Number: TR 31-06-C Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.3 = $1,444.85
                                                                  Subtotal: $1,444.85
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 280.00 cy = $744.80
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 3.8 sta = $131.44
  Slope Rounding: $0.40/lf x 380.00 lf = $152.00
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 280.00 cy = $324.80
  Blading without ditch: $15.35/station x 3.80 stations = $58.33
                                                                  Subtotal: $1,411.37
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Section 8000 Miscellaneous:
  Reconstruct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
  Remove Existing Berm/Barricade
   Tractor: D7 with rippers 2 hr x $250.25/hr = $500.50
                                                                  Subtotal: $1,251.25
Mobilization:
  Construction - 0.40\% of total Costs = $46.51
                                                                  Subtotal: $46.51
                                                                  Total: $4,255.58
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 31-07 Road Name: TEMP ROUTE Temporary Road: 0.07 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,408.91
300 Excavation: Standard cy	\$1,366.20
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$31.79 Surf. \$0.00	\$31.79
Quarry Development:	\$0.00

Total: \$2,908.49

Notes:

```
Road Construction Worksheet
Road Number: TR 31-07 Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.1 = 3.92
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.92 x Total Acres: 0.3 = $1,408.91
                                                                  Subtotal: $1,408.91
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 271.00 cy = $720.86
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 3.7 sta = $127.29
  Slope Rounding: $0.40/lf x 368.00 lf = $147.20
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 271.00 cy = 3314.36
  Blading without ditch: $15.35/station x 3.68 stations = $56.49
                                                                  Subtotal: $1,366.20
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Mobilization:
  Construction - 0.27\% of total Costs = \$31.79
                                                                  Subtotal:
                                                                               $31.79
                                                                  Total: $2,908.49
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-A Road Name: TEMP ROUTE Temporary Road: 0.08 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,408.91
300 Excavation: Standard cy	\$1,633.42
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$43.03 Surf. \$0.00	\$43.03
Quarry Development:	\$0.00

Total: \$3,937.70

Notes:

```
Road Construction Worksheet
Road Number: TR 32-25-A Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.1 = 3.92
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.92 x Total Acres: 0.3 = $1,408.91
                                                                    Subtotal: $1,408.91
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 324.00 cy = $861.84
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 4.4 sta = $152.20
  Slope Rounding: $0.40/lf x 440.00 lf = $176.00
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 324.00 cy = $375.84
  Blading without ditch: \frac{515.35}{\text{station}} \times 4.40 \text{ stations} = \frac{67.54}{100}
                                                                    Subtotal: $1,633.42
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                    Subtotal: $101.60
Section 8000 Miscellaneous:
  Reconstruct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                    Subtotal: $750.75
Mobilization:
  Construction - 0.37\% of total Costs = $43.03
                                                                    Subtotal: $43.03
                                                                    Total: $3,937.70
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-B Road Name: TEMP ROUTE Temporary Road: 0.05 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,444.85
300 Excavation: Standard cy	\$1,737.14
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$44.58 Surf. \$0.00	\$44.58
Quarry Development:	\$0.00

Total: \$4,078.91

Notes:

```
Road Construction Worksheet
Road Number: TR 32-25-B Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.3 = $1,444.85
                                                                  Subtotal: $1,444.85
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 390.00 cy = $1,037.40
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 2.8 sta = $95.12
  Slope Rounding: $0.40/lf x 275.00 lf = $110.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 390.00 cy = $452.40
  Blading without ditch: $15.35/station x 2.75 stations = $42.21
                                                                  Subtotal: $1,737.14
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.38\% of total Costs = $44.58
                                                                  Subtotal: $44.58
                                                                  Total: $4,078.91
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-C Road Name: TEMP ROUTE Temporary Road: 0.29 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 1.30 acres	\$6,261.01
300 Excavation: Standard cy	\$8,671.85
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.60 acres Includes Small Quantity Factor of 1.07	\$609.58
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$500.50
Mobilization: Const. \$177.27 Surf. \$0.00	\$177.27
Quarry Development:	\$0.00

Total: \$16,220.20

Notes:

Road Construction Worksheet Road Number: TR 32-25-C Road Name: TEMP ROUTE Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 16-30% (Avg Side Slopes): Adjustment Factor (0.1) Pile and Burn (Slash): Adjustment Factor (1.28) 20-40' (Avg Clearing Widths): Adjustment Factor (0.1) Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02Base Cost/Acre: \$1,198.05 x Adjustment Factor: 4.02 x Total Acres: 1.3 = \$6,261.01 Subtotal: \$6,261.01 Section 300 Excavation: Excavation - Common: $$2.66/cy \times 1,904.00 cy = $5,064.64$ Subgrade Compaction: 4 Sta/hr 34.59/sta. x 15.6 sta = 537.87Slope Rounding: \$0.40/lf x 1,555.00 lf = \$622.00 Embankment Placement & Compaction 306.a - Common: $1.16/cy \times 1,904.00 cy = 2,208.64$ Blading without ditch: \$15.35/station x 15.55 stations = \$238.69 Subtotal: \$8,671.85 Section 1800 Soil Stabilization: Dry Method with Mulch: $563.97/acre \times 0.60 acres = 338.38 Includes Small Quantity Factor of 1.07 + Seed Cost: \$132.00/acre x 0.60 acres = \$79.20 + Mulch Cost: \$320.00/acre x 0.60 acres = \$192.00 Subtotal: \$609.58 Section 8000 Miscellaneous: Remove Existing Berm/Barricade Tractor: D7 with rippers 2 hr x \$250.25/hr = \$500.50 Subtotal: \$500.50 Mobilization: Construction - 1.53% of total Costs = \$177.27Subtotal: \$177.27 Total: \$16,220.20

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-D Road Name: TEMP ROUTE Temporary Road: 0.05 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.20 acres	\$963.23
300 Excavation: Standard cy	\$896.72
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$29.97 Surf. \$0.00	\$29.97
Quarry Development:	\$0.00

Total: \$2,742.26

Notes:

```
Road Construction Worksheet
Road Number: TR 32-25-D Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.2 = $963.23
                                                                  Subtotal: $963.23
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 178.00 \ cy = $473.48
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 2.4 sta = $83.36
  Slope Rounding: $0.40/lf x 241.00 lf = $96.40
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 178.00 cy = $206.48
  Blading without ditch: $15.35/station x 2.41 stations = $36.99
                                                                  Subtotal: $896.72
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.26\% of total Costs = $29.97
                                                                  Subtotal: $29.97
                                                                  Total: $2,742.26
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-E Road Name: TEMP ROUTE Temporary Road: 0.07 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.30 acres	\$1,444.85
300 Excavation: Standard cy	\$1,300.35
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.10 acres Includes Small Quantity Factor of 1.07	\$101.60
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$39.75 Surf. \$0.00	\$39.75
Quarry Development:	\$0.00

Total: \$3,637.30

Notes:

```
Road Construction Worksheet
Road Number: TR 32-25-E Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.3 = $1,444.85
                                                                  Subtotal: $1,444.85
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 258.00 cy = $686.28
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 3.5 sta = $121.07
  Slope Rounding: $0.40/lf x 350.00 lf = $140.00
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 258.00 cy = $299.28
  Blading without ditch: $15.35/station x 3.50 stations = $53.73
                                                                  Subtotal: $1,300.35
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.10 acres = $56.40
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.10 acres = $13.20
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                  Subtotal: $101.60
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.34\% of total Costs = \$39.75
                                                                  Subtotal: $39.75
                                                                  Total: $3,637.30
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 32-25-F Road Name: TEMP ROUTE Temporary Road: 0.09 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.40 acres	\$1,926.46
300 Excavation: Standard cy	\$1,728.48
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.20 acres Includes Small Quantity Factor of 1.07	\$203.19
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$750.75
Mobilization: Const. \$50.93 Surf. \$0.00	\$50.93
Quarry Development:	\$0.00

Total: \$4,659.82

Notes:

```
Road Construction Worksheet
Road Number: TR 32-25-F Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1.28 + 0.1 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.4 = $1,926.46
                                                                  Subtotal: $1,926.46
Section 300 Excavation:
  Excavation - Common: $2.66/cy x 343.00 cy = $912.38
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 4.7 sta = $160.84
  Slope Rounding: $0.40/lf x 465.00 lf = $186.00
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 343.00 cy = $397.88
  Blading without ditch: $15.35/station x 4.65 stations = $71.38
                                                                  Subtotal: $1,728.48
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.20 acres = $112.79
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.20 acres = $26.40
        + Mulch Cost: $320.00/acre x 0.20 acres = $64.00
                                                                  Subtotal: $203.19
Section 8000 Miscellaneous:
  Construct Truck Turnaround
   Tractor: D7 with rippers 3 hr x $250.25/hr = $750.75
                                                                  Subtotal: $750.75
Mobilization:
  Construction - 0.44\% of total Costs = $50.93
                                                                  Subtotal: $50.93
                                                                  Total: $4,659.82
```

T.S. Contract Name: Salmon Run TS Sale Date: July 2023 Road Number: TR 35-12 Road Name: TEMP ROUTE Temporary Road: 0.14 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.90 acres	\$4,334.54
300 Excavation: Standard cy	\$9,488.40
400 Drainage: Culvert: 0.00 lf DownSpout: 0.00 lf PolyPipe: 0.00 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.40 acres Includes Small Quantity Factor of 1.07	\$406.39
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing (NONE):0.00 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$157.23 Surf. \$0.00	\$157.23
Quarry Development:	\$0.00

Total: \$14,386.56

Notes:

```
Road Construction Worksheet
Road Number: TR 35-12 Road Name: TEMP ROUTE
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  31-45% (Avg Side Slopes): Adjustment Factor (0.2)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  greater than 40' (Avg Clearing Widths): Adjustment Factor (0)
  Total Adjustment Factor: 2.54 + 0.2 + 1.28 + 0 = 4.02
  Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.9 = $4,334.54
                                                                   Subtotal: $4,334.54
Section 300 Excavation:
  Excavation - Common: $2.66/cy \times 2,312.00 \ cy = $6,149.92
  Subgrade Compaction: 4 Sta/hr $34.59/sta. x 7.3 sta = $252.51
  Slope Rounding: $0.40/lf x 730.00 lf = $292.00
  Embankment Placement & Compaction 306.a - Common: 1.16/cy \times 2,312.00 cy = $2,681.92
  Blading without ditch: 15.35/station x 7.30 stations = 112.06
                                                                  Subtotal: $9,488.40
Section 1800 Soil Stabilization:
  Dry Method with Mulch: $563.97/acre \times 0.40 acres = $225.59
        Includes Small Quantity Factor of 1.07
        + Seed Cost: $132.00/acre x 0.40 acres = $52.80
        + Mulch Cost: $320.00/acre x 0.40 acres = $128.00
                                                                   Subtotal: $406.39
Mobilization:
  Construction - 1.36\% of total Costs = $157.23
                                                                   Subtotal: $157.23
```

```
Total: $14,386.56
```

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Mobilization Costs - Construction and Surfacing

T.S. Contract Name: Salmon Run TS Sale Date: July 2023

Average Mobilization distance = 50 miles Factor = 1.00

Mobilization: Construction

Graders-all: 1 ea x (1.00 x \$536.00/ea + 25 mi x \$18.44/mi) = \$997.00 Brush Cutter: 1 ea x (1.00 x \$536.00/ea) = \$536.00 Loaders < 3cy: 1 ea x (1.00 x \$536.00/ea + 25 mi x \$11.43/mi) = \$821.75 Rollers & Comp: 1 ea x (1.00 x \$536.00/ea + 25 mi x \$27.67/mi) = \$1,227.75 Excavators (Lg): 1 ea x (1.00 x \$1176.00/ea + 0 mi x \$33.32/mi) = \$1,176.00 Excavators (Sm): 1 ea x (1.00 x \$536.00/ea + 25 mi x \$25.12/mi) = \$1,164.00 RTBackhoes 24/30: 1 ea x (1.00 x \$399.00/ea + 25 mi x \$7.16/mi) = \$578.00 Tractors <= D7: 1 ea x (1.00 x \$856.00/ea + 25 mi x \$48.94/mi) = \$2,079.50 Dump Truck<=15cy: 1 ea x (1.00 x \$124.00/ea + 25 mi x \$5.15/mi) = \$252.75 Water Truck: 1 ea x (1.00 x \$131.00/ea + 25 mi x \$5.47/mi) = \$267.75 Equipment Washing: 10 ea x (\$250.00) /ea = \$2,500.00

Mobilization: Surfacing Dump Truck<=15cy: 8ea x (1.00 x \$124.00/ea + 25 mi x \$5.15/mi)= \$2,022.00 Equipment Washing: 8 ea x (\$250.00) /ea = \$2,000.00

Subtotal: \$4,022.00

Subtotal: \$11,600.50

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Summary of Construction Quantities

T.S. Contract Name: Salmon Run TS Sale Date: July 2023

Road Number 33-5-17.1 A 33-5-18.0 A-B 33-5-30.0 A-B 33-5-30.2 33-5-31.1 33-5-31.2 A-B 33-5-31.3 A 33-5-31.5 33-5-31.7 33-5-32.0 33-5-32.1 33-5-32.1 NEW 33-5-32.2 33-5-7 0 D	Const 7.89	Improv	Renov 4.22 89.76 58.08 6.86 4.22 34.85 38.54 103.49 21.12 7.92 20.59 33.26 4.22	Decomm	Temp
33-5-7.0 A 33-6-14.0 A-B 33-6-24.0 A-B2 33-6-35.1 A-C 34-5-5.0 34-5-6.0 34-6-1.0 34-6-1.1 34-6-1.2 34-6-1.3 34-6-1.4 34-6-2.0 A-D			$117.74 \\ 37.49 \\ 209.09 \\ 66.53 \\ 11.09 \\ 7.92 \\ 23.76 \\ 76.56 \\ 1.06 \\ 2.64 \\ 4.75 \\ 107.71 \\ \end{cases}$		6.05
TR 01-02-A TR 01-02-B TR 17-03B TR 23-07 TR 31-06-A TR 31-06-B TR 31-06-C TR 31-07 TR 32-25-A TR 32-25-B TR 32-25-C TR 32-25-C TR 32-25-C TR 32-25-F TR 32-25-F TR 35-12	7.89		1,093.47		6.05 5.3 35.95 8.9 2.8 2.52 3.8 3.68 4.4 2.75 15.55 2.41 3.5 4.65 7.3

200 Clearing and Grubbing Clear acr 33-5-17.1 A 33-5-18.0 A-B 33-5-30.0 A-B 33-5-30.2 33-5-31.2 A-B 33-5-31.2 A-B 33-5-31.3 A 33-5-31.5 33-5-32.0 33-5-32.1 33-5-32.1 33-5-32.1 33-5-32.2 33-5-7.0 A 33-6-14.0 A-B 33-6-24.0 A-B2 33-6-35.1 A-C 34-5-5.0 34-5-6.0 34-6-1.0 34-6-1.2 34-6-1.2 34-6-1.3 34-6-1.4 34-6-1.4 34-6-2.0 A-D TR 01-02-B TR 17-03B TR 23-07 TR 31-06-A TR 31-06-A TR 31-06-C TR 31-06-C TR 31-07 TR 32-25-B TR 32-25-C TR 32-25-C TR 32-25-F	0.0 0.2 1.0 0.2 1.0 0.2 0.0 0.1 0.2 0.4 0.2 0.4 0.2 0.1 0.2 0.1 0.2 0.3 0.4 0.5 0.5 0.6 0.5 0.6 0.5 0.6 0.5 0.6 0.5 0.6 0.5 0.6 0.7 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.4
TR 32-25-F TR 35-12	0.4

Totals: 16.60

300 Excavation	Excav	Haul	Haul
	LCY.s		
33-5-32.1 NEW	1,561	4	0
33-6-14.0 A-B	1,284	0	0
34-6-1.4	504	0	0
34-6-2.0 A-D	1,216	0	0
TR 01-02-A	1,156	0	0
TR 01-02-B	1,013	0	0
TR 17-03B	2,650	0	0
TR 23-07	656	0	0
TR 31-06-A	206	0	0
TR 31-06-B	186	0	0
TR 31-06-C	280	0	0
TR 31-07	271	0	0
TR 32-25-A	324	0	0
TR 32-25-B	390	0	0
TR 32-25-C	1,904	0	0
TR 32-25-D	178	0	0
TR 32-25-E	258	0	0
TR 32-25-F	343	0	0
TR 35-12	2,312	0	0
	— — — — — — — — — —		

Totals:	16,692	375	0

400 Drainage

Road Number 33-5-31.2 A-B 33-5-31.3 A 33-5-32.0 33-5-32.1 33-5-32.1 NEW 33-6-14.0 A-B 33-6-24.0 A-B2 34-6-2.0 A-D	82 lf 242 lf 80 lf 330 lf 78 lf 30 lf	Polypipes 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf	Downspouts 0 lf 0 lf 20 lf 40 lf 20 lf 0 lf 90 lf 0 lf					
Total Drainage:								
Culvert Qty 12 inch 18 inch 24 inch 30 inch 36 inch 42 inch 48 inch	Aluminized 0 lf 180 lf 1008 lf 190 lf 110 lf 0 lf 60 lf	Galvanized 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf 0 lf	Poly Pipe 0 lf 0 lf 0 lf 0 lf					
Downspout Qty 18 inch 21 inch 24 inch 30 inch	Half Round 0 lf 0 lf 0 lf 0 lf	Full (poly) 0 lf 0 lf	Full (galv) 0 lf 20 lf 150 lf					
Repair Downspout at MP 0.34 33-5-32.1 General Laborer								

500 Renovation	Blade Miles	Slide cy		
33-5-17.1 A	0.08	0		
33-5-18.0 A-B	1.70	0		
33-5-30.0 A-B	1.10	0		
33-5-30.2	0.13	0		
33-5-30.3	0.08	0		
33-5-31.1	0.66	0		
33-5-31.2 A-B	0.73	0		
33-5-31.3 A	1.96	9		
33-5-31.5	0.40	0		
33-5-31.7	0.15	0		
		-		
33-5-32.0	0.39	0		
33-5-32.1	0.63	0		
33-5-32.2	0.08	0		
33-5-7.0 A	2.23	0		
33-6-14.0 A-B	0.71	0		
33-6-24.0 A-B2	3.96	0		
33-6-35.1 A-C	1.26	0		
34-5-5.0	0.21	0		
34-5-6.0	0.15	3		
34-6-1.0	0.45	0		
34-6-1.1	1.45	6		
34-6-1.2	0.02	0		
34-6-1.3	0.05	0		
34-6-1.4	0.09	0		
34-6-2.0 A-D	2.04	3		
Totals:	20.71	21		
Heavy blading 34-6-1.4				
Tractor: D7 with rippers				
Heavy road renovation 33-5-17.1 Tractor: D7 with rippers	A			
Tractor: D7 with rippers			3 hi	2
Road Reconstruction 33-5-30.0 A-	В			
Tractor: D7 with rippers			8 hi	2
Water for Compaction 34-5-5.0				
Water Truck 3000 Gal			2 hi	2
Water for Compaction 34-6-1.1				
			••••••••••••••••••••••••••••••••••••••	ır
Water for Compaction 34-6-1.4				
Water Truck 3000 Gal			1 hi	2
Water for Compaction 34-6-1.0				
Water Truck 3000 Gal			5 hi	£
Water for Compaction 34-6-1.2				
Water Truck 3000 Gal			1 hi	C
Water for Compaction 34-6-1.3				
Water Truck 3000 Gal			1 h	ſ
Water for Compaction 33-6-35.1 A	7-C			
Water Truck 3000 Gal			13 h	nr
Water for Compaction 33-6-24.0 A				
Water Truck 3000 Gal			40 h	nr
Water for Compaction 33-5-31.7				
Water Truck 3000 Gal			2 h:	r
Water for Compaction 33-5-31.2 A				
Water Truck 3000 Gal			8 ht	r
Water for Compaction 34-5-6.0			•••••••	-
Water Truck 3000 Gal			2 h	r
Water for Compaction 33-5-32.1				-
Water Truck 3000 Gal			7 h.	r
Water for Compaction 33-6-14.0 P			•••••	-
Water Truck 3000 Cal			7 b	~

Water for	Compaction	33-5-32.0																
Water	Truck 3000	Gal			•													4 hr
		33-5-31.1																
Water	Truck 3000	Gal				 •		•										7 hr
	Compaction																	
Water	Truck 3000	Gal		•	•	 •		•			•			•	•	•	•	1 hr
	Compaction																	
Water	Truck 3000	Gal		•	•	 •		•			•			•	•	•	•	11 hr
	Compaction																	
Water	Truck 3000	Gal	• •	•	•	 •	• •	•	•	•	•	 •	•	•	•	•	•	4 hr
	Compaction	33-5-30.3																
Water	Truck 3000	Gal	• •	•	•	 •	• •	•	•	•	•	 •	•	•	•	•	•	1 hr
		33-5-30.2																
Water	Truck 3000	Gal	• •		•	 •		•	•	•	•	 •	•	•	•	•	•	2 hr
		33-5-7.0 <i>P</i>																
Water	Truck 3000	Gal	• •		•	 •		•	•	•	•	 •	•	•	•	•	•	23 hr
	Compaction																	
Water	Truck 3000	Gal	• •	•	•	 •		•	•	•	•	 •	•	•	•	•	•	17 hr
	Compaction																	
Water	Truck 3000	Gal		•	•	 •		•	•	•	•	 •	•	•	•	•	•	1 hr
	Compaction																	
		Gal			•	 •		•	•	•	•	 •	•	•	•	•	•	20 hr
-	_	ion 34-6-2.																
Water	Truck 3000	Gal			•													21 hr

Surfacing (Loose Cubic Yards)

Note: Due to slight rounding differences between total LCY vs. subtotaled LCY, Totals shown here may not be exactly as shown in the road summaries and worksheets.

Quarry Name: Commercial 1-1/2" Mi

Commercial	Roadway	Turnouts	Other	
34-6-2.0 A-D	0	0	15	15
34-6-2.0 A-D	0	0	15	15
34-6-2.0 A-D	0	0	15	15
34-6-2.0 A-D	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	20	20
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	0	0	15	15
33-6-24.0 A-B2	1,740	49	0	1,789
33-5-31.2 A-B	0	0	15	15
33-5-31.2 A-B	0	0	15	15
33-5-31.3 A	0	0	15	15
33-6-24.0 A-B2	640	25	0	665
34-6-1.4	57	0	0	57
34-6-1.1	1,080	37	0	1,117
34-6-2.0 A-D	2,079	74	0	2,153
33-6-14.0 A-B	0	0	15	15
33-5-31.3 A	0	0	20	20

33-5-31.3 A		0	0	15	15
33-5-31.3 A		0	0	15	15
33-5-31.3 A		0	0	15	15
33-5-31.3 A		0	0	15	15
33-5-31.3 A		1,685	62	0	1,747
33-5-32.1		0	0	20	20
33-5-32.1		0	0	20	20
33-5-32.1		0	0	20	20
33-5-32.1		0	0	15	15
33-5-32.1		0	0	15	15
33-5-32.1		0	0	20	20
33-5-32.1		856	37	0	893
33-5-32.1 NEW		203	25	0	228
33-5-32.0		0	0	15	15
33-5-32.0		0	0	15	15
33-6-14.0 A-B		829	37	0	866
33-5-32.1 NEW		0	0	63	63
	Totals:	9,169	346	618	10,133
Output Names Commencial 4"	Minus				
Quarry Name: Commercial 4" Commercial	MINUS	Deeducar	mu an out o	Other	
34-6-1.4		Roadway 0	Turnouts O	375	375
34-6-2.0 A-D		0	0	375	375
34-6-2.0 A-D 34-6-1.4		74	0	0	74
34-0-1.4 33-5-32.1 NEW		435	49	0	484
33-6-14.0 A-B		435	49	563	404 563
33-5-32.1 NEW		0	0	125	125
55-5-32.1 NEW		0	0	125	125
	Totals:	509	49	1,438	1,996

1300 Geotextiles

1400 Slope Protection	
33-5-18.0 А-В	Gradation Class 2: 2 cy
33-5-18.0 A-B	Gradation Class 2: 2 cy
33-5-31.2 A-B	Gradation Class 2: 2 cy
33-5-31.2 A-B	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 3 cy
33-5-31.3 A	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 2 cy
33-5-31.3 A	Gradation Class 2: 3 cy
33-5-32.0	Gradation Class 2: 2 cy
33-5-32.1	Gradation Class 2: 2 cy
33-5-32.1	Gradation Class 2: 2 cy
33-5-32.1	Gradation Class 2: 2 cy
33-5-32.1	Gradation Class 2: 2 cy
33-5-32.1	Gradation Class 2: 2 cy
33-5-32.1 NEW	Gradation Class 2: 2 cy
33-5-7.0 A	Gradation Class 2: 2 cy
33-6-24.0 A-B2	Gradation Class 2: 2 cy
33-6-24.0 A-B2	Gradation Class 2: 3 cy
33-6-24.0 A-B2	Gradation Class 2: 2 cy
33-6-24.0 A-B2	Gradation Class 2: 3 cy
33-6-24.0 A-B2	Gradation Class 2: 2 cy

33-6-24.0 A-B2
33-6-24.0 А-B2
33-6-24.0 А-B2
33-6-24.0 A-B2
33-6-24.0 A-B2
33-6-24.0 A-B2
34-6-1.0
34-6-1.0
34-6-1.0
34-6-2.0 A-D

Gradation Class 2: 2 cy Gradation Class 2: 3 cy Gradation Class 2: 3 cy Gradation Class 2: 3 cy Gradation Class 2: 2 cy

Totals:

85 cy

1800 Soil stabilization -	acres	Dry W/O Mulch	Dry/with Mulch	Hydro Mulch
33-5-18.0 A-B		0.0	0.0	0.0
33-5-30.0 A-B		0.0	0.0	0.0
33-5-30.3		0.0	0.0	0.0
33-5-31.1		0.0	0.0	0.0
33-5-31.2 A-B		0.0	0.0	0.0
33-5-31.3 A		0.0	0.0	0.0
33-5-31.5 A		0.0	0.0	0.0
		0.0	0.0	0.0
33-5-32.0				
33-5-32.1 NEW		0.0	0.0	0.0
33-5-7.0 A		0.0	0.0	0.0
33-6-24.0 A-B2		0.0	0.0	0.0
34-6-1.0		0.0	0.0	0.0
34-6-1.1		0.0	0.0	0.0
34-6-2.0 A-D		0.0	0.0	0.0
TR 01-02-A		0.0	0.0	0.0
TR 01-02-B		0.0	0.0	0.0
TR 17-03B		0.0	0.0	0.0
TR 23-07		0.0	0.0	0.0
TR 31-06-A		0.0	0.0	0.0
TR 31-06-B		0.0	0.0	0.0
TR 31-06-C		0.0	0.0	0.0
TR 31-07		0.0	0.0	0.0
TR 32-25-A		0.0	0.0	0.0
TR 32-25-B		0.0	0.0	0.0
TR 32-25-C		0.0	0.0	0.0
TR 32-25-D		0.0	0.0	0.0
TR 32-25-E		0.0	0.0	0.0
TR 32-25-F		0.0	0.0	0.0
TR 35-12		0.0	0.0	0.0
	Totals:	0.00	8.90	0.00
	Small Quan	tity Fact	or of 1.07	used

1900 Cattleguards

2100 RoadSide Brushing	acres
33-5-17.1 A - Manual Brushing	0.1
33-5-18.0 A-B - Manual Brushing	1.7
33-5-30.0 A-B - Manual Brushing	1.1
33-5-30.2 - Manual Brushing	0.1
33-5-30.3 - Manual Brushing	0.1
33-5-31.1 - Manual Brushing	0.6
33-5-31.2 A-B - Manual Brushing	
33-5-31.3 A - Manual Brushing	1.9
33-5-31.5 - Manual Brushing	0.4
33-5-31.7 - Manual Brushing	0.2
33-5-32.0 - Manual Brushing	
33-5-32.1 - Manual Brushing	
33-5-32.2 - Mechanical Brushing	
33-5-7.0 A - Manual Brushing	2.2
33-6-14.0 A-B - Manual Brushing	
33-6-24.0 A-B2 - Manual Brushing	3.8
33-6-35.1 A-C - Mechanical Brush:	ing
	1.2
34-5-5.0 - Manual Brushing	0.2
34-5-6.0 - Manual Brushing	
34-6-1.0 - Mechanical Brushing	
34-6-1.1 - Manual Brushing	
34-6-1.2 - Manual Brushing	
24 6 1 2 Manual Drushing	0.1
34-6-1.3 - Manual Brushing	0.1
34-6-1.4 - Manual Brushing	0.1
34-6-2.0 A-D - Manual Brushing	2.0
matel.	20.12
Chipping for Roadside Brushing	33-5-30.0 A-B
Brush Chipper	11 hr
Chipping for Roadside Brushing	34-6-1.1 •••••• 15 hr
Brush Chipper	
Chipping for Roadside Brushing	34-6-1.4
Brush Chipper	1 hr
Chipping for Roadside Brushing	34-6-1.2
Brush Chipper	
Chipping for Roadside Brushing	34-6-1.3
Brush Chipper	
Chipping for Roadside Brushing	33-6-24.0 A-B2
Brush Chipper	
Chipping for Roadside Brushing	
Chipping for Roadside Brushing	34-5-6.0
Chipping for Roadside Brushing	
Brush Chipper	
Chipping for Roadside Brushing	33-5-32 1
Chipping for Roadside Brushing	24-5-5 0
Chipping for Roadside Brushing	
	21 hr
Chipping for Roadside Brushing	
Brush Chipper	
Chipping for Roadside Brushing	
Chipping for Roadside Brushing	
Brush Chipper	
Chipping for Roadside Brushing	33-5-30.3
Brush Chipper	

Chipping for Roadside Brushing 33-5-30.2	
Brush Chipper	2 hr
Chipping for Roadside Brushing 33-5-32.2	
Brush Chipper	1 hr
Chipping for Roadside Brushing 33-5-7.0 A	
Brush Chipper	23 hr
Chipping for Roadside Brushing 33-5-18.0 A-B	
Brush Chipper	17 hr
Chipping for Roadside Brushing 33-5-17.1 A	
Brush Chipper	1 hr
Chipping for Roadside Brushing 33-5-31.7	
Brush Chipper	2 hr
Chipping for Roadside Brushing 33-5-32.0	
Brush Chipper	4 hr
Chipping or Roadside Brushing 33-6-14.0 A-B	
Brush Chipper	7 hr
Remove down tree-downspout-MP 33-6-24.0 A-B2	
Excavator -Small (1.5 CY)	l hr

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2300 Engineering stations
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Totals: 0.00

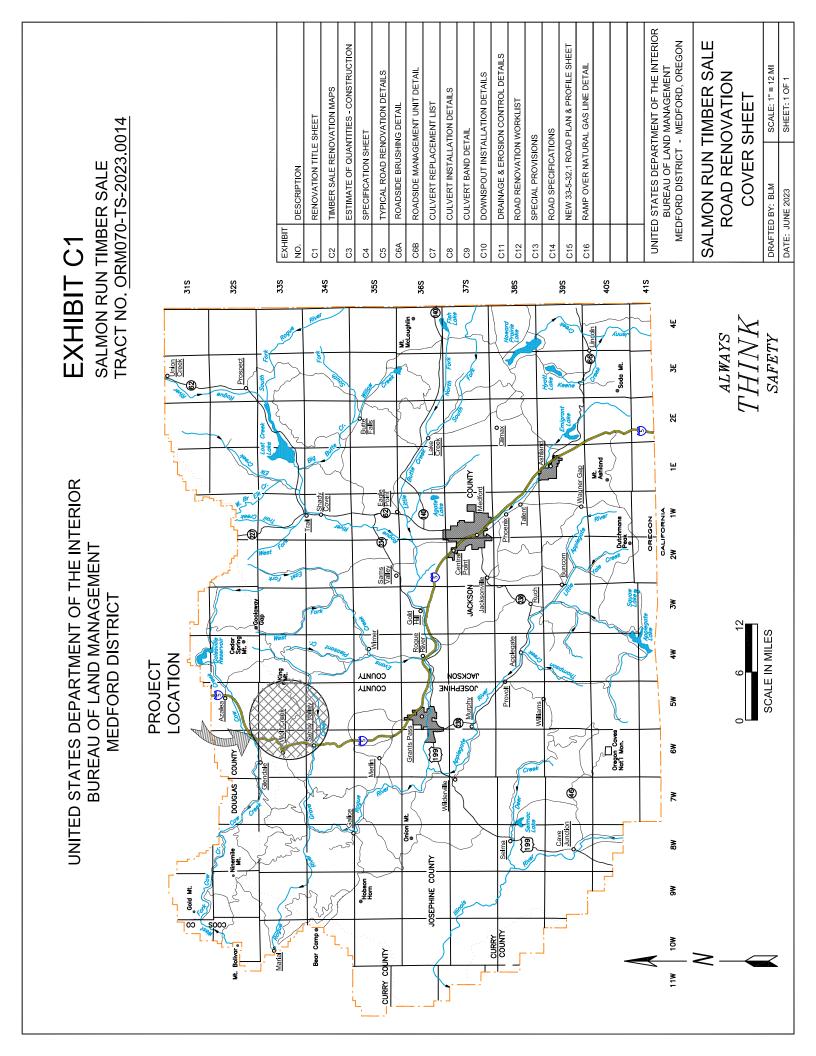
2400 Minor Concrete

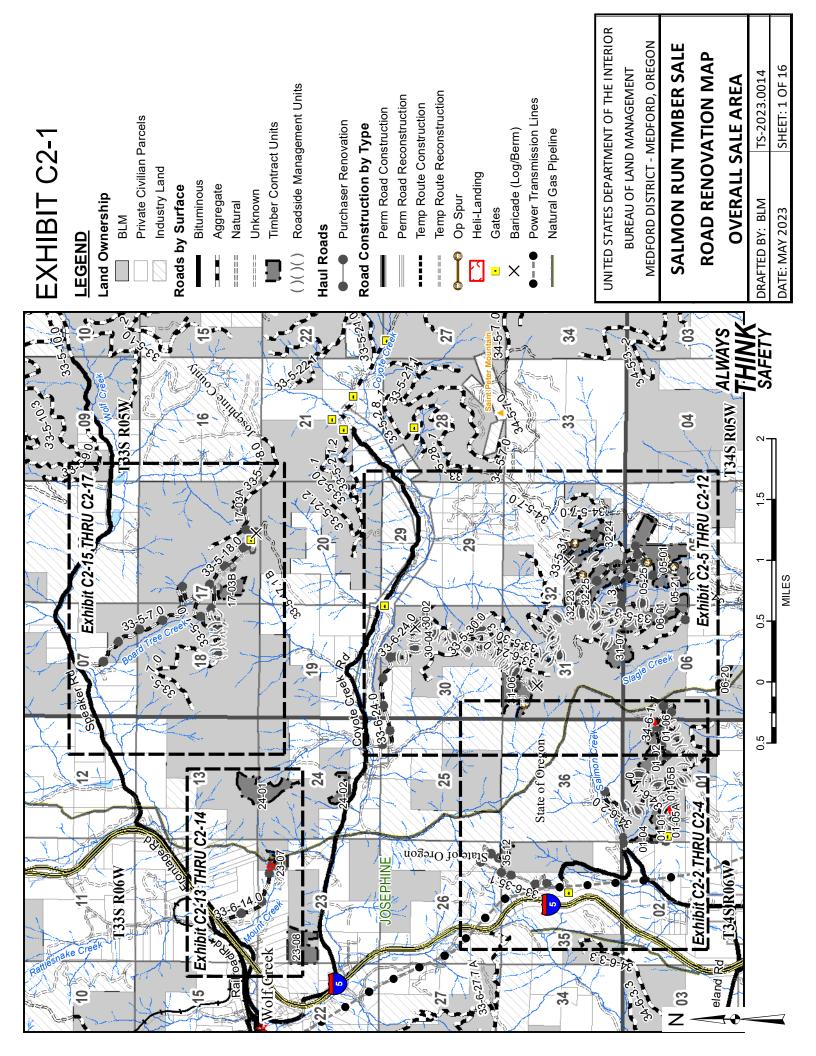
2500 Gabions

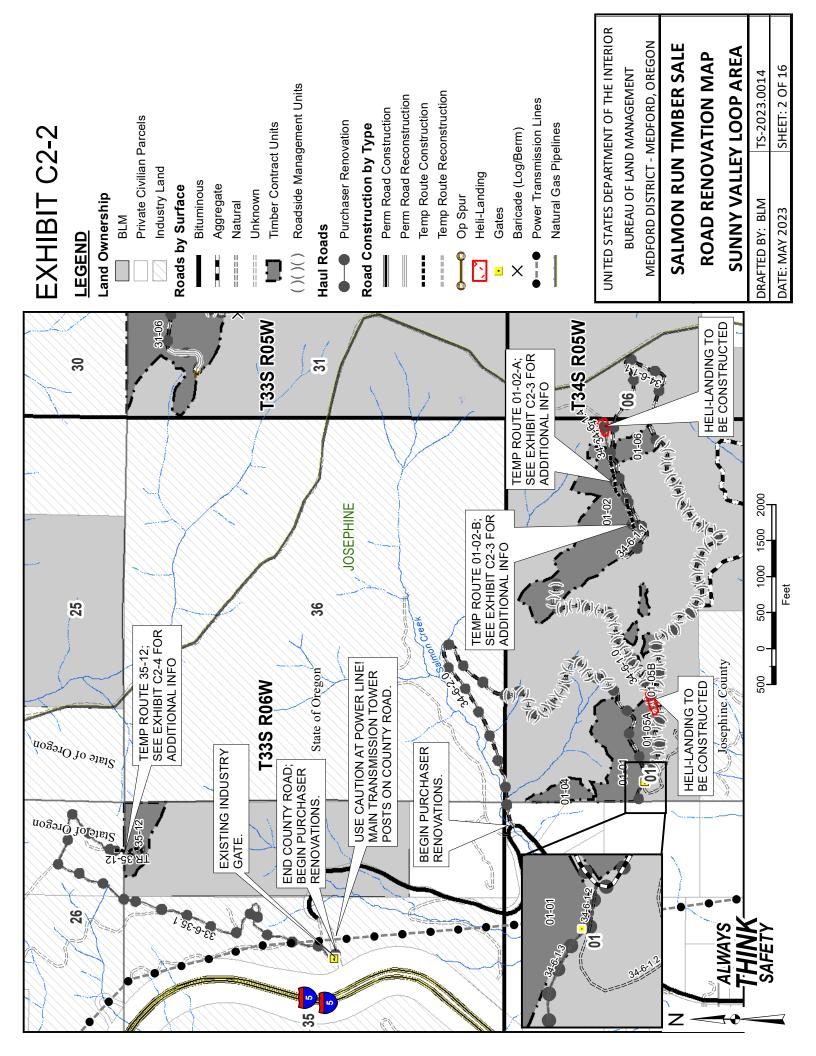
8000 N	Miscellaneous		
BMP	Installation at	MP 0.04 33-6-24.0 A-B2	
	General Laborer		2 hr
	Crew Cab or 3/4	Ton Pickup	2 hr
BMP	Installation at	MP 0.04 33-5-7.0 A	
	General Laborer		2 hr
	Crew Cab or 3/4	Ton Pickup	2 hr
BMP	Installation at	MP 0.08 33-5-32.1	
	Crew Cab or 3/4	Ton Pickup	2 hr
BMP		MP 0.10 33-5-32.1	
	Crew Cab or 3/4	Ton Pickup	2 hr
BMP		MP 0.10 34-6-2.0 A-D	
		Ton Pickup	2 hr
BMP		MP 0.25 33-5-31.2 A-B	
		Ton Pickup	2 hr
BMP		MP 0.29 34-6-2.0 A-D	
		Ton Pickup	2 hr
BMP		MP 0.85 34-6-2.0 A-D	
		Ton Pickup	2 hr
BMP		MP 1.13 33-5-31.3 A	
		Ton Pickup	2 hr
BMP		MP 1.17 33-5-31.3 A	0 1
		· · · · · · · · · · · · · · · · · · ·	
	Crew Cab or 3/4	Ton Pickup	∠ hr

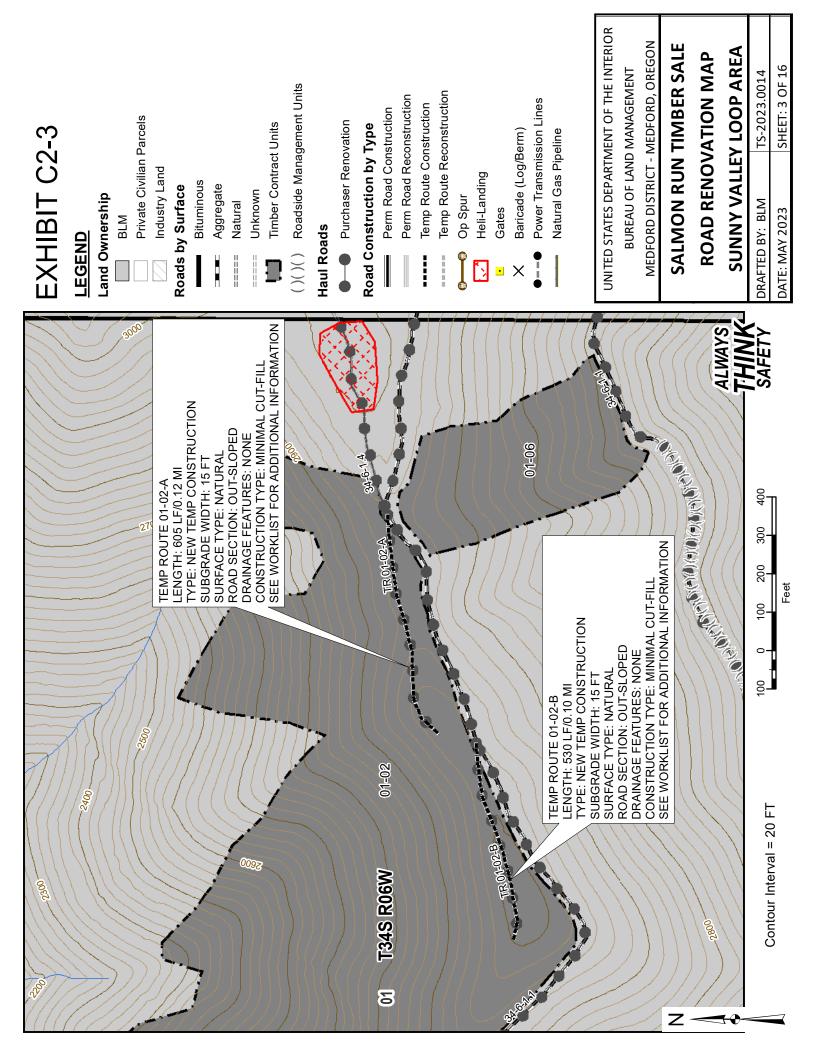
BMP Installation at MP 1.32 33-5-31.3 A	
General Laborer	2 hr
Crew Cab or 3/4 Ton Pickup	2 hr
BMP Installation at MP 1.33 33-5-7.0 A	
General Laborer	
Crew Cab or 3/4 Ton Pickup	2 hr
BMP Installation at MP 1.55 33-5-7.0 A	
General Laborer	2 hr
Crew Cab or 3/4 Ton Pickup	2 hr
BMP Installation at MP 1.59 33-5-7.0 A	
General Laborer	2 hr
Crew Cab or 3/4 Ton Pickup	2 hr
BMP Installation at MP 2.82 33-6-24.0 A-B2	
General Laborer	2 hr
Crew Cab or 3/4 Ton Pickup	
BMP Installation at MP 2.92 33-6-24.0 A-B2	
General Laborer	2 hr
Crew Cab or 3/4 Ton Pickup	
Construct Heli-Landing 34-6-1.4	~ 111
Tractor: D7 with rippers	1 hr
Excavator $-$ Small (1.5 CY)	
Motor Grader 14M	
Construct Heli-Landing 34-6-2.0 A-D	4 IIT
	1 10 40
Tractor: D7 with rippers	
Excavator -Small (1.5 CY)	
Motor Grader 14M	4 nr
Construct Heli-Landing 33-6-14.0 A-B	C 1
Tractor: D7 with rippers	
Excavator -Small (1.5 CY)	
Motor Grader 14M	6 hr
Construct Truck Turnaround TR 32-25-D	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 17-03B	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 23-07	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 32-25-E	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 01-02-B	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 32-25-F	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 31-06-A	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 01-02-A	
Tractor: D7 with rippers	3 hr
Construct Truck Turnaround TR 32-25-B	
Tractor: D7 with rippers	3 hr
Construct Truck Turn-around 33-5-32.1 NEW	
Excavator - Large (3 CY)	3 hr
Tractor: D7 with rippers	
Ramp Over Natural Gas Pipeline TR 23-07	.=
Tractor: D7 with rippers	8 hr
Excavator $-$ Small (1.5 CY)	
Reconstruct Truck Turnaround TR 32-25-A	
Tractor: D7 with rippers	3 hr
Reconstruct Truck Turnaround TR 31-06-C	- 11L
Tractor: D7 with rippers	3 hr
Reconstruct Truck Turnaround TR 31-06-B	- 11L
Tractor: D7 with rippers	3 hr
	J 111

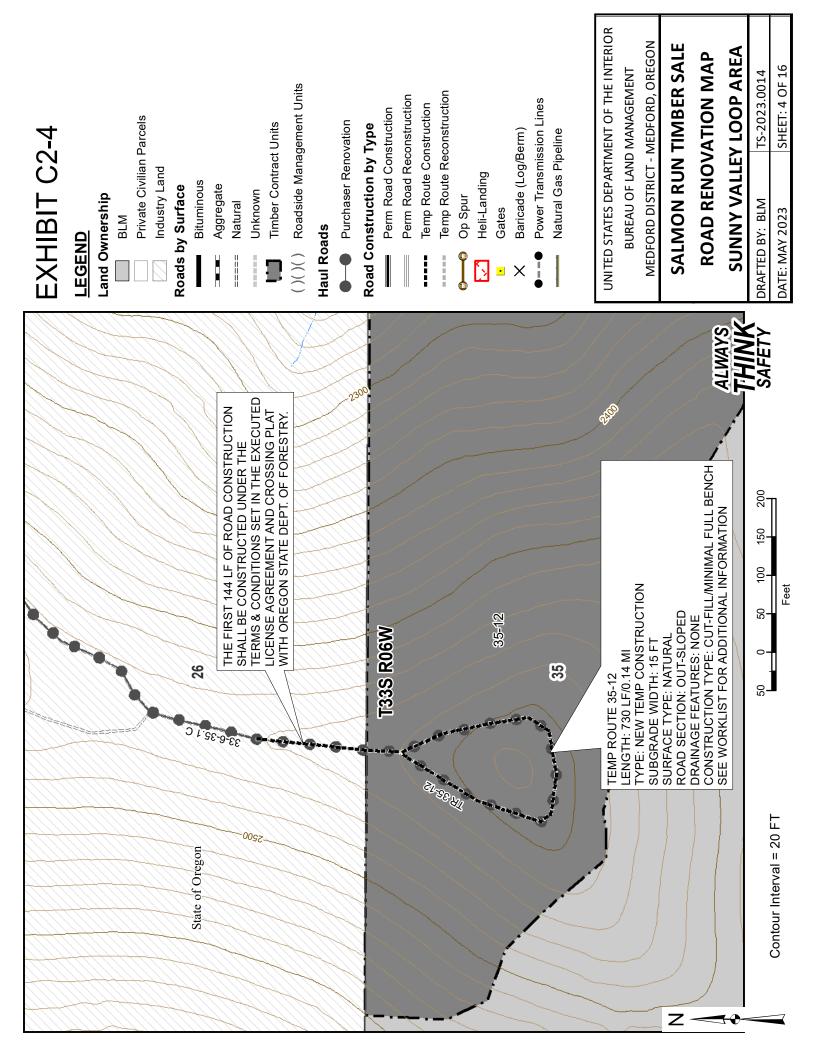
Reconstruct turnaround/landing	34-6-1.0
Tractor: D7 with rippers .	
Excavator - Large (3 CY) .	
Reconstruct turnaround/landing	
Tractor: D7 with rippers .	
Excavator - Large (3 CY) .	
Reconstruct water dip MP 0.05	34-6-1.0
Tractor: D5 with winch	
Reconstruct water dip MP 0.26	
Tractor: D5 with winch	
Reconstruct water dip MP 0.34	
Tractor: D5 with winch	
Remove Existing Berm/Barricade	
Remove Existing Berm/Barricade	TR 31-06-C
11	
Remove Existing Berm/Barricade	
Remove Existing Berm/Barricade	
Tractor: D7 with rippers .	

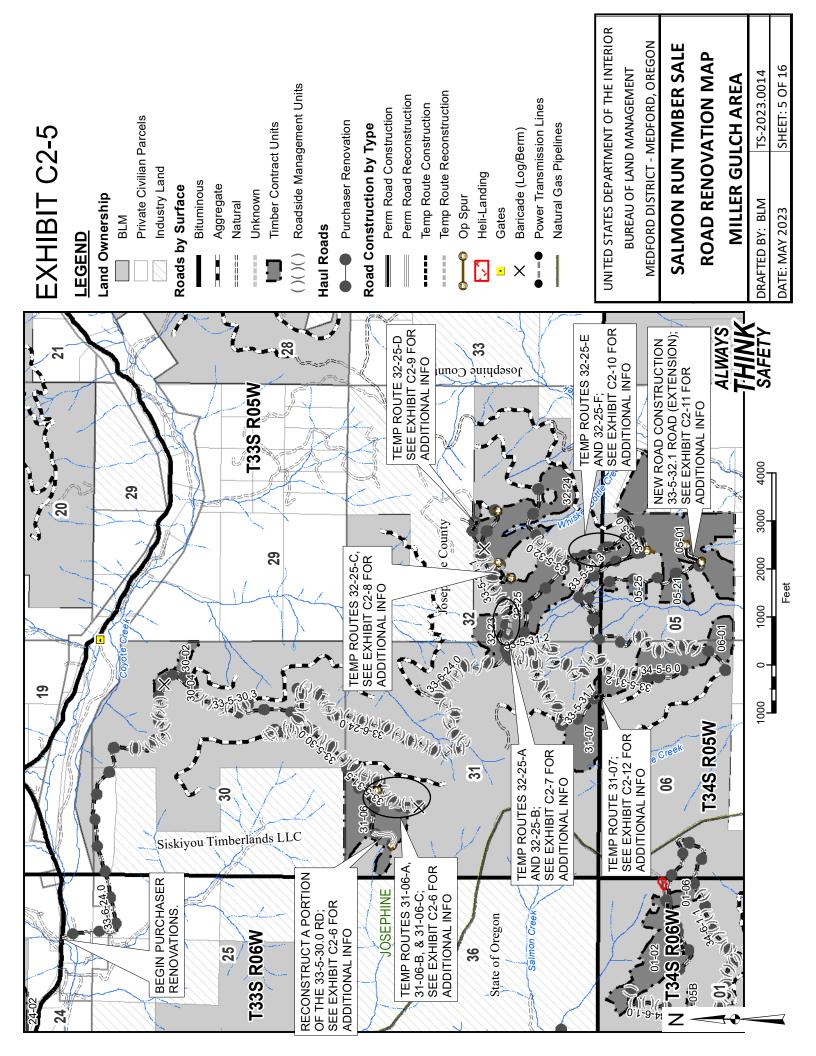


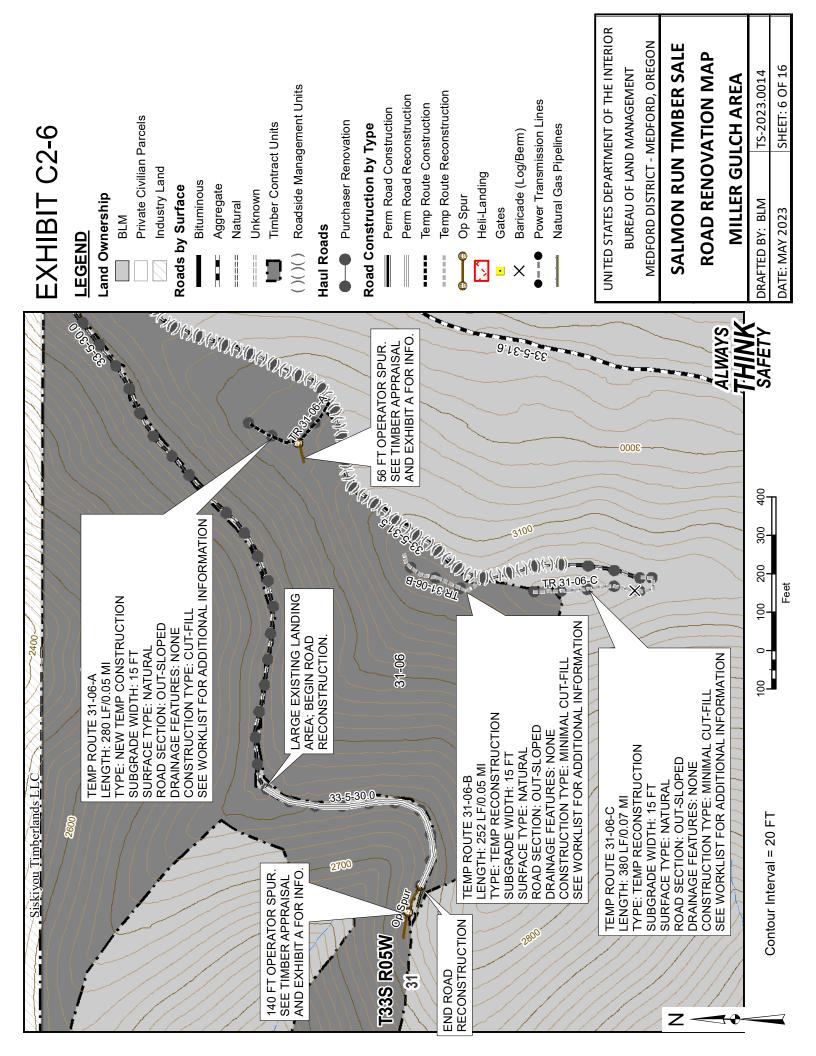


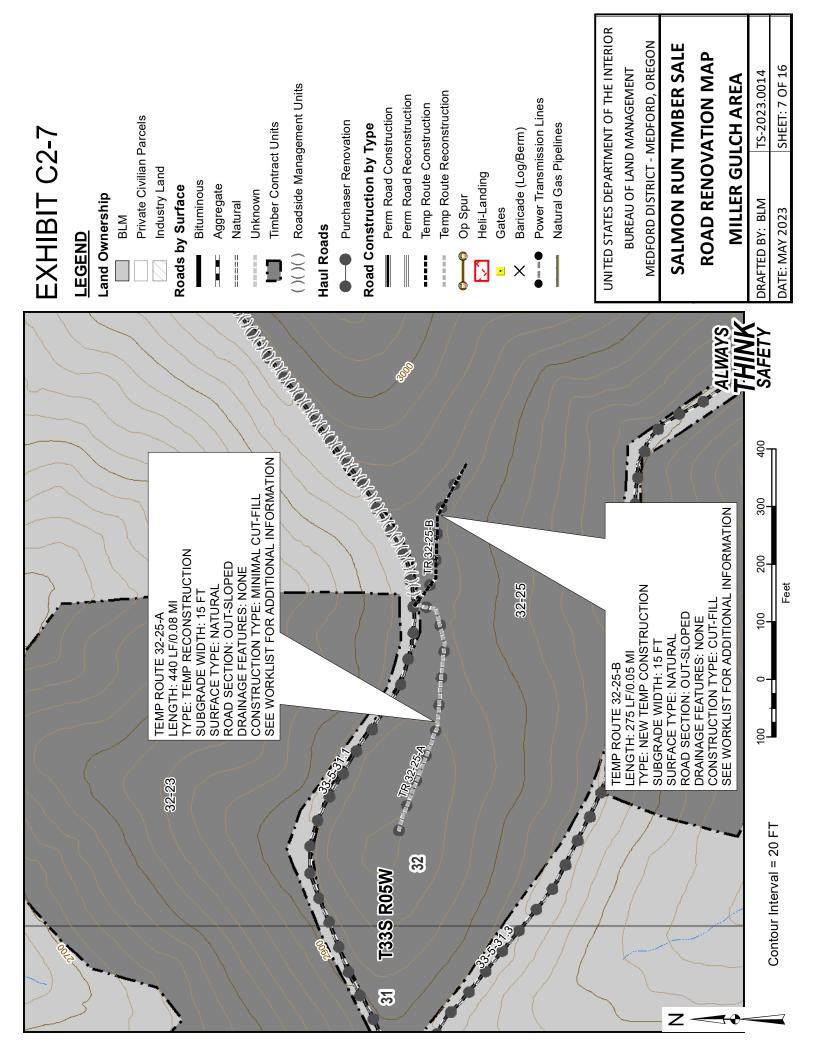


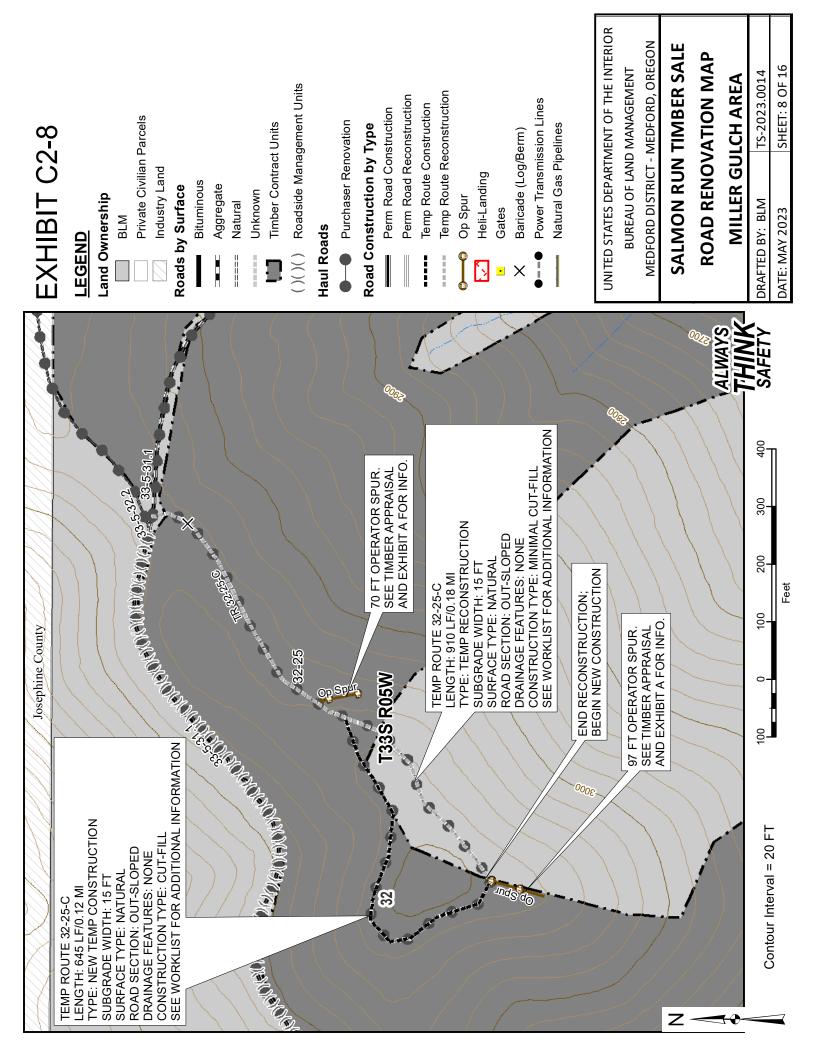


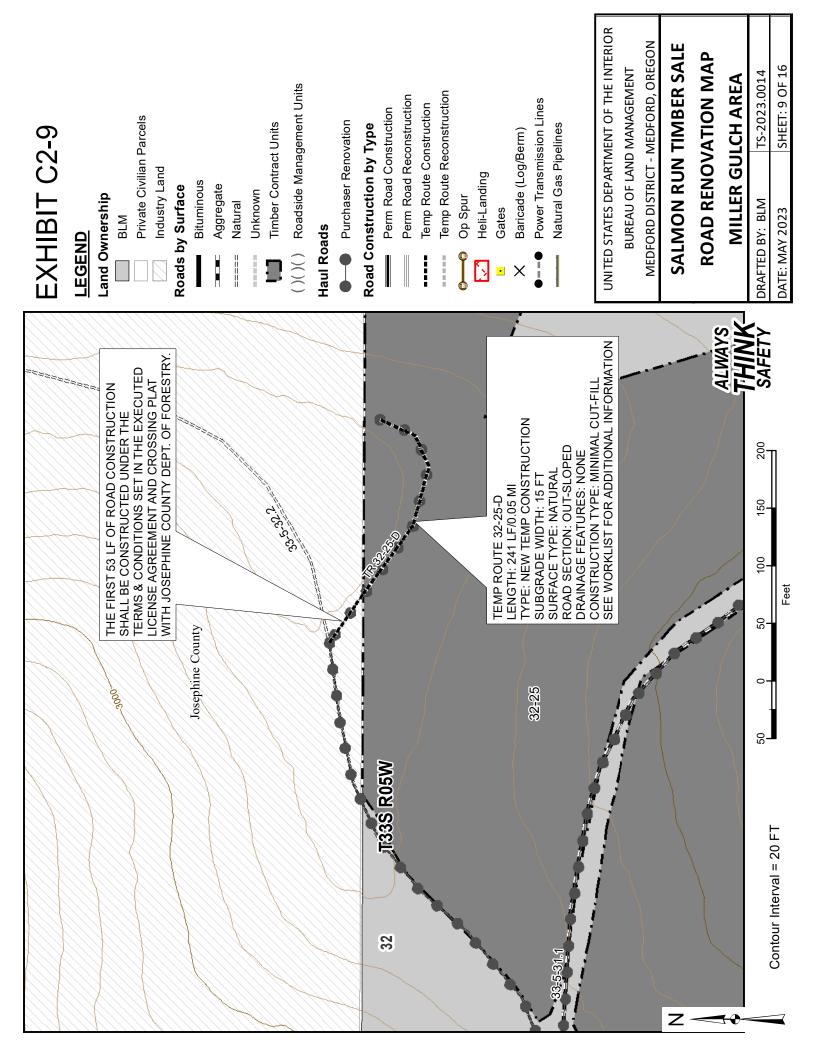


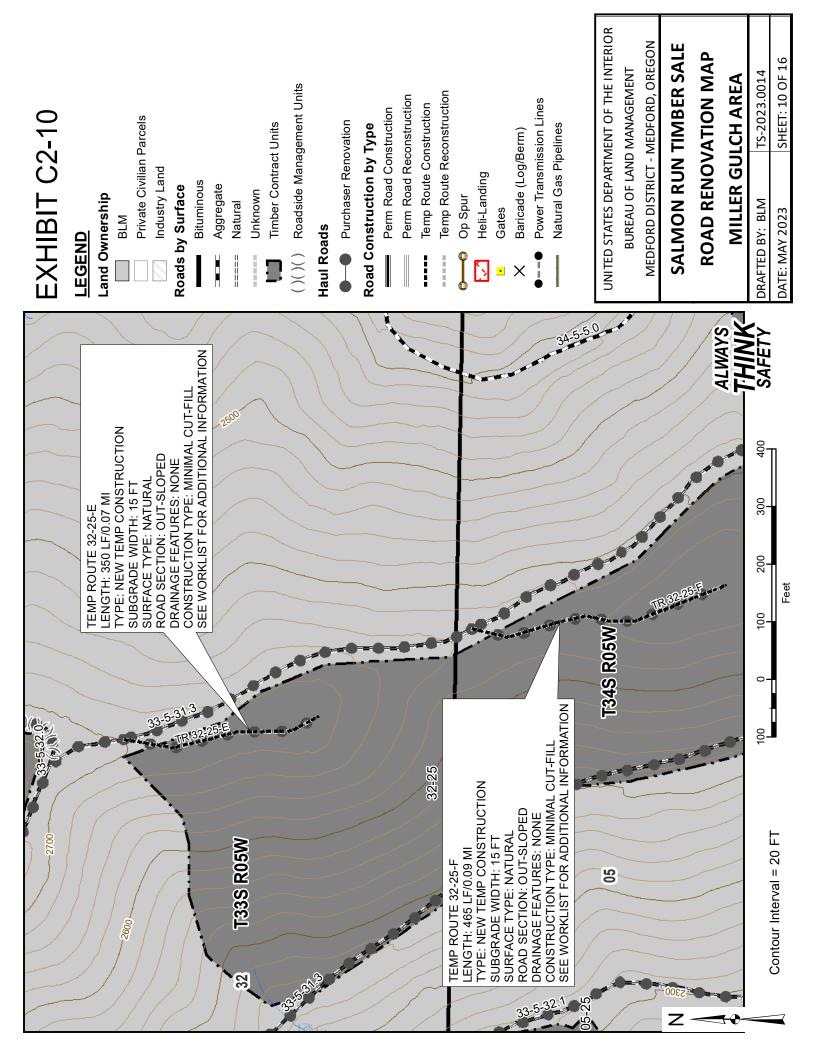


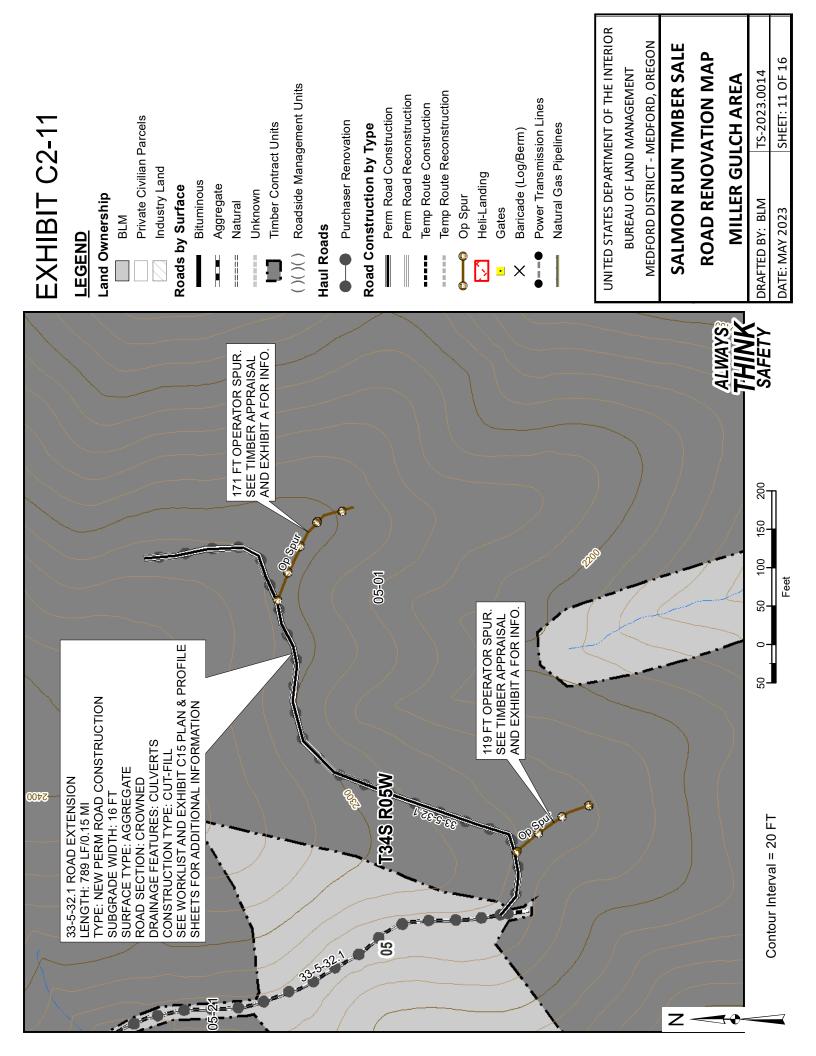


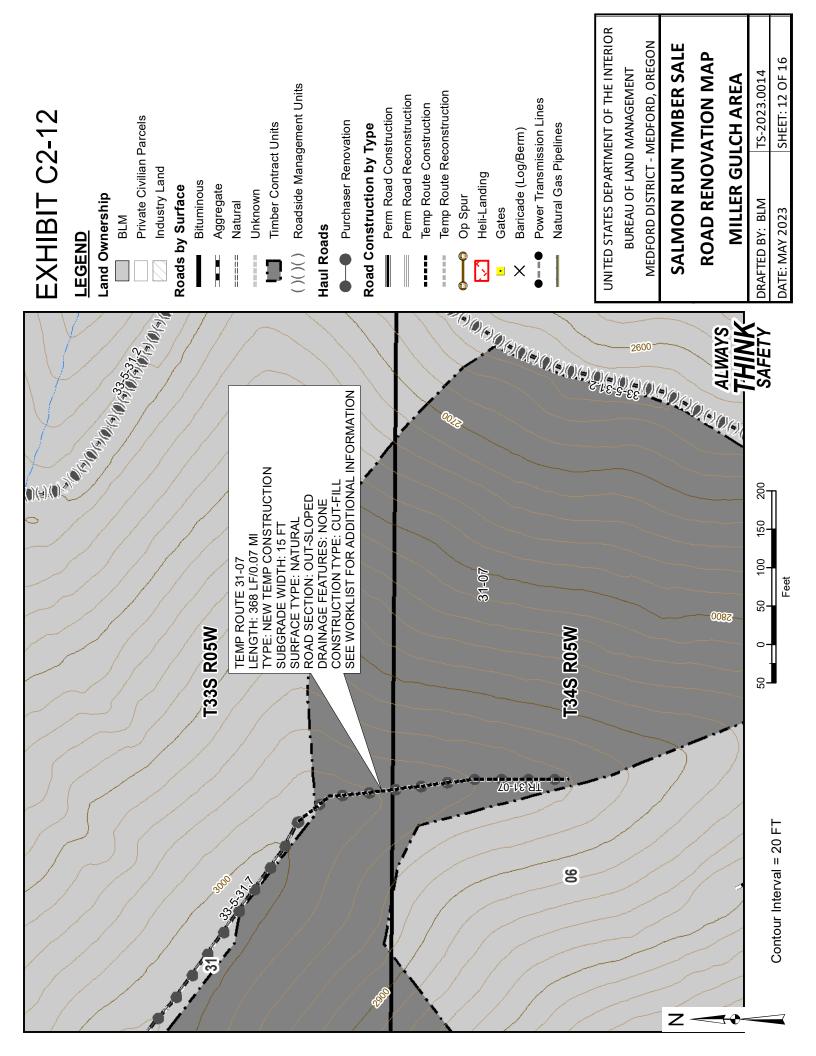


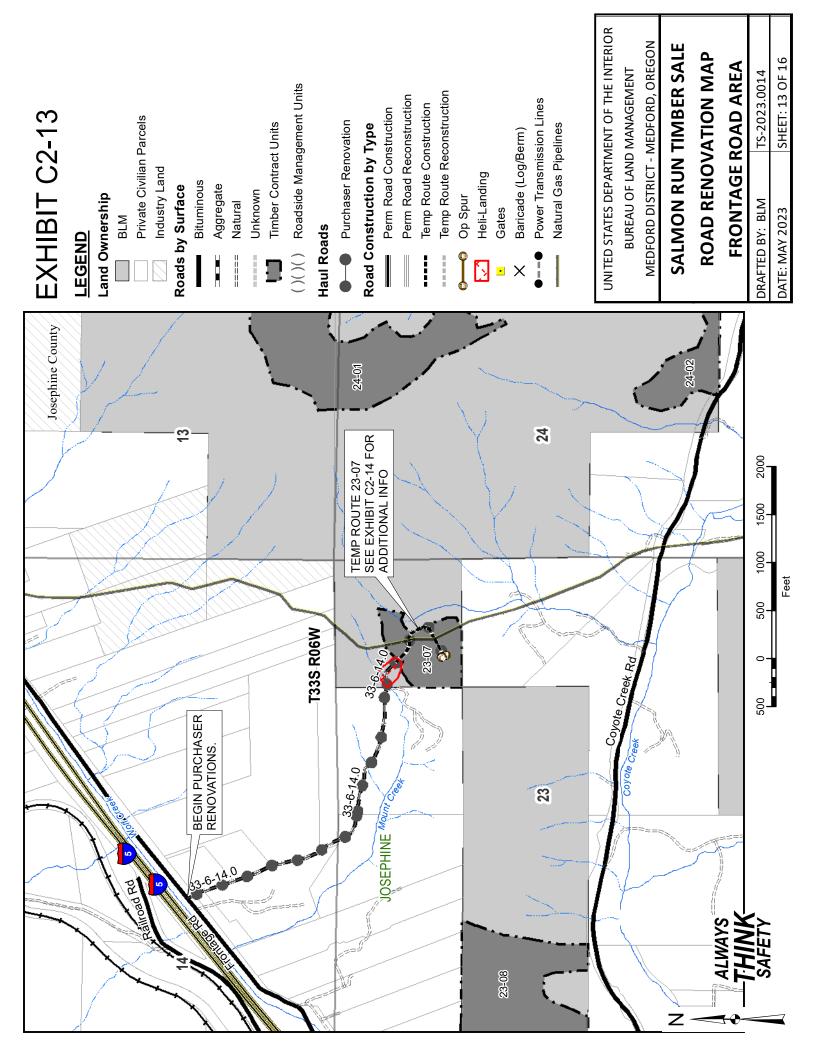


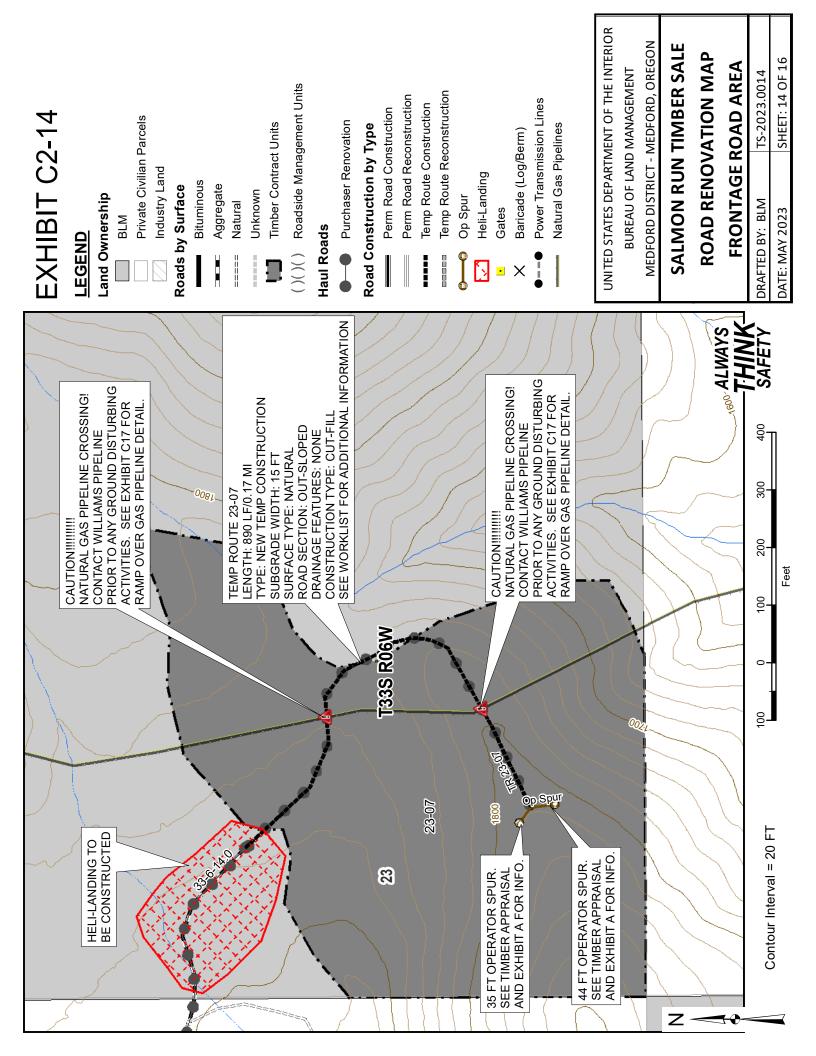


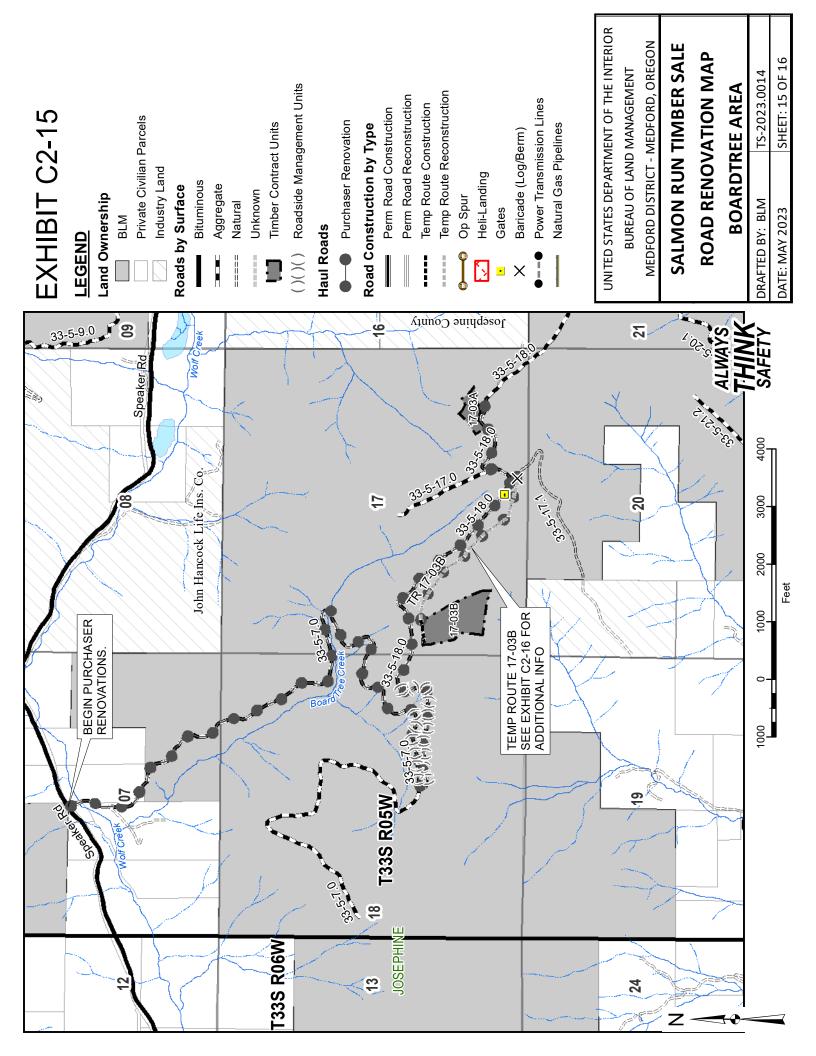


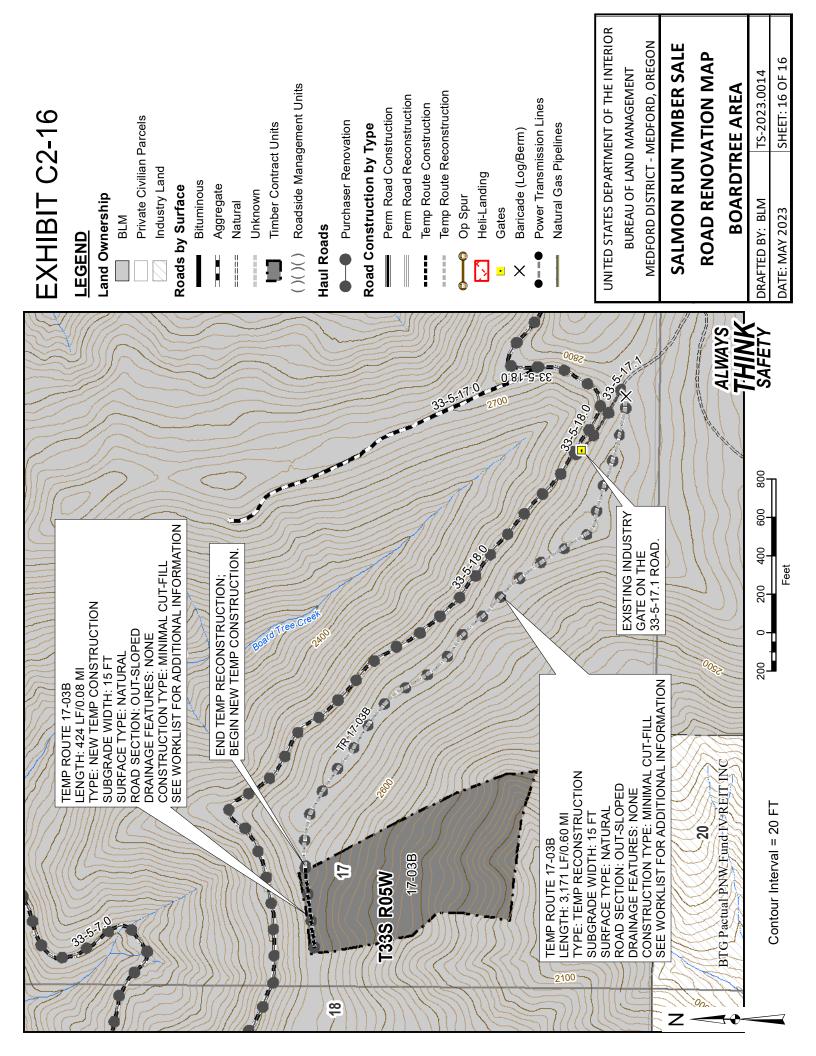












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					EXCAVATION	ATION			DRAIN/	AINAGE			RENOVATION	VTION		AGGREGATE	ATE		В		SIN	MISCELLANEOUS	SN	
				ΩN∀		I	CORR		CORRUGATED METAL PIPE							sock Bse		NOI	0/dna	киие)	S L	DN L S		
ROAD NUMBER	FROM	TO	LENGTH	CLEARING A	сочмои	воск	18"	24" 30"	36"	48"	BOUND 24" FULL	WATERING, BLADING, 30" FULL	8 ROLLING	SCERNING SCARIFICAT AND/OR HE,	SCREENED BASE COUR BLADING	CKNSHED E SNKE CON	PROTECTIO	soil tasiliaats	CHIPPING BRUSHING ROADSIDE	ISEOPE STA (SLOPE STA	INSTALL BM HYDRO POI OF CONCEF CONSTRUC WATER DIP RECONSTR	WATER DIP: CONSTRUC TURNAROU RECONSTRI	ТОRИАROUI REMOVE EX ВЕRM	CONSTRUC
SPECIFICATION NO.			Å	200	300	0			400					500	006	0 1200	1400	1800	2100	2300		8000		
UNITS	МР	MP	MILE	ACRE	ς	ζ	L L	L L	5	5	4	LF MILE	LE MILE	E MILE	Е ГСУ	Y LCY	ζ	ACRE	MILE	STA	EA EA E	EA EA EA	A EA	EA
SUNNY VALLEY LOOP ROAD SYSTEM	P ROAD S	YSTEM																						
34-6-2.0 (A-D)	0.00	2.04	2.04	1.0	1216		38 7	76	45			2.04	04 2.04	4 2.04)4 375	5 2213	3 12	0.5	2.04		ε			-
34-6-1.1	0.00	1.45	1.45	0.3								1.45	1.45	5 1.45	5	1117		0.3	1.45			-		
34-6-1.4	0.00	<u>60</u> .0	0.09	0.5	504			-				60.0	6(<u>60</u> .0	9 449	9 57			<u>60</u> .0					~
34-6-1.0	0.00	0.45	0.45	0.5								0.45	15	0.45	5		6	0.5	0.45				, -	
34-6-1.2	0.00	0.02	0.02									0.02	12	0.02	Q				0.02					
34-6-1.3	0.00	0.05	0.05									0.05	15	0.05	Q				0.05					
33-6-35-1 (A-C)	0.00	1.26	1.26									1.2	.26 0.82	2 0.32	0				1.26					
MILLER GULCH ROAD SYSTEM	D SYSTEM	1																						
33-6-24.0 (A-B2)	0.00	3 <u>.96</u>	3.96	1.1			4	482	65			90 3.9	96 3.96	3 1.00	0	2669	9 24		3.96		0			
33-5-31.7	0.00	0.15	0.15				\dashv	-	-		\neg	0.15	5	0.15	5				0.15					
33-5-31.2 (A-B)	0.00	0.73	0.73	0.4			~	82				0.73	73 0.73	3 0.25	5	30	4	0.4	0.73		-			
34-5-6.0	0.00	0.15	0.15									0.15	5	0.15	5				0.15					
33-5-31.3 (A)	0.00	1.96	1.96	0.2			34	148		60		1.96	96 1.96	0	50	1842	2 16	0.2	1.96		e e		_	
SEE PAGE 3 FOR	ROAD TOTALS	DTALS																						
RENOVATION NOTES	I NOTE:	S			-	AGGREGATE	EGA		RADA	TION	REG	GRADATION REQUIREMENTS	1ENTS			I								
1. ROADS LISTED FOR SURFACE RESHAPING	FOR SU	RFACE R	ESHAPIN	U	<u> </u>	ITEM 900	00			Ē	ITEM 1000	000		<u> </u>	ITEM 1200	200								
SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS &	UF BLAUI NTRACT	ING, WA	LEKING, & CATIONS	ું જ	M 4	SIZE 4 inch		<u>GRADATION</u> A	NO	SIZE 3 inct	SIZE 3 inch	GRAL	<u>GRADATION</u> A,C,F	ທI ←	SIZE 1 1/2 inct		GRADATION C,C-1	71						
.00NIIMAAD					ლ (3 inch 2 inch		ഫറ		2	Чс	B,D	B,D,G,H	− α	1 inch 3/4 inch		D,D-1 1-1		UNITED	STATE	UNITED STATES DEPARTMENT OF THE INTERIOR	ENT OF THI	INTEF	NOR
2. DITCH/CULVERT CLEANING SHALL CONSIST OF DITCH BLADING AND RESHAPING, CLEADING DEBDIS VECETATION SEDIMENT	RT CLEAN 4G AND R	ESHAPIN SESHAPIN	LL CONS 4G, SEDIMENT	۲ ۲	· —	1/2 incl	۲ ۲	0)			- 1		MEDF	BUREA FORD D	BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	IANAGEME EDFORD, (NT DREGC	z
CLEAR IND ALL OTHER MATERIAL HINDERING THE FLOW OF RUNOFF PER CONTRACT SPECIFICATIONS & DRAWINGS.	DUCE DINOFF PE	ATERIAL ER CONT INGS.	HINDERIN	<u>. බ</u>										-		ALWAYS				S T S	SALMON RUN TIMBER SALE ESTIMATE OF OLIANTITIES*	RUN SALE	Ŭ L	*
*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	T PAY ITE	SE ONLY EMS.	QUANT.	ITIES											1 1 1 SA	LIV FETY	7	3	DRAFTED BY: BLM DATE: APRIL 2023	BY BL		SCALE: NONE SHEET: 1 OF 4	ш.†	
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					EXCAVATION	ATION			DRAI	AINAGE			RENC	RENOVATION		AGG	AGGREGATE					MISCE	MISCELLANEOU	SNC		
ROAD NUMBER	FROM	TO	LENGTH	GRUBBING CLEARING AND	соммои	воск	CORF 18"	Z4" 3	CORRUGATED METAL PIPE	L PIPE 48"	ВОЛИВ 30., ЕЛГГ 80., ЕЛГГ 54., ЕЛГГ		BLADING, & ROLLING & ROLLING	DITCH AND/OR CULVERT CLEANING	SCARIFICATION AND/OR HEAVY BLADING	SUBE COURSE (4"-minus) BASE COURSE BASE COURSE	SI OBE (1-1/S"-minus) CRUSHED ROCK SURF. COURSE	SOIL SLOPE SOIL	NOITAZIJIBATS	ВКЛ2НИС УЛРИИС) ENGINEERINC СНІБЬІИС	(SLOPE STAKING) INSTALL BMPs @ ОF CONCERN OF CONCERN	CONSTRUCT WATER DIPS RECONSTRUCT WATER DIPS	CONSTRUCT TURNAROUND RECONSTRUCT	TURNAROUND REMOVE EXIST.	СОИЗТRUCT	ЭНЕГІ-ГУИДІИС
SPECIFICATION NO.				200	300	Q	4	4	- 1	-			-	500		-	6	20 18	~			-	18	-	4	
UNITS	MP	MP	MILE	ACRE	с	ç	Ц		LF LF	5	Ч	5	MILE	MILE	MILE	гсу	ГСЛ	CY ACRE	RE MILE	LE STA	EA	EA EA	EA EA	A EA	EA	4
MILLER GULCH ROAD SYSTEM (CONT)	D SYSTEN	I (CONT)																								
33-5-32.1	00.00	0.63	0.63					140 1	190			40	0.63 (0.63	0.15		1003	10	0.6	63	7					
34-5-5.0	00.0	0.21	0.21										0.21 (0.21	0.05				0.21	21						I
33-5-32.0	0 <u>.00</u>	0.39	0.39	0.1				80				20	0.39 (0.39	0.10		30	2 0.1	1 0.39	39						
33-5-31-1	0.00	0.66	0.66	0.2									0.66 (0.66	0.20			0.2	2 0.66	36						
33-5-32.2	00.00	0.08	0 <u>.08</u>										0.08	-	0.08				0.08	80		_				
33-5-30.0 (A-B)	0.00	1.10	1.10	1.0									1.10	0.64	0.46			0	5 1.10	10						
33-5-31.5	0 <u>0</u> 0	0.40	0.40	0.2									0.40	-	0.10			0.2	2 0.40	<u>10</u>						
33-5-30.3	00.0	0.08	0.08	0.1							_		0.08	0.08	0.08			0.1	1 0.08	38						
33-5-30.2	0.00	0.13	0.13										0.13 (0.13	0.13				0.13	13				-		
FRONTAGE ROAD SYSTEM	YSTEM																									
33-6-14.0 (A-B)	0.00	0.71	0.71	0.8	1284		30						0.71 (0.71	0.15	563	881		0.71	71					~	
									-																	
SEE PAGE 3 FOR	3 FOR ROAD TOTALS	DTALS																				_				Т
RENOVATION NOTES	I NOTE:	S			I	AGGREGATE	REGA	TEG	RAD	ATIO	N RE	QUIRE	GRADATION REQUIREMENTS	S												
1. ROADS LISTED FOR SURFACE RESHAPING	FOR SUI	REACE F	ESHAPIN	<u>0</u>	_	ITEM 900	006				ITEM 1000	1000			ITEM	ITEM 1200										
SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS & DRAWINGS	OF BLADI INTRACT	NG, WA SPECIFI	Tering, { cations	<u>ক</u>	₩. N	SIZE 4 inch		<u>GRADATION</u> A		ა ო	SIZE 3 inch	GF	GRADATION A,C,F	zl	<u>SIZE</u> 1 1/2 ir		<u>GRADATION</u> C,C-1	NOL								
2. DITCH/CULVERT CLEANING SHALL CONSIST	T CLEAN	⊿HS 9N	VIL CONS	ST		3 inch 2 inch 1 1/2 inch	Ę	ഫറല		2	Inch	_	в,D,G,H		1 inch 3/4 inch	۲	D, П, 1- 1-		UNI	TED STA' BURI	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	ARTMEN AND MAI	T OF THI NAGEME		RIOR	~
OF DITCH BLADING AND RESHAPING, CLEARING DEBRIS. VEGETATION. SEI	NG AND F S. VEGE'	ESHAPII TATION.	NG, SEDIMEN	Ē															ž	1EDFORE	DISTRIC	T - MEI	DFORD, (OREG	x	
ROCK AND ALL OTHER MATERIAL HINDERING THE FLOW OF RUNOFF PER CONTRACT SPECIFICATIONS & DRAWINGS.	THER M/ JNOFF PE & DRAW	TTERIAL ER CONT INGS.	HINDERI	Ű												ALWAYS THINI	YV VIK		Ш	STIM	SALMON RUN TIMBER SALE ESTIMATE OF QUANTITIES*	ER S.	ALE	Ë	ۍ ۲	
*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	'IONAL U(T PAY ITE	SE ONLY EMS.	UAN1	ITIES											H (2) H	1 1 1 AFE	TY TY		DRAF	DRAFTED BY: BLM DATE: APRIL 2023	BLM 023	SC/	SCALE: NONE SHEET: 2 OF 4	■ ¹		
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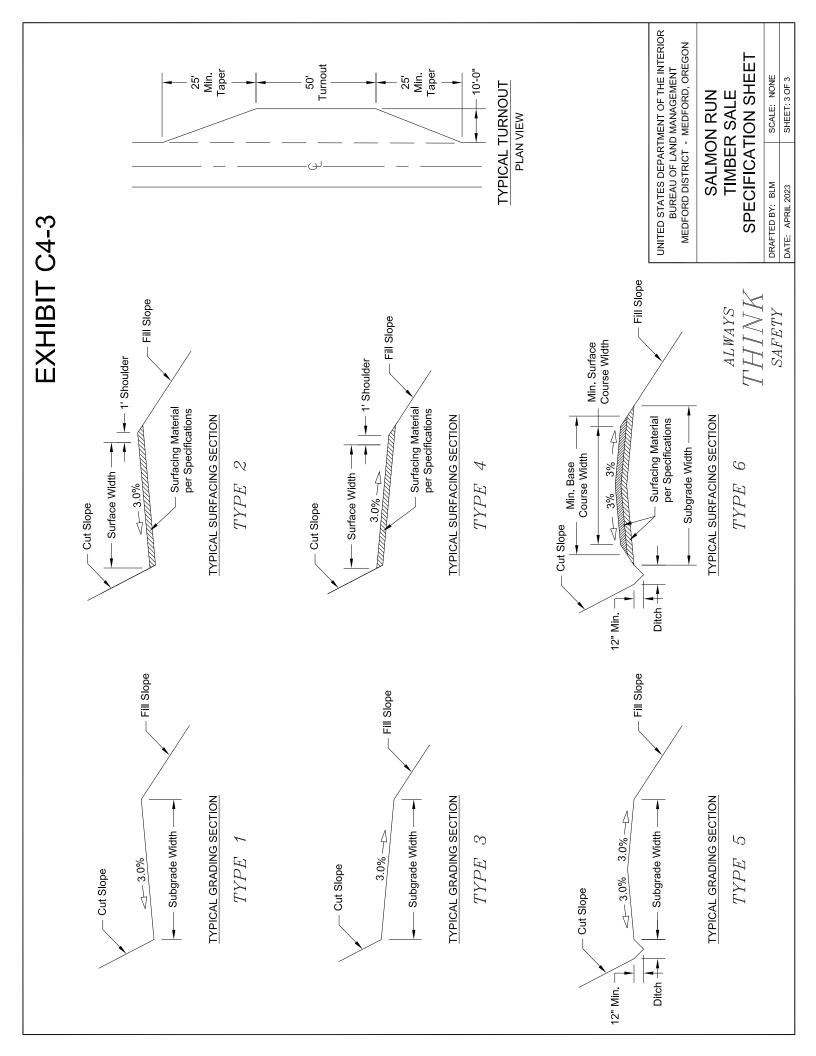
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AD Image: Second sector for the field of th						EXCAV	ATION			DRA	NAGE			RE		N	AGG	BREGAT	ш		В		Σ	IISCEL	LANEO	SN		
AD ERA FILM FILM ERA FILM FIL					D			COR	RUGATE	ED MET/	AL PIPE	DOW	ISPOUT		٤	ر N		E		N	10/01	(ЭN	_S.	T	1:		ť	-
$ \frac{1}{10000000000000000000000000000000000$	ROAD NUMBER	FROM	TO	LENGTH	CLEARING ANI GRUBBING	сочмои	воск	18"					30" FULL	WATERING,	DITCH AND/OF CULVERT CUEANING	SCARIFICATIO AND/OR HEAV BLADING		CKUSHED ROC		NOLLAZIJIBATS	BRUSHING AN	(SLOPE STAKI	CONSTRUCT	S9IO A3TAW	ТИВИАВОИИР ТОВАТЕЛОС	REMOVE EXIS	HELI-LANDING CONSTRUCT BERM	
Image Image <th< td=""><td>SPECIFICATION NO.</td><td></td><td></td><td></td><td>200</td><td>30</td><td>0</td><td></td><td></td><td>40</td><td>C</td><td></td><td></td><td></td><td>500</td><td></td><td>006</td><td>1200</td><td></td><td></td><td></td><td>2300</td><td></td><td>8</td><td>000</td><td></td><td></td><td></td></th<>	SPECIFICATION NO.				200	30	0			40	C				500		006	1200				2300		8	000			
223 223 025 2 </td <td>UNITS</td> <td>MP</td> <td>MP</td> <td>MILE</td> <td>ACRE</td> <td></td> <td>ς</td> <td>ц</td> <td>\vdash</td> <td>\vdash</td> <td></td> <td></td> <td>5</td> <td>MILE</td> <td>MILE</td> <td>MILE</td> <td>ΓС</td> <td>ΓС</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A EA</td> <td>EA</td> <td></td>	UNITS	MP	MP	MILE	ACRE		ς	ц	\vdash	\vdash			5	MILE	MILE	MILE	ΓС	ΓС								A EA	EA	
2.29 2.29 0.0 0.0 2.0 0.0 0.06 0.01 0.0 1.0 1.0 1.0 1.0 0.0 0 <td< td=""><td>BOARDTREE ROAD .</td><td>SYSTEM</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	BOARDTREE ROAD .	SYSTEM																										
1.70 1.70 <th< td=""><td>33-5-7.0 (A)</td><td>00.0</td><td>2.23</td><td>2.23</td><td>0.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2.23</td><td>2.23</td><td>0.55</td><td></td><td></td><td>7</td><td>0.2</td><td>2.23</td><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td></th<>	33-5-7.0 (A)	00.0	2.23	2.23	0.2									2.23	2.23	0.55			7	0.2	2.23		4					
008 008 008 008 008 0 <th< td=""><td>33-5-18.0 (A-B)</td><td>0.00</td><td>1.70</td><td>1.70</td><td>0.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1.70</td><td>1.40</td><td>0.40</td><td></td><td></td><td>4</td><td>0.2</td><td>1.70</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	33-5-18.0 (A-B)	0.00	1.70	1.70	0.2									1.70	1.40	0.40			4	0.2	1.70							
T-90 0.15 0.9 1405 158 7.9 2.0 609 291 2 0.4 7-90 0.15 0.9 1405 158 7.9 0.1 20 609 291 2 0.4 20 1 1 1 1 1 1 1 1 1 2 0.4 20.1 1 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 0.4 2 2 0.4 2 0.4 2 0.4 2 0.4 2 2 0.4 2 2 2 0.4 2 1 1 1 1 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	33-5-17.1	0.00	0.08	0.08										0.08		0.08					0.08							
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FFB 0.15 0.9 1405 156 78 1 20 10 20 20.4 20 F	NEW ROAD CONSTR	RUCTION																										
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SIZE GRADATION SIZE GRADATION 4 inch A 3 inch A C,F 1 1/2 inch C,C-1 3 inch C 2 inch B,D,G,H 1 1/2 inch C,C-1 1 1/2 inch C 1 1/2 inch D,D-1 UNITED 1 1/2 inch D 3/4 inch E,E-1 UNITED 1 1/2 inch D AL WAYS AL WAYS EST	1. ROADS LISTED	FOR SU	RFACE R	ESHAPIN	Ū	-	ITEM (006			-	ITEM	1000			ITE	M 120(0										
F 11/2 inch B 3 inch A,C,F 11/2 inch D,C,T 11/	ROLLING PER CC	OF BLAD	SPECIFI	rering, ¿ cations	્રે જ		SIZE		RADA			SIZE		RADAT	NOI	<u>SIZE</u>		GRAD/	<u>VTION</u>									
T 2 inch C 3/4 inch E,E-1 UNIEU MEDE 41/2 inch D MEDE 41/2 inch D MEDE 41/2 inch D MEDE 41/2 inch E,E-1 UNIEU EE	DRAWINGS.						3 inch		< ₪			2 inch		A,C,F B,D,G,I	Т	1 I/2	und T	סכ		[:								
ES THINK SAFETY SAFETY TIMBER TIMBER SALMON TIMBER TIMBER DRAFTED BY: BLM	2. DITCH/CULVEF OF DITCH BLADIN	AT CLEAN	VING SHA	VIL CONS	IST I		2 inch 1 1/2 inc	ž	UО							3/4 ir	þ	ш	5	>		IAIES UREAU NRD DIS	DEPARI OF LANE STRICT -	MENI (MANP MEDF	OF THE AGEME ORD, O	IN IE NT OREGO	NON NO	
ANTITIES $THINK$ ESTIMATE OF C SAFETY DRAFTED BY: BLW DATE: APRIL 2023	CLEAKING DEBK ROCK AND ALL C THE FLOW OF RL SPECIFICATIONS	LIS, VEGE DTHER M/ JNOFF PE & DRAW	LIALION, ATERIAL ER CONT INGS.	SEUIMEN HINDERII RACT	- Q												AL W	4YS				S⊨	ALMO MBEF	N RI	Ц Ц Ц Ц			1
SAFETY DRAFTED BY: BLM DATE: APRIL 2023																	Η	NK	Ν.,		ESTI	MAT	ЕОЕ	QU/	ANTI	E	т Ш	
	*FOR INFORMAT SHOWN ARE NO	TONAL U	SE ONLY EMS.	QUAN	rities											1	SAFL	ŢŢY		P D	AFTED B TE: APR	Y: BLM IL 2023		SCALE SHEE	T: 3 OF	ш 4		

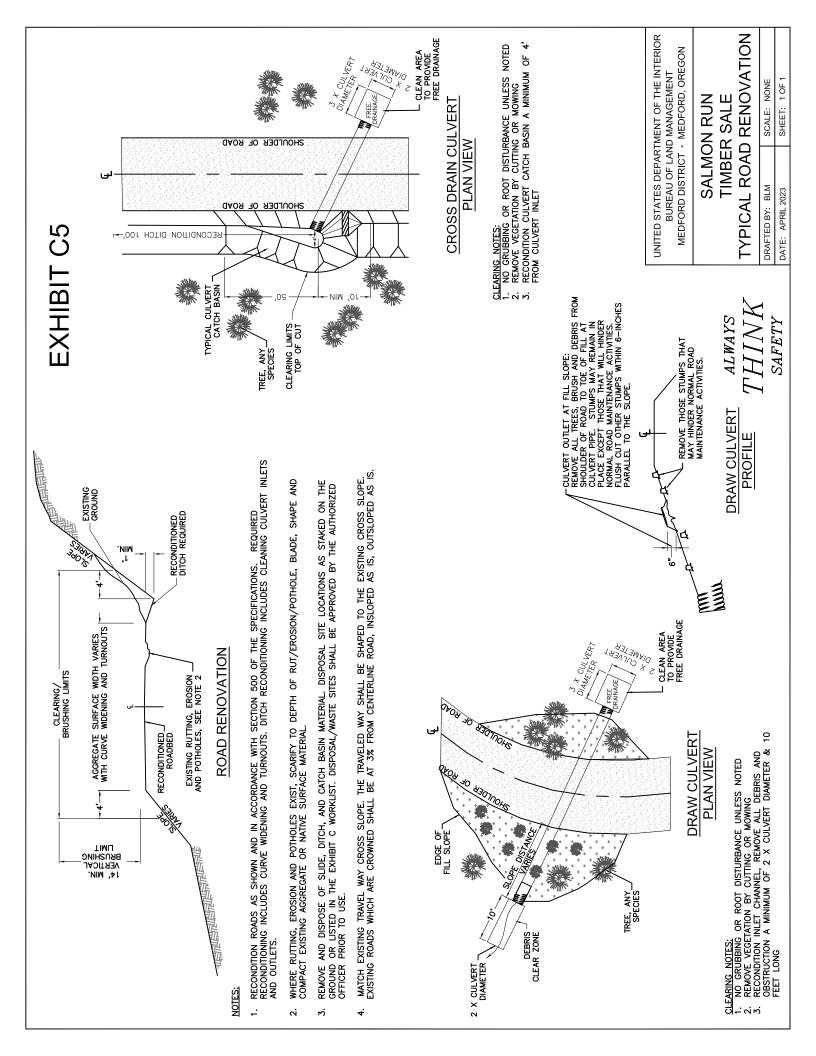
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					CLEARING &	8	EXCAVATION	LION	TEMP	ORARY		CONSTRI	CONSTRUCTION/RECONSTRUCTION	RECONST	TRUCTIO		AGGREGATE	GATE			MISCI	MISCELLANEOUS	SUC
				U	GRUBBING			оск	DRA	DRAINAGE							воск se) OCK SZE	N	NO		TN	1E
TEMP ROUTE NUMBER	FROM	TO	LENGTH	TOTAL 8383A	CLEARING CLEARING	СLEARING ЭVA) НТОІМ	коммол	RIPPABLE R	18	24" 36"	- Соизтяисо Weter Dips	-DUATENOD IUOAANAUT	үүаэн Эиідаяээя	ЯЕСОИЗТЯ! ЕХ. МАТЕР I	RECONSTRL EX. ТURNAR	хэ эvомэя Яяаа/мяэв	(4"-minus) SCREENED BASE COUR	SURF COUF	PROTECTIO SLOPE	soil Stabiliaats	NSTALL BM 107 DOIN 0F CONCER 0F CONCER	MEGA GATE REPLACEME	RAMP OVER
SPECIFICATION NO.					200		300		4	400			2	500			006	1200	1400	1800		8000	
UNITS	STA	STA	MILE	ACRE	L/M/H	FEET	с	ζ	- 	L L	EA	EA	MILE	EA	EA	EA	ς	C√	ς	ACRE	EA	EA	EA
TR 01-02-A	00+0	6+05	0.11	<u>0.6</u>	т	40	1156					-								0.3			
TR 01-02-B	00+0	5+30	0.10	0.5	т	40	1013					-								0.2			
TR 35-12	00+0	7+30	0.14	0.9	т	50	2312													0.4			
TR 31-06-A	00+0	2+80	0.05	0.2	т	30	206					-								0.1			
TR 31-06-B	00+0	2+52	0.05	0.2	т	30	186						0.05		-					0.1			
TR 31-06-C	00+0	3+80	0.07	0.3	т	30	280			-			0.07		-	1				0.1			
TR 32-25-A	00+0	4+40	0.08	0.3	т	30	324						0.08		1					0.1			
TR 32-25-B	00+0	2+75	0.05	0.3	т	40	390					-								0.1			
TR 32-25-C	00+0	15+55	0.29	1.3	т	30/40	1904						0.17			٢				0.6			
TR 32-25-D	00+0	2+41	0.05	0.2	т	30	178					-								0.1			
TR 32-25-E	00+0	3+50	0.07	0.3	т	30	258					-								0.1			
TR 32-25-F	00+0	4+65	60.0	0.4	т	30	343			-		-								0.2			
TR 31-07	00+0	3+68	0.07	0.3	т	30	271													0.1			
TR 23-07	00+0	8+90	0.17	0.6	т	30	656					-								0.3			2
TR 17-03B	00+0	35+95	0.68	2.5	т	30	2650			+		-	0.60			٢				1.2			
TEMP ROUTE TOTALS	TALS		2.07	8.9			12,127					15								4.0			
CONSTRUCTION NOTES	ON NC	TES																					
1. ALL TEMP ROUTE SUBGRADE OR RUNNING SURFACE WIDTHS SHALL NOT EXCEED 15 FEET.	TE SUBC	SRADE C	JR RUNN	NG SUI	RACE	WIDTH.	S SHALL	NOT															
2. TURNOUTS ARE AUTHORIZED BUT SHALL BE CONSTRUCTED AT THE AUTHORIZED OFFICERS DISCRETION AND KEPT TO A MINIMUM QUANTITY TO AVOID UNNECESSARY DISTURBANCE.	E AUTHC FICERS [SARY DI:	DRIZED E DISCRET STURBAI	BUT SHAL TON AND NCE.	L BE C KEPT	ONSTR TO A MI	UCTED	AT THE QUANTI	TY TO											UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	DEPARTN OF LAND TRICT - I	AENT OF MANAGE MEDFOR	THE INTE MENT D, OREG	ERIOR
3. STA's = 100 LINEAR FEET.	EAR FEE	Ë.														Ç			SA	SALMON RUN	N RUN	7	
4. TURNAROUND AREAS SHALL NOT EXCEED 0.25 ACRES OR 60 FOOT RADIUS.	AREAS (SHALL N	OT EXCE	ED 0.25	ACRE	S OR 6() FOOT F	RADIUS						F	THINF	VK		EST	IIMBER SALE ESTIMATE OF QUANTITIES*	Itimber Sale Ate of Quan'	QUAN		* S
*FOR INFORMATIONAL USE ONLY. SHOWN ARE NOT PAY ITEMS.	T PAY ITI	SE ONLY EMS.	 QUANTITIES 	TITIES										4	SAFETY	TY		DRAFTED BY: BLM DATE: APRIL 2023	BY BLM RIL 2023		SCALE: NONE SHEET: 4 OF 4	JONE 1 OF 4	
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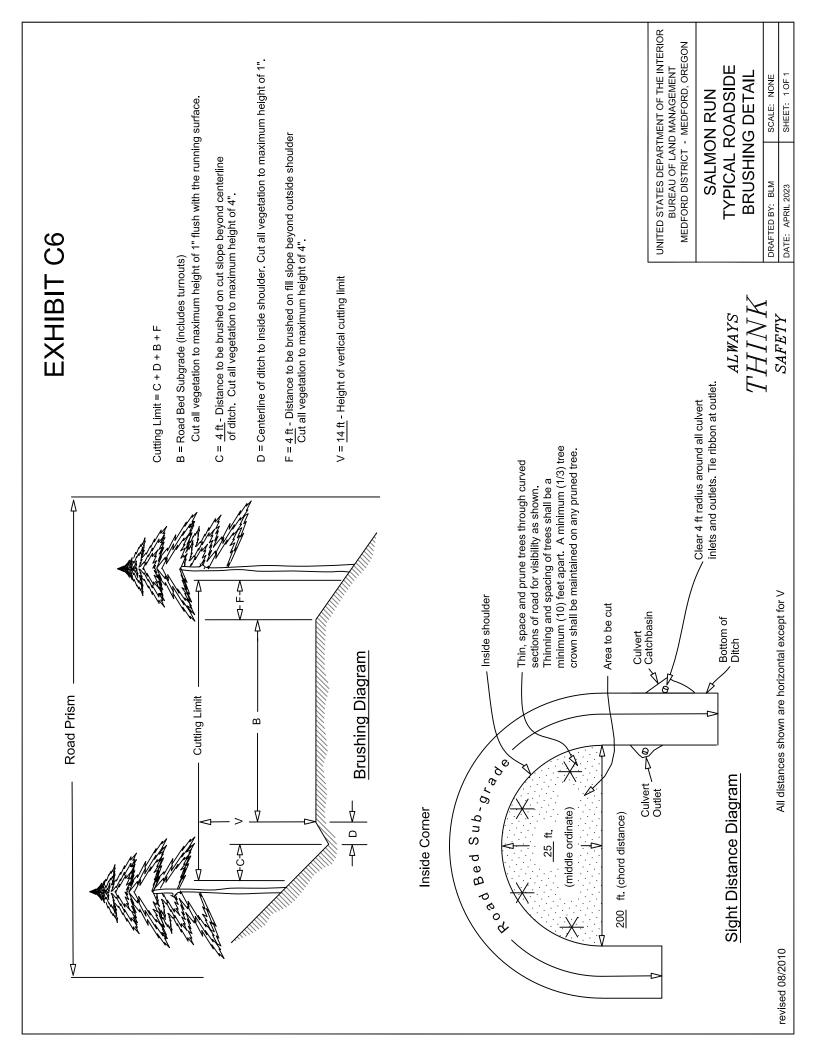
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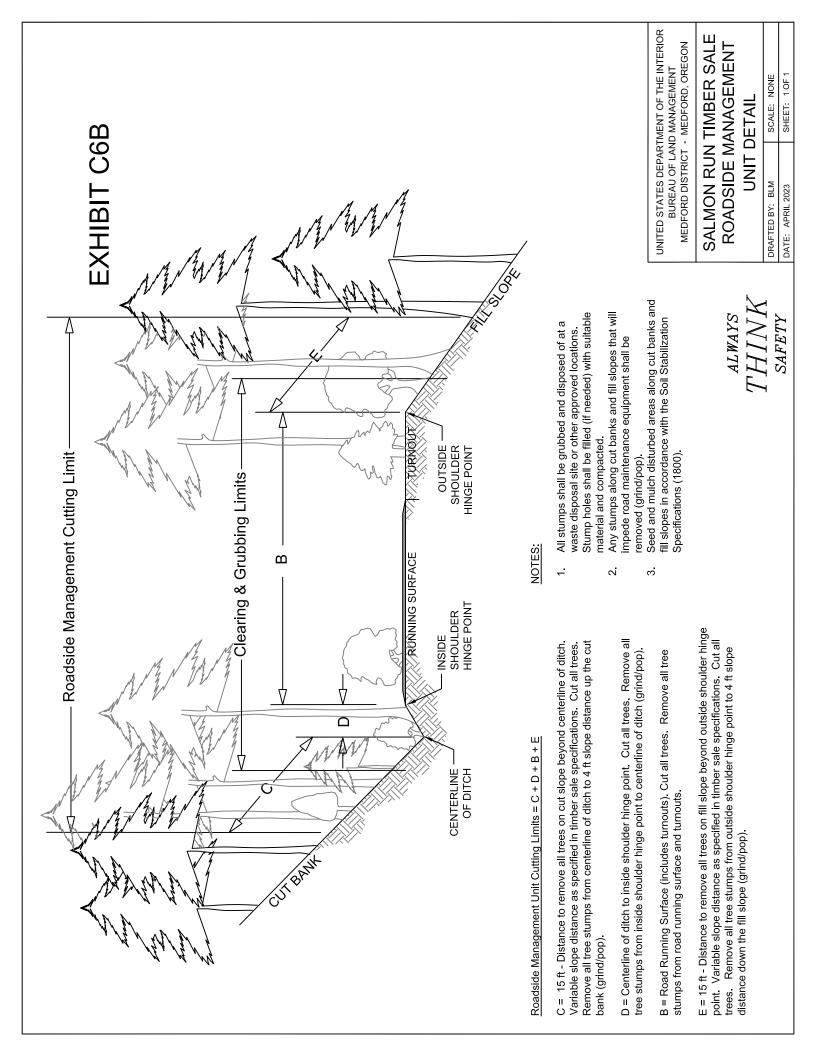
					ALIGNMENT	ROAD WIDTH	IDTH ¹⁻³	GRAI	GRADIENT	CLEA	CLEARING WIDTH	TH			SURF	SURFACING	(م) 4			
										BEYOND	ND EXISTING ROAD(S)	US)C	BAS	BASE COURSE		N.	SURFACE COURSE	COURE	ЗË	
ROAD NUMBER	FROM (MP or STA)	I TO (MP or STA)	(MILES)	TYPICAL SECTION TYPE	MAXIMUM DEGREE OF CURVE	SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM	тор сит	TOE FILL	Ľ		LABE ₅ DEbth	NOITADARÐ	MINIMUM	DEPTH COMPACTIO	TYPE ²	NOITADARÐ	REMARKS
EXISTING ROAD SURFACING	4D SURFAC	SING																		
33-6-24.0 (A)	00.0	1.00	1 <u>.</u> 00	I	ı	20'-18'	ю.	ı	ı							18	4		- -	1 1/2"-minus
33-6-24.0 (B2)	3.52	3.96	0.44	ı	ı	16'	3	ı	ı							15'	4"	۵	<u>5</u>	1 1/2"-minus
33-5-31.3 (A)	00.0	1.24	1.24	ı		14'	3	ı	ı							14'	4"	۵	<u>5</u>	1 1/2"-minus
33-5-32.1	00.0	0.63	0.63	ı	ı	14'	o.	·	ı							14'	4	۵	5 5	1 1/2"-minus
33-6-14.0 (A-B)	3) 0.00	0.71	0.71	ı	I	12'	0'/3'	ı	ı							12'	4	۵	- -	1 1/2"-minus
34-6-2.0 (A-D)	00.00	2.04	2.04	ı	ı	15'	3	ı	ı							14'	3"	۵	- -	1 1/2"-minus
34-6-1.1	00.00	1.14	1.14	I		14'	0,	ı								13'	3"	Δ	C-1	1 1/2"-minus
34-6-1.4	00.0	0.09	0 [.] 09	ı		15'	0	ı	ı				14' 4"	0	۷					4"-minus
																13'	3"	۵		1 1/2"-minus
NEW ROAD CONSTRUCTION	ONSTRUCI	TION																		
33-5-32.1	00+0	7+89	0.15	9	114.6°	16'	3	13.9%	ı	2	5		15' 8"	0 =	4					4"-minus
																14'	4"			1 1/2"-minus
NOTES	_											-	_	_	_					
1. EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS:	EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS:	HS R, ADD 1 F ILLS OVEF -L CURVE: EQUALS:	-OOT FOR F 3 6 FEET. M S AS FOLLC	FILLS OF 1-(VIDEN THE)WS WHEN			SURFAC A. PIT I B. GRIE C. SCR D. CRU	2. SURFACING TYPES A. PIT RUN ROCK B. GRID ROLLED R C. SCREENED ROC D. CRUSHED ROCH	2: SURFACING TYPES A. PIT RUN ROCK B. GRID ROLLED ROCK MATERIAL C. SCREENED ROCK MATERIAL D. CRUSHED ROCK MATERIAL	RIAL L										
22-1 36-2	22-35 ADD 2 FT 36-48 ADD 3 FT					ကျ	3 TURNOUTS A WIDTH	<u>JTS</u> TH 10 FT. IN	TURNOUTS A. WIDTH 10 FT, IN ADDITION TO SUB-GRADE WIDTH, OR	FO SUB-(GRADE WI	ртн, оі	ſŕ							
49- 65-(49-64 ADD 4 FT 65-96 ADD 5 FT						B. LOC	HOWN ON	AS SHOWN ON THE PLANS. B. LOCATED APPROXIMATELY, AS SHOWN ON THE ROAD	, AS SHC	IT NO NMC	ЧE ROA	Q			5		STATE: 31 IREA	S DEPA	UNITED STATES DEPARTMENT OF THE INTERIOR
MATERIALS	CUT SLOPE		FILL SLOPE				C INVISIE	45. SIBLE AND I	PLANS. C. INVISIBLE AND NOT MORE THAN 750 FT. APART.	THAN 75	0 FT. APAF	₹T.					MEDF	ORD D	ISTRIC.	MEDFORD DISTRICT - MEDFORD, OREGON
COMMON	1/2 : 1	-	1 1/2 : 1			4	4. SURFACING		SURFACING TUBNICUTS CURVE WIDENING AND POAD ADDPOACH			HUVU						S	ALM	SALMON RUN
SOFT ROCK & SHALE	1/2 : 1	÷	1 1/2 : 1				APRON	S SHALL BE	APRONS SHALL BE SURFACED.				ALW	ALWAYS			Ц С			TIMBER SALE
SOLID ROCK	1/2 : 1	an	angle of repose	Ð		ام ا	CLEARIN SEE SU	5. CLEARING WIDTH SEE SUBSECTION 200	200			7			$\mathbf{\zeta}$	DR	DRAFTED BY- BI M) ,	<u></u>	
													SAF	SAF'E''Y		DA	DATE APRIL 2023	RIL 2023		SHEET: 1 OF 3

												ш	EXHIBIT C4-2		О Г	4				
					ALIGNMENT	ROAD WIDTH	DTH ¹⁻³	GRADIENT	DIENT	CLE	CLEARING WIDTH	TH		SUF	SURFACING ⁴	4 DV				
										BEYOND	ND ROAD(S)	D(S)	BASE COURSE	JRSE		SURFAC	SURFACE COURSE	SE		
ROAD NUMBER	FROM (STA)	TO (STA)	LENGTH (MILES)	TYPICAL STATION TYPE	MAXIMUM DEGREE OF CURVE	SUBGRADE	ЫТСН	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	TUP GUT	רם דסב דורנ	W∩WINIW ∝	DEPTH WIDTH WIDTH WIDTH	LAPE ²		DEPTH COMPACTIC	LAPE ²	ЭNIQAЯЭ	REMARKS	Š
TR 01-02-A	00+0	6+05	0.11	n		15'		17%	7%	Ω	Ω.									
TR 01-02-B	00+0	5+30	0.10	с		15'	ı	14%	16%	Ω	5									
TR 35-12	00+0	7+30	0.14	r		15'	ı	18%	I	Ω	5								Crossing Plat and License Agreement with ODF	ense
TR 31-06-A	00+0	2+80	0.05	с		15'	ı	6%	18%	ىī	5									
TR 31-06-B	00+0	2+52	0.05	ę		15'	ı	7%	8%	Ω	5'									
TR 31-06-C	00+0	3+80	0.07	ю		15'	,	17%	15%	5	5			_	_	_				
TR 32-25-A	00+0	4+40	0.08	n		15'	,	17%	1	Ω	5				_					
TR 32-25-B	00+0	2+75	0.05	e		15'		5%	11%	2	5'									
TR 32-25-C	00+0	15+55	0.29	n		15	ı	17%	%6	Ω	5									
TR 32-25-D	00+0	2+41	0.05	e		15'		2%	2%	Q	5,				_				Crossing Plat and License Agreement with JoCo DoF	ense DoF.
TR 32-25-E	00+0	3+50	0.07	ю		15'	ı	5%	11%	2	5									
32-25-F	00+0	4+65	0 [.] 09	ю		15'	ı	16%	I	2	5'									
31-07	00+0	3+68	0.07	n		15'		ı	18%	2	5			_	_	_				
TR 23-07	00+0	8+90	0.17	ю		15'	1	18%	1	Q	5				_				Coordination with Williams Pipeline on-site representative.	liams Pipeline
TR 17-03B	00+0	35+95	0.68	с		15'	,	16%	18%	5	5			_	_	_				
NOTES																				
1. EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS: 7-21 ADD 1 FT.	JB-GRADE WIDTH 1 FILL SHOULDER D 2 FEET FOR FIL HOULDER OF ALL SREE OF CURVE E 7-21 ADD 1 FT.	IS 8, ADD 1 F LLS OVER L CURVES EQUALS:	:OOT FOR F 8 6 FEET. M 5 AS FOLLC	ILLS OF 1- VIDEN THE WIS WHEN	0		SURFACI A PIT R B GRID C SCRE D CRUS	NG TYPES UN ROCK ROLLED RC ENED ROCK SHED ROCK	2: SURFACING TYPES A. PIT RUN ROCK B. GRID ROLLED ROCK MATERIAL C. SCREENED ROCK MATERIAL D. CRUSHED ROCK MATERIAL	L L										
22-35 36-48 49-64	22-35 AUU 2 F I 36-48 ADD 3 F T 49-64 ADD 4 F T						A WIDT	H 10 FT. IN	3. IUKNUUIS A. WIDTH JD FT. IN ADDITION TO SUB-GRADE WIDTH, OR AS SHOWN ON THE PI ANS	ro sub	-GRADE WI	DTH, OF	~		L					
65-96	65-96 ADD 5 FT						B. LOCA	TED APPRC	DXIMATELY	, AS SF	IOWN ON TI	HE ROA	D			UNITEC) STATI BURE	ES DEF AU OF I	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	E INTERIOR NT
MATERIALS	CUT SLOPE		FILL SLOPE				C. INVIS	IBLE AND N	C. INVISIBLE AND NOT MORE THAN 750 FT. APART.	THAN 7	50 FT. APAF	λT.				MED	FORD	DISTRI	MEDFORD DISTRICT - MEDFORD, OREGON	DREGON
COMMON	1/2 : 1	.	1 1/2 : 1			4	SURFACI	NG TS CURVE	4. SURFACING TIIDNOLITS CLIPVE WIDENING AND POAD ADDROACH								0,	SALN	SALMON RUN	
SOFT ROCK & SHALE	1/2 : 1	-	1 1/2 : 1				APRONS	SHALL BE	SURFACED				ALWAYS	S + Y		C			TIMBER SALE	ŀ
CK	1/2 1		andle of repose	ď		2.	5. CLEARIN SFF SUF	RING WIDTH SUBSECTION 200	00				NTHI	Z		ע			SPECIFICATION SHEET	- 11
	-	5)					2				SAFETY	Y		DRAFTED BY: BLM DATE: APRIL 2023	D BY: B	LM 23	SCALE: NONE SHEET: 2 OF 3	E E



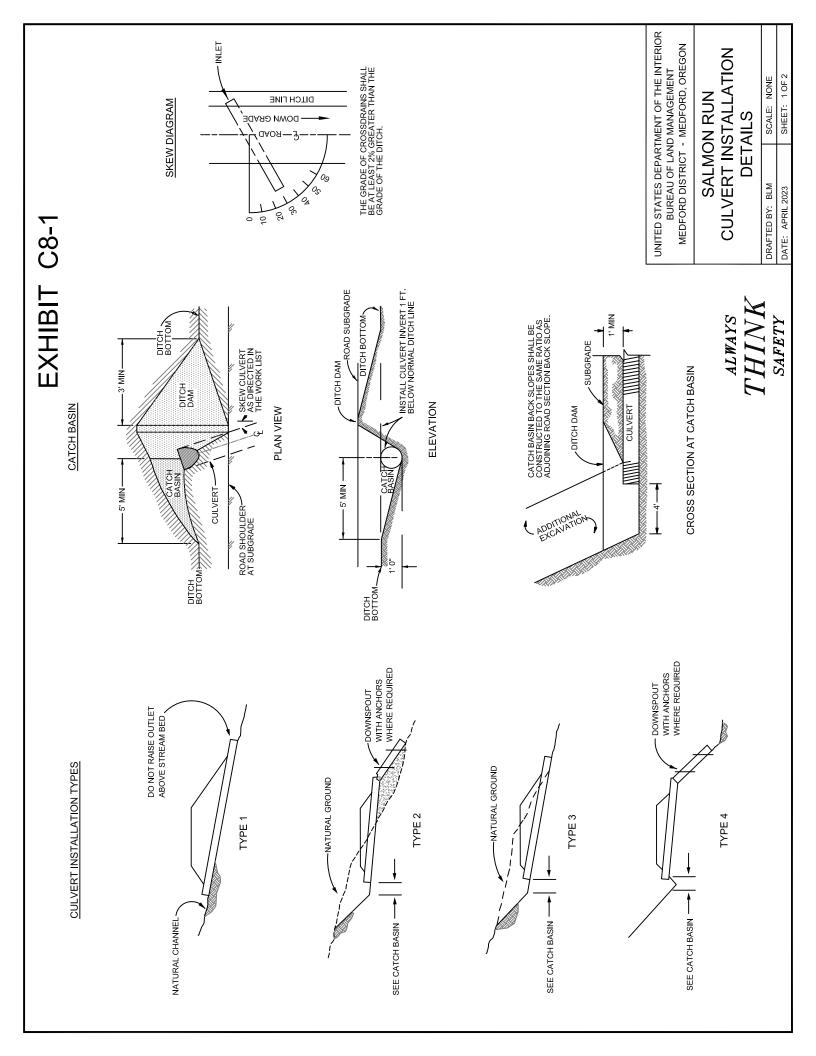






		NOTES:	A. Designed culvert lengths and locations are approximate. Actual lengths and locations will be measured in the field.	B. Summary of Quantities are shown on Exhibit c3	C. All downspout pipes are 16 gauge	unless otherwise noted.	ELBOW TYPES:*	1. Conventional or fabricated	2. Further type 3. Slip joint			<u>SKEW DETAIL</u>			и евъ			- ₀₉	_		SAVMIV	THINK	SAFETY		UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	MEDFORD DISTRICT - MEDFORD, OREGON	SALMON RUN			
			REMARKS	- In-line w/ natural trubutary channel.			- New installation											 Drop outlet elevation 2 feet. In-line w/ natural trubutary channel. 				 Drop outlet elevation 2 feet. 	 Drop outlet elevation 2 feet. In-line w/ natural trubutary channel. 		- In-line w/ natural trubutary channel.					
	THIN	}*. *. *.	ГЕИСТН																											
JTS		*Jy	JZIS																											
DOWNSPOUTS	SNIC		геиетн							30'			20'	20'					20'											
SNN.										30"			30"	30"					30"											
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			геиетн																											
		Б	GAUGE																											
		AS BUILT	SIZE																											
		AS	STATION OR M.P.																											
	SNC		VNGLE SKEW	°	30°	30°	30°	30°	30°	15°	15°	15°	15°	15°	30°	30°	30°	°0	15°	30°	30°	30°	°	30°	°0	30°	30°	30°	30°	OF 2
	ATIC		геиетн	45'	38'	38'	38'	40'	40'	40'	40'	34'	40'	34'	36'	34'	34'	65'	34'	40'	36'	36'	46'	34'	60'	34'	40'	34'	40'	AGE 2
			BAUGE	14	16	16	16	16	16	16	16	16	16	16	16	16	16	14	16	16	16	16	16	16	14	16	16	16	16	ON P/
	CULVERT LOCATIONS	۵	JZIS	36"	24"	24"	18"	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"	36"	24"	24"	24"	24"	24"	18"	48"	24"	24"	24"	24"	TALS
	CULV	DESIGNED	STATION OR M.P.	0.10	0.21	0.72	1.27	1.03	1.08	1.21	1.64	1.76	1.84	2.10	2.27	2.36	2 <u>.</u> 55		2 <u>.</u> 99	3.73	3.88		0.37	0.70		1.41	1.47	1.53	1.62	NSPOUT TO
			ROAD NO.	34-6-2.0 A-D				33-6-24.0 A-B2														33-5-31.2 A-B		33-5-31.3 A						CMP AND DOWNSPOUT TOTALS ON PAGE

		NOTES:	A. Designed culvert lengths and locations are approximate. Actual lengths and locations will be measured in the field.	B. Summary of Quantities are shown on Exhibit C3	C. All downspout pipes are 16 gauge	unless otherwise noted.	ELBOW TYPES:*	1. Conventional or fabricated	z. turner type 3. Slip joint			SKEW DETAIL			NWO	$\overline{\int_{o_s}^{o_s}}$	- 	-		THINK	SAFETY	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	MEDFORD DISTRICT - MEDFORD, OREGON	SALMON RUN		ע - ארם א	DRAFTED BY: BLM SCALE: NONE DATE: APRIL 2023 SHEET: 2 OF 2
			REMARKS	 Drop outlet elevation 4 feet. In-line w/ natural trubutary channel. 	 Drop outlet elevation 3 feet. In-line w/ natural trubutary channel. 				- In-line w/ natural trubutary channel.	- New installation	- New installation		 In-line w/ natural trubutary channel. 											ц			
	WIN	کې . ۲ _ک ې	ГЕИВТН																				20 LF	150 LF			
JTS		~¥	JZIS																				:pund:	:pun	:pund:	:punc	:punc
DOWNSPOUTS	ON T		геиетн				20'	20'			20'	20'											TOTAL 24" 1/2 Round:	TOTAL 30" 1/2 Round:	TOTAL 24" Full Round:	TOTAL 30" Full Round:	TOTAL 36" Full Round:
NNS							30"	30"			24"	30"											24" 、	30" ,	. 24" F	. 30" F	- 36" F
DO	91	NOL 2/1	геиетн																				OTAL	OTAL	OTAL	OTAL	OTAL
		54-3-1	JZIS																						L	T	
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		AS BUILT	JZIS																								
		ASE	STATION OR M.P.																								
	SNC		VNGLE SKEW	°0	°0	°0	15°	15°	0°	30°	15°	15°	0°	0°													
	ATIC		геиетн	60'	60'	65'	35'	40'	70'	42'	36'	40'	40'	30'													
	LOC		GAUGE	14	14	16	16	16	14	16		16	16	16													
	ÉRT		JZIS	30"	30"	24"		24"	30"	18"		24"	24"	18"					$\left \right $								
	CULVERT LOCATIONS	DESIGNED	STATION OR M.P.	0.08	0.10	0.16	0.24	0.30	0.41	0+40		0.14	0.23	0.03									180 LF	928 LF	190 LF	110 LF	60 LF
			ROAD NO.	33-5-32.1						33-5-32.1 (NEW)		33-5-32.0		33-6-14.0 A-B									TOTAL 18" CMP:	TOTAL 24" CMP:	TOTAL 30" CMP:	TOTAL 36" CMP:	TOTAL 48" CMP:



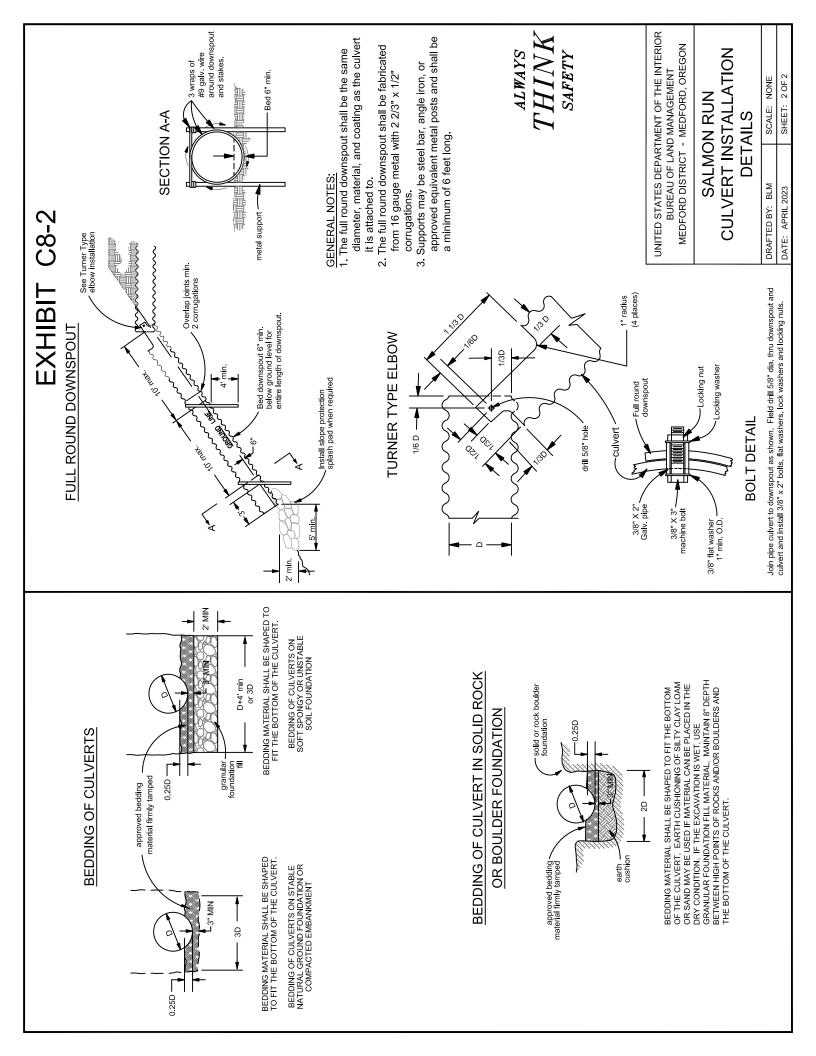
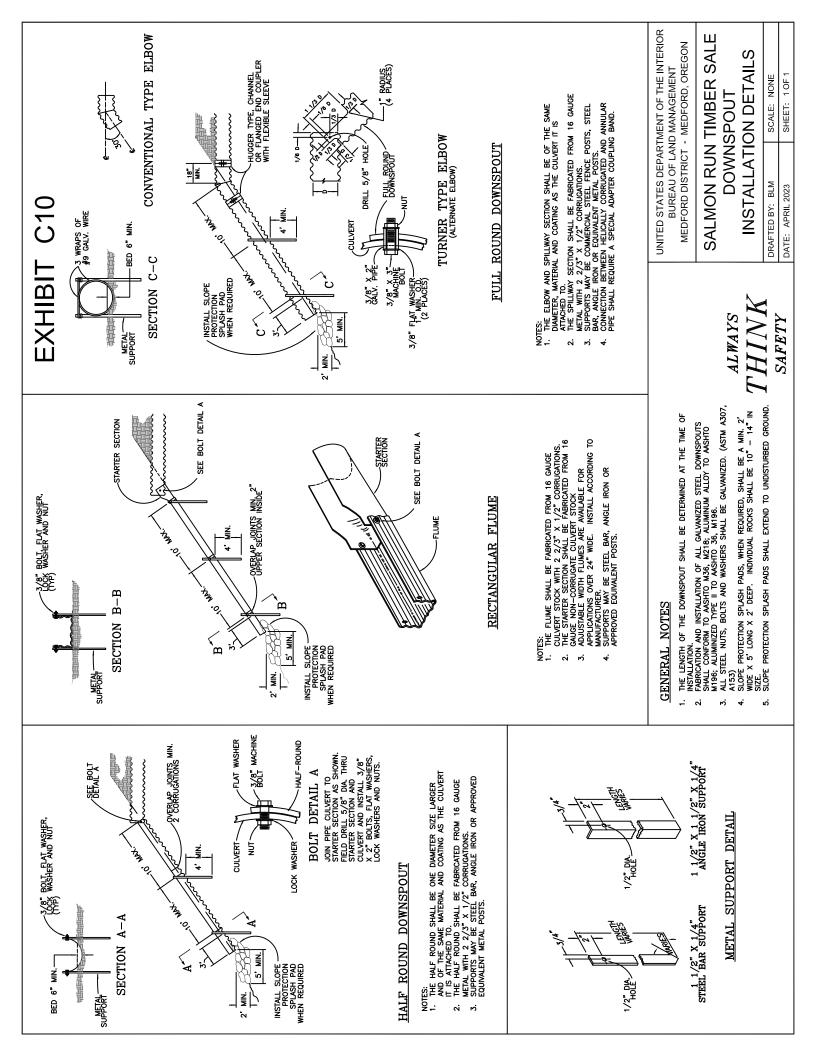
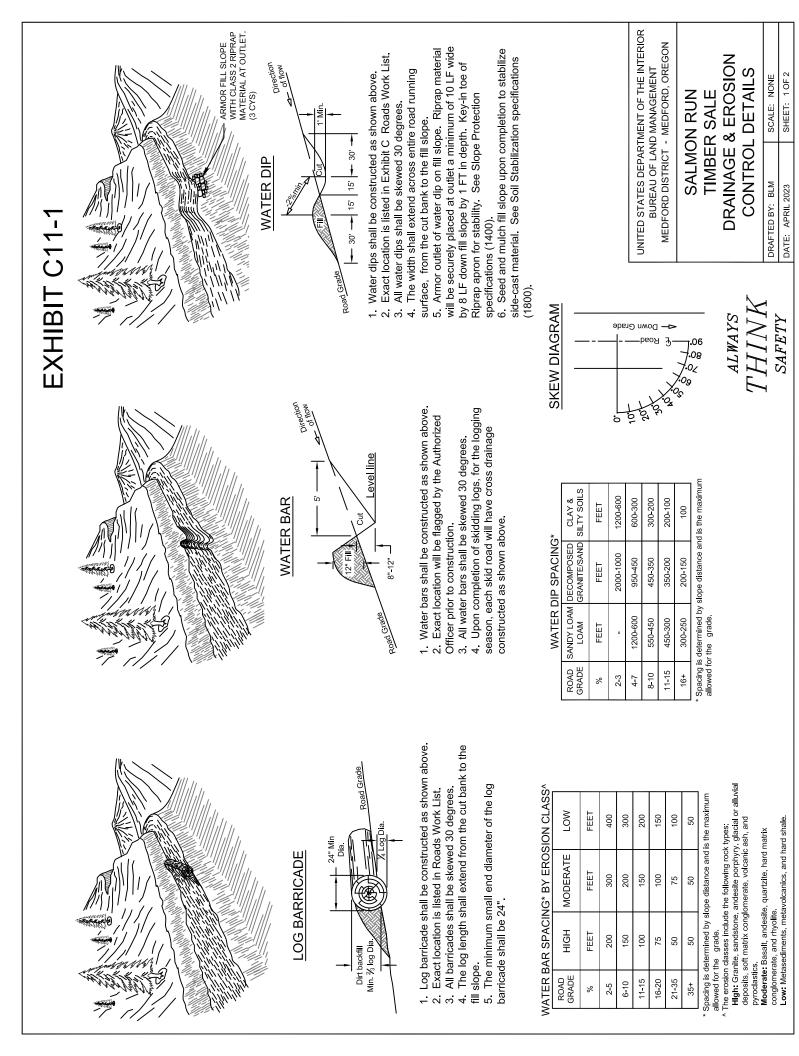
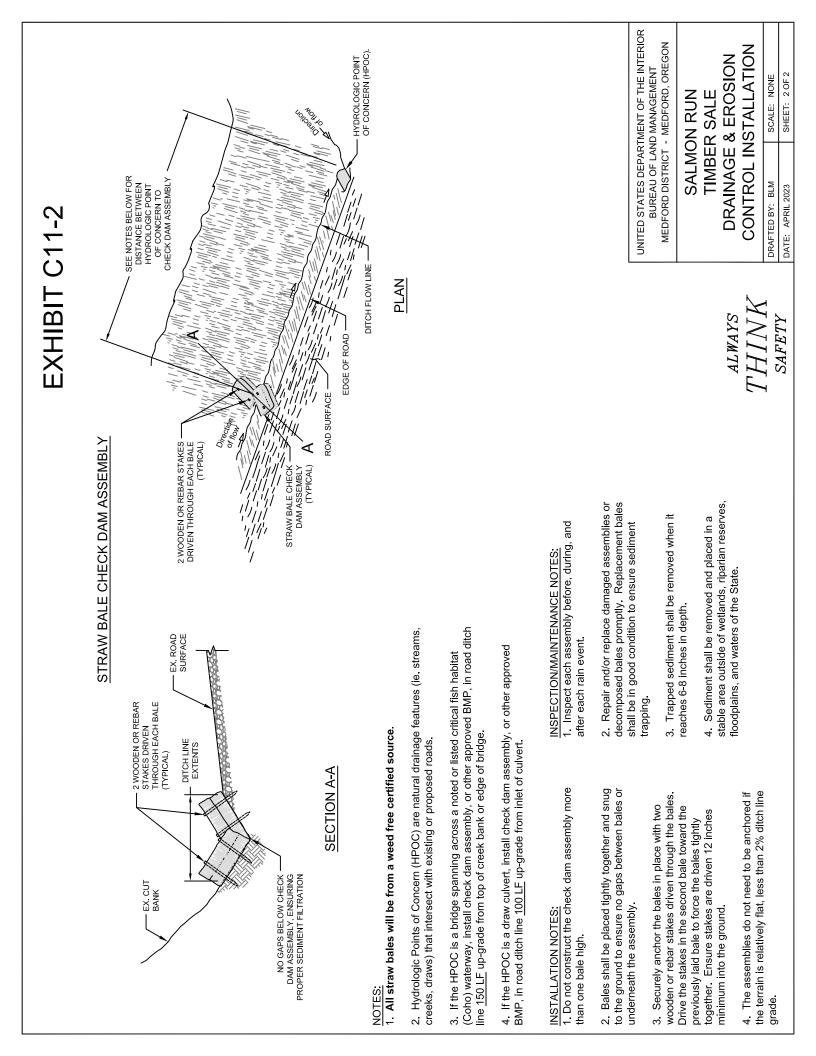


	EXHIBIT C9
CSP "HUGGER" COUPLER BANDS	
10-1/2" MIN	
ROLLED END PIPE	
Continuous	
AROUND BAND STANDARD CONSTRUCTION IS A ONE PIECE BAND FOR 12" THRU	
48" PIPES AND A TWO PIECE BAND FOR 54" PIPES AND ABOVE	
THE HUGGER COUPLER BAND OR AN APPROVED EQUIVALENT COUPLER BAND SHALL BE MADE OF THE SAME MATERIAL AND FUISH AS THE PIPES JOINED. THE COUPLER BANDS SHALL BE A MINIMUM OF 10-1/2 INCHES WIDE AND BE 16 GUAGE OR HEAVIER. THE BAND SHALL BE DESIGNED TO BE DRAWN TOGETHER WITH A MINIMUM OF TWO (2) 1/2 INCH BOLTS THROUGH USE OF A BAR AND STRAP SUITABLY WELDED TO THE BAND THE RAND SHALL FNGAGE AND MESH WITH THE SECOND ANNULER	
CORRUGATION INWARD FROM THE END OF EACH OF THE CONDUIT SECTIONS JOINED.	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON
WHEN DESIGNATED ON THE PLANS OR IN THE SPECIAL PROVISIONS, GASKETS SHALL BE INSTALLED WHEN THE "HUGGER" TYPE, OR AN APPROVED EQUIVALENT COUPLER BAND IS INSTALLED ON SPILLWAY, OVERSIDE OR DOWN DRAINS.	ALWAYS SALMON RUN THINK TIMBER SALE CULVERT BAND DETAIL
	SAFETY DATE: APRIL 2023 SHEET: 10F1







Salmon Run Timber Sale Page 1 of 24

Roads Work List

Definitions:

AGG = Aggregate Rock Surface BST = Bituminous Surface CL = Center Line of Road CMP = Corrugated Metal Pipe CY = Cubic Yard Jct = Junction/Intersection MP = Mile Post NAT = Natural or Native Surface Pvt = Private (Industry or Citizen) Seg = Segment WDS = Waste Disposal Site

Road Renovation/Construction

The road renovation/construction work list consists of road work to be performed by the Purchaser's Representative and/or Contractor **prior** to timber hauling per Section 42(B)(2) of the contract Special Provisions. This work includes, but not limited to, clearing and grubbing; excavation for road construction; compacting, watering, blading and/or rolling the road surface; scarify rutted road surface as needed; clearing and reshaping ditch lines; cleaning or enlarging catch basins and outlets; cleaning the entire barrel of all culverts; furnishing and replacing corrugated metal pipes (culverts); regrading and/or constructing water-dips; surfacing or resurfacing roads with crushed rock aggregate; slide removal; seeding and mulching; and removing all down trees from roadways. All road work shall comply with the contract Special Provisions, Specifications, and Exhibits.

Roadside Brushing

This consists of work to be performed by the Purchaser's Representative and/or Contractor prior to timber hauling per Section 42(B)(2) of the contract Special Provisions. This work includes, but not limited to, brushing 4 horizontal feet up the cut bank slope from the centerline of ditch and 4 horizontal feet down the fill slope from the outside shoulder hinge point of the road; removing brush at the inlet and outlet of existing culverts; and removing brush, limbs, and small diameter trees along the roadway to improve sight distance. All roadside vegetation to be cut and disposed of will be less than 8 inches in diameter at breast height (≤ 8 " DBH). Disposal from roadside brushing will be lop and scatter unless otherwise noted as chipping in the work list. In areas where the road crosses through private (industry or civilian) property, conifer trees shall be pruned rather than cut down. Brush shall be cut to meet regular specifications. All work shall comply with the contract Special Provisions, Specifications, and Exhibits.

Roadside Vegetation Management Units

This work includes, but not limited to, removing merchantable and non-merchantable trees 15 feet up the cut bank slope from the centerline of ditch and 15 feet down the fill slope from the outside shoulder hinge point of the road as designated in the contract as Roadside Management Units (RMUs). All vegetation to be cut and removed will be greater than 12 inches in height and *generally less than 25 inches in diameter at breast height (DBH). All RMUs have been tagged and marked with beginning and ending locations. Merchantable trees in sections outside of identified timber sale units are marked with blue tracer paint. Sections within timber sale units will not be marked with paint but will have tags identifying beginning and ending locations of units. See Exhibit A for additional information.

All stumps remaining after the removal of the RMUs timber that may hinder normal road renovation and maintenance operations, will be grubbed and removed per Clearing and Grubbing Specifications (200). Any damage that occurs to the road subgrade during stump removal will be properly repaired. Any loose material that remains on site shall be compacted or disposed of at areas designated by the Authorized Officer. Stumps that will not hinder normal road maintenance operations can be left in place. All disturbed areas shall be seeded and mulched per Slope Protection Specifications (1400). All remaining brush and limbs from tree removal operations shall either be chipped or piled and burned in locations designated by the Authorized Officer or lopped and scattered below the road in accordance with roadside brushing disposal methods in the Roadside Brushing Specifications (2100). No debris, brush, or limbs shall be placed or stacked on the cut-bank. All work shall comply with the contract Special

Salmon Run Timber Sale Page 2 of 24

Provisions, Specifications, and Exhibits.

*Generally: refers to any tree \geq 24" DBH hindering road renovation/construction/maintenance activities (typically within the 4' Roadside Brushing extents) can be cut and removed.

Sunny Valley Loop Area - See Exhibit C2-2 for Map

	Road, Seg A-D – Salmon Crk Rd – AGG – Sub: 15Ft – Ditch: 3Ft
<u>MP</u>	Description
$\frac{1011}{0.00}$	Jet w/ Sunny Valley Loop Road (County). Begin pre-haul road renovation which includes
0.00	reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted
	road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets
	and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing
	and chipping.
	Begin road surfacing. Upon completion of all other road renovation items and approval of
	the road subgrade, properly place, water, and roll a 14' wide by 3" depth aggregate surface
	course which shall consist of 1-1/2"-minus crushed rock compacted in place from an
	approved weed free commercial source per contract specifications and details. Surface 4
	turnouts per mile (8 total) approximately 10' wide by 50' long with 25' tapers.
	The Purchaser shall be required to furnish and apply non-saline water, or approved equal,
	during dry hauling periods (dust abatement), when directed by the Contract Officer, for the
	purpose of laying nuisance dust and to prevent loss of surface material over the next 0.90
	miles of road.
0.00	Jct w/ Pvt driveway on right.
0.09	Property line Private Civilian/BLM.
0.10	Existing culvert at Salmon Creek trib crossing. Remove and replace the existing culvert with
	a new 36" x 45' Aluminized 14-gauge CMP per contract details and specifications (Type 1).
	Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free
	commercial source at pipe outlet for fill-slope protection and energy dissipation per contract
	specifications and details. Upon approval of the roadbed after the culvert replacement,
	properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall
	consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed
	free commercial source per contract specifications and details.
	Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2
	details and specifications or approved equal.
0.16	Property line BLM/ODF.
0.21	Existing culvert. Remove and replace the existing culvert with a new 24" x 38' Aluminized
	16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2
	CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet
	for fill-slope protection and energy dissipation per contract specifications and details. Upon
	approval of the roadbed after the culvert replacement, properly place, water, and roll a 14'
	wide by 60' long by 4" depth aggregate cap which shall consist of $1-1/2$ "-minus crushed rock
	(15 CYs) compacted in place from an approved weed free commercial source per contract
0.29	specifications and details. Existing culvert at Salmon Creek trib crossing. Hydrologic point of concern. Install check
0.29	dams or other approved BMPs per Exhibit C11-2 details and specifications.
0.40	Existing culvert.
0.40	Jct w/ Pvt Road (ODF) on left.
0.57	

0.72 Existing culvert. Remove and replace the existing culvert with a new 24" x 38' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14'

Salmon Run Timber Sale Page **3** of **24**

wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.

0.81 Property line ODF/BLM.

Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.

- 0.85 Existing culvert at Salmon Creek trib crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications. Remove detached downspout and properly dispose of. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
- 0.93 Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 1.04 Existing culvert.
- 1.12 Existing culvert.
- 1.22 Existing culvert.
- 1.26 End RMU.
- 1.27 Install a new 18" x 38' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.28 Unit 01-01 boundary on right.
- 1.34 Unit 01-05A boundary on left.
- 1.36 Existing culvert.
- 1.44 Cut bank slump. Remove approximately 3 CYs of slump material to the WDS listed on this road system.
- 1.52 Jct w/ 34-6-1.2 Road on right. Unit 01-01 boundary on right.
 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 1.53 Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 1.74 Unit 01-05A boundary on left.
- 1.75 Jct w/ 34-6-1.0 Road on left. Unit 01-05B boundary on left.
 - Construct a 0.5-acre heli-landing area on left (along road/within unit). Properly excavate, place, grade, and compact clean embankment material per specifications. Upon completion of heli-landing construction, properly place, water, and roll a 4" depth aggregate base course which shall consist of 4"-minus crushed rock (375 CY) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.76 Existing culvert.
- 1.82 Unit 01-05B boundary on left.
- 1.89 Unit 01-05B boundary on left.
- 1.91 Existing culvert. Remove detached downspout and properly dispose of. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
- 1.92 Unit 01-05B boundary on left.
- 2.01 Existing culvert.

Exhibit C12 Salmon Run Timber Sale Page 4 of 24

2.04 End pre-haul road renovation and surfacing. End RMU. Jct w/ 34-6-1.1 Road on left (See 34-6-1.1 Road info below for RMU continuation).

34-6-1.1 Road - Aiko Aiko Rd - AGG - Sub: 14Ft - Ditch: 0Ft

MP Description 0.00 Jct w/ 34-6-2.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Begin road surfacing. Upon completion of all other road renovation items and approval of the road subgrade, properly place, water, and roll a 13' wide by 3" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (4 total) approximately 10' wide by 50' long with 25' tapers. Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information. 0.04 Existing culvert. 0.13 Cut bank slump. Remove approximately 6 CYs of slump material to the WDS listed on this road system. Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running 0.24 surface of road and outside of turnoff area so not to impede drivability of traffic. 0.56 Unit 01-06 boundary on left. End RMU. Existing culvert. 0.57 Unit 01-06 boundary on left. 0.62 0.65 Existing culvert. 0.73 Existing culvert. Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running 0.75 surface of road and outside of turnoff area so not to impede drivability of traffic. Existing culvert. 0.83 0.91 Existing culvert. 0.99 Existing culvert. 1.11 Unit 06-01 boundary on left. Jct w/ 34-6-1.4 Road on right. End road surfacing. 1.14 Jct w/ Temp Route 01-02-A on right. 1.15 1.18 Unit 06-01 boundary on left. 1.20 Existing culvert. Jct w/ Temp Route 01-02-B on right. 1.27 1.36 Existing culvert. Existing culvert. 1.41 1.45 End pre-haul road renovation. Reconstruct truck turn around/landing area. Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

<u>34-6-1.4 Road – Pipeline Access Sp – NAT – Sub: 15Ft – Ditch: 0Ft</u>

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 34-6-1.1 Rd. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.

Begin road surfacing. Upon completion of all other road renovation items and approval of the road subgrade, properly place, water, and roll a 14' wide by 4'' depth aggregate base course which shall consist of 4''-minus crushed rock compacted in place from an approved

Salmon Run Timber Sale Page **5** of **24**

weed free commercial source per contract specifications and details. Upon completion and approval of the aggregate base course, properly place, water, and roll a 13' wide by 3" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details.
0.06 End road surfacing (base and surface courses). Begin construction of a 0.5-acre heli-landing area. Properly excavate, place, grade, and compact clean embankment material per specifications. Upon completion of heli-landing, properly place, water, and roll a 4" depth aggregate base course which shall consist of 4"-minus crushed rock (375 CY) compacted in place from an approved weed free commercial source per contract specifications and details.
0.09 End pre-haul road renovation and heli-landing surfacing. Waste Disposal Sight (WDS) on right. Place any slump material on stable area well off running surface of road and outside of turnoff/landing area so not to impede drivability of traffic.

34-6-1.0 Road - Salmon Crk Sp - AGG - Sub: 14Ft - Ditch: 0Ft

<u>MP</u> <u>Description</u>

0.00 Jct w/ 34-6-2.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; reconstructing water dips; and roadside brushing and chipping. Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub

all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.

- 0.01 Unit 01-05A boundary on left and Unit 01-05B boundary on right.
- 0.05 Reconstruct existing water dip. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at drainage outfall for fill-slope protection and energy dissipation per contract specifications and details.
- 0.06 Unit 01-05B boundary on right.
- 0.08 Unit 01-05B boundary on right.
- 0.14 Unit 01-05B boundary on right.
- 0.26 Reconstruct existing water dip. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at drainage outfall for fill-slope protection and energy dissipation per contract specifications and details.
- 0.34 Reconstruct existing water dip. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at drainage outfall for fill-slope protection and energy dissipation per contract specifications and details.
- 0.39 Unit 01-02 boundary on left and right.
- 0.40 Reconstruct truck turn around area. Waste Disposal Sight (WDS). Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 0.45 End pre-haul road renovation. End RMU.

34-6-1.2 Road - Salmon School Rd - NAT - Sub: 14Ft - Ditch: 0Ft

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 34-6-2.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
- 0.01 Existing gate; closed no lock.
- 0.02 End pre-haul road renovation. Jct w/ 34-6-1.3 Road (private driveway) on right. This driveway leads to a turnaround/parking area constructed on BLM land. Landowners are cooperative but coordination is a must if using the area for a landing. They have water delivered every 2 weeks and would rather this service/supply not be interrupted.

34-6-1.3 Road - No Name Sp - NAT - Sub: 12Ft - Ditch: 0Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 34-6-1.2 Rd. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
- 0.05 End pre-haul road renovation. Property line BLM/Private civilian. Unit 01-01 boundary on right.

33-6-35.1 Road, Seg A-C - No Name Pvt Rd - AGG/NAT - Sub: 15Ft - Ditch: 0Ft

<u>MP</u> <u>Description</u>

- 0.00 End Sunny Valley Loop Road (County Road). Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; removal of existing water bars; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
- 0.01 Existing private Industry gate.
- 0.12 Jct w/ powerline access road on left.
- 0.42 Jct w/ private spur on right.
- 0.63 Jct w/ private spur on left.
- 0.75 Property line BTG Pactual/Rough & Ready Lumber.
- 0.77 Property line Rough & Ready Lumber/ODF.
- 0.81 Existing culvert
- 0.96 Jct w/ Pvt Rd on left. End AGG surface and begin NAT surface road.
- 1.16 Existing water bar to be removed prior to haul.
- 1.18 Existing water bar to be removed prior to haul.
- 1.23 Jct w/ Pvt Rd on right.
- 1.26 Large landing area on ridge. End pre-haul road renovation. Begin Temp Route 35-12 ahead.

Miller Gulch Road System - See Exhibit C2-5 for Map

33-6-24.0 Road, Seg A-B2 – Miller Gulch Road – AGG – Sub: 20-16Ft – Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ Coyote Creek Road (County) on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

Begin road surfacing. Upon completion of all other road renovation items and approval of the road subgrade, properly place, water, and roll an 18' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (4 total) approximately 10' wide by 50' long with 25' tapers.

The Purchaser shall be required to furnish and apply non-saline water, or approved equal, during dry hauling periods (dust abatement), when directed by the Contract Officer, for the purpose of laying nuisance dust and to prevent loss of surface material over the next 0.60 miles of road.

0.04 Existing bridge at Coyote Creek crossing. A BLM haul authorization form for oversize loads can be obtained from the Authorized Officer. This form shall be properly filled out and submitted for approval a minimum of 14 days prior to driving oversized loads across the bridge.

Hydrologic Point of Concern: Install check dams, or other approved BMPs, per contract specifications and Exhibit C11-2. This creek is noted for protecting fish habitat (*Coho*). Jct w/ private driveway on left.

0.06

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- 0.11 Jct w/ private driveway on right.
- 0.19 Jct w/ private driveway on right.
- 0.24 Existing culvert.
- 0.31 Existing culvert.
- 0.40 Existing culvert.
- 0.45 Existing culvert.
- 0.46 Property line Private Civilian/BLM.
- 0.50 Existing culvert.
- 0.55 Existing culvert.
- 0.62 Existing culvert.
- 0.66 Jct w/ old spur road on right.
- 0.67 Existing culvert.
- 0.74 Existing culvert.
- 0.80 Existing culvert.
- 0.85 Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 0.88 Existing culvert.
- 0.93 Existing culvert. Remove downed tree across the existing downspout.
- 1.00 End road surfacing. Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 1.03 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.08 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.09 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 1.14 Existing culvert.
- 1.21 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 30' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.30 Existing culvert. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
- 1.39 Existing culvert.

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- 1.40 Unit 30-02 boundary on left. End RMU.
- 1.46 Existing culvert.
- 1.47 Jct w/ 33-5-30.2 Road on left.
- 1.50 Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 1.52 Unit 30-04 boundary on left.
- 1.53 Existing culvert.
- 1.58 Existing culvert.
- 1.62 Unit 30-04 boundary on left.
 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 1.64 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.70 Existing culvert.
- 1.76 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.77 Jct w/ 33-5-30.3 Road on left. End RMU (See 33-5-30.3 Road info below for RMU continuation).
- 1.84 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.88 Existing culvert.
- 1.96 Existing culvert.
- 2.00 Existing culvert.
- 2.10 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 2.14 Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

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- 2.15 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 2.16 Existing culvert.
- 2.19 Jct w/ 33-5-30.0 Road on right.
- 2.22 Existing culvert.
- 2.27 Existing culvert. Remove and replace the existing culvert with a new 24" x 36' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 2.36 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 2.43 Existing culvert.
- 2.55 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 2.65 Existing culvert.
- 2.70 Existing culvert.
- 2.74 Existing culvert.
- 2.82 Existing culvert at Miller Gulch trib crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.
- 2.92 Existing culvert at Miller Gulch Creek crossing. Remove and replace the existing culvert with a new 36" x 65' Aluminized 14-gauge CMP per contract details and specifications (Type 1). Drop outlet elevation 2 feet. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14'-15' wide (curve widening) by 80' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (20 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.

Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.

2.99 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall

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consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.

- 3.02 Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 3.06 Existing culvert.
- 3.09 Existing culvert.
- 3.18 Jct w/ 33-5-31.0 Road on left.
- 3.22 Existing culvert.
- 3.29 Existing culvert.
- 3.39 Existing culvert.
- 3.44 Unit 32-23 boundary on left. End RMU.
- 3.47 Existing culvert.
- 3.52 Spider jct w/ 33-5-31.1 Road, 33-5-31.3 Road, and 33-5-31.2 Road on left. Begin road surfacing. Upon completion of all RMU unit treatments, other road renovation items, and approval of the road subgrade; properly place, water, and roll a 15' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (2 total) approximately 10' wide by 50' long with 25' tapers.
- 3.54 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 3.58 Existing culvert.
- 3.73 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 3.82 Existing culvert.
- 3.88 Existing culvert. Remove and replace the existing culvert with a new 24" x 36' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 3.93 Jct w/ 33-5-31.7 Road on left. Unit 31-07 boundary on left. End RMU.
- 3.96 End pre-haul road renovation and surfacing. Unit 31-07 boundary on left.

33-5-31.7 Road - Miller Gulch S Sp - AGG - Sub: 16Ft - Ditch: 0Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-6-24.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping. Unit 31-07 on right.
- 0.15 End pre-haul road renovation. Jct w/ Temp Route 31-07 straight ahead.

33-5-31.2 Road, Seg A-B - Miller Mobile - AGG - Sub: 14Ft - Ditch: 3Ft

- Description MP 0.00 Spider jct w/ 33-6-24.0 Road, 33-5-31.1 Road, and 33-5-31.3 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information. 0.06 Existing culvert. Remove and replace the existing culvert with a new 24" x 36' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Drop outlet elevation 2 feet. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details. 0.14 Existing culvert.
- 0.25 Existing culvert at Benjamin Gulch crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.
- 0.37 Existing culvert. Remove and replace the existing culvert with a new 24" x 46' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Drop outlet elevation 2 feet. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.46 Existing culvert.
- 0.55 Unit 31-07 boundary on right.
- 0.57 Existing culvert.
- 0.61 Existing culvert.
- 0.67 Existing culvert. Unit 06-01 boundary on left. End RMU.
- 0.73 End pre-haul road renovation. Jct w/ 34-5-6.0 Road on left. Unit 31-07 boundary on right.

$\underline{34\text{-}5\text{-}6.0\ Road} - \underline{Miller\ Gulch\ N\ Sp} - \underline{AGG} - \underline{Sub:\ 14Ft} - \underline{Ditch:\ 0Ft}$

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-5-31.2 Road on left and right. Begin pre-haul road renovation which includes clearing and grubbing; reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Unit 06-01 on right.
- 0.04 Existing culvert. Cut bank/inlet slump. Remove approximately 3 CYs of slump material to the WDS listed on this road system.
- 0.15 End pre-haul road renovation. Waste Disposal Sight (WDS) at end. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

33-5-31.3 Road, Seg A - Miller Benjamin Rd - AGG - Sub: 14Ft - Ditch: 3Ft

<u>MP</u> <u>Description</u>

0.00 Spider jct w/ 33-6-24.0 Road, 33-5-31.1 Road, and 33-5-31.2 Road. Begin pre-haul road

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renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Unit 32-25 on left.

Begin road surfacing. Upon completion of all other road renovation items and approval of the road subgrade, properly place, water, and roll a 14' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (5 total) approximately 10' wide by 50' long with 25' tapers.

- 0.02 Existing culvert.
- 0.12 Unit 32-25 boundary on right.
- 0.13 Existing culvert.
- 0.18 Existing culvert.
- 0.23 Existing culvert.
- 0.29 Cut bank slump. Remove approximately 3 CYs of slump material to the WDS listed on this road system.
- 0.35 Existing culvert. Remove approximately 3 CYs of slump material to the WDS listed on this road system.
- 0.38 Cut bank slump. Remove approximately 3 CYs of slump material to the WDS listed on this road system.
- 0.42 Unit 32-25 boundary on right.
- 0.45 Existing culvert.
- 0.47 Jct w/ 33-5-32.0 Road on left. Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 0.50 Unit 32-25 boundary on right. Jct w/ Temp Route 32-25-G on right.
- 0.62 Jct w/ Temp Route 32-25-H on right.
- 0.70 Existing culvert. Remove and replace the existing culvert with a new 18" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.73 Unit 32-25 boundary on left.
- 0.79 Existing culvert.
- 0.82 Jct w/ 34-5-5.0 Road on left.
- 0.87 Existing culvert.
- 0.95 Existing culvert.
- 1.06 Existing culvert. Unit 32-25 boundary on left.
- 1.13 Existing culvert at Benjamin Gulch trib crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.
- 1.17 Existing culvert at Benjamin Gulch trib crossing. Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.
- 1.24 Jct w/ 33-5-32.1 Road on left. End road surfacing.
- 1.25 Existing culvert.
- 1.32 Existing culvert at Benjamin Gulch crossing. Remove and replace the existing culvert with a new 48" x 60' Aluminized 14-gauge CMP per contract details and specifications (Type 1).

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Supply and properly place 3 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14'-15' wide (curve widening) by 80' long by 4'' depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (20 CYs) compacted in place from an approved weed free commercial source per contract specifications and details. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications.

- 1.41 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.45 Existing culvert.
- 1.47 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.53 Existing culvert. Remove and replace the existing culvert with a new 24" x 34' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.54 Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 1.61 Unit 06-01 boundary on right.
- 1.62 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 1.68 Existing culvert.
- 1.84 Unit 06-01 boundary on left. End RMU.
- 1.87 Existing culvert. Unit 06-01 boundary on right.
- 1.94 Existing culvert. Unit 06-01 boundary on left.
- 1.96 End pre-haul road renovation at turnaround area.

33-5-32.1 Road - Valley View Road - AGG - Sub: 14Ft - Ditch: 3Ft

<u>MP</u> 0.00	Description
0.00	Jct w/ 33-5-31.3 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing
	and chipping. Begin road surfacing. Upon completion of all other road renovation items and approval of the road subgrade, properly place, water, and roll a 14' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4
0.02	turnouts per mile (3 total) approximately 10' wide by 50' long with 25' tapers.
0.03 0.08	Existing culvert. Existing culvert at Paniamin Culab trib grossing. Permaya and replace the existing culvert
0.08	Existing culvert at Benjamin Gulch trib crossing. Remove and replace the existing culvert with a new 30" x 60' Aluminized 14-gauge CMP per contract details and specifications (Type 1). Drop outlet elevation 4 feet. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 80'
	long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (20 CYs)
	compacted in place from an approved weed free commercial source per contract
	specifications and details.
	Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2
0.10	details and specifications.
0.10	Existing culvert at Benjamin Gulch trib crossing. Remove and replace the existing culvert with a new 20" x 60". Aluminized 14 gauge CMB new contrast details and specifications
	with a new 30" x 60' Aluminized 14-gauge CMP per contract details and specifications (Type 1). Drop outlet elevation 3 feet. Supply and properly place 2 CYs of Class 2 Riprap
	material from an approved weed free commercial source at pipe outlet for fill-slope
	protection and energy dissipation per contract specifications and details. Upon approval of
	the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 80'
	long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (20 CYs)
	compacted in place from an approved weed free commercial source per contract
	specifications and details.
	Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2
	details and specifications.
0.16	Existing culvert. Remove and replace the existing culvert with a new 24" x 65' Aluminized
	16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2
	CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet
	for fill-slope protection and energy dissipation per contract specifications and details. Upon
	approval of the roadbed after the culvert replacement, properly place, water, and roll a 14'
	wide by 80' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock
	(20 CYs) compacted in place from an approved weed free commercial source per contract
	specifications and details.
0.17	Unit 05-25 boundary on right.
0.22	Unit 05-25 boundary on right.
0.24	Existing culvert. Remove and replace the existing culvert with a new 24" x 35' Aluminized
	16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round
	downspout at pipe outlet for fill-slope protection and energy dissipation per contract

16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.

- 0.28 Unit 05-25 boundary on right.
- 0.30 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.34 Existing culvert. Repair existing downspout.
- 0.36 Unit 05-25 boundary on right.
- 0.41 Existing culvert. Remove and replace the existing culvert with a new 30" x 70' Aluminized 14-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 80' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (20 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.44 Unit 05-01 boundary on left and Unit 05-21 boundary on right.
- 0.45 Existing culvert.
- 0.51 Existing culvert.
- 0.55 Unit 05-01 boundary on left and Unit 05-21 boundary on right.
- 0.57 Existing culvert.
- 0.63 End pre-haul road renovation and surfacing. Unit 05-01 boundary on left and right. Begin new road construction ahead (see below).

NEW 33-5-32.1 Road - Valley View Road - AGG - Sub: 16Ft - Ditch: 3Ft

(See Exhibit C2-11 for Map and Exhibit C11 for Plan and Profile Sheets)

- <u>STA</u> <u>Description</u>
- 0+00 Begin new road construction. Begin road surfacing. Upon completion of all other road construction items and approval of the road subgrade, properly place, water, and roll a 15' wide by 8" depth aggregate base course which shall consist of 4"-minus screened rock compacted in place. Upon approval of base course, properly place, water, and roll a 14' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place. All aggregate materials shall be from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (2 total) approximately 10' wide by 50' long with 25' tapers.
- 0+40 Install 18" x 42' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
- 0+89 Jct w/ Op Spur on right.
- 4+60 Install 18" x 36' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
- 6+00 Jct w/ Op Spur on right.
- 7+89 Construct truck turn-around/landing area. End road construction and surfacing.

34-5-5.0 Road - Miller Mobile - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-5-31.3 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted

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road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Unit 32-25 on left.

- 0.03 Jct w/ Op Spur on right. Unit 05-01 boundary on right.
- 0.07 Existing culvert.
- 0.17 Existing culvert.
- 0.20 Unit 32-25 boundary on left and Unit 05-01 boundary on left and right.
- 0.21 End pre-haul road renovation. Landing on right.

33-5-32.0 Road - Miller Gulch X Sp - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-5-31.3 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Unit 32-35 on left.

Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.

- 0.01 Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 0.09 Existing culvert. Unit 32-35 boundary on left.
- 0.14 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Install a 20' full-round downspout at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.15 Unit 32-24 boundary on right. End RMU.
- 0.18 Unit 32-35 boundary on left.
- 0.21 Unit 32-35 boundary on left and Unit 32-24 boundary on right.
- 0.23 Existing culvert. Remove and replace the existing culvert with a new 24" x 40' Aluminized 16-gauge CMP per contract details and specifications (Type 2). Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 14' wide by 60' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.24 Unit 32-35 boundary on left and Unit 32-24 boundary on right.
- 0.31 Unit 32-35 boundary on left.
- 0.32 Existing culvert.
- 0.35 Existing rock quarry area on left.
- 0.39 End pre-haul road renovation. Unit 32-24 boundary on right.

33-5-31.1 Road - Miller Gulch S Spur - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Spider jct w/ 33-6-24.0 Road, 33-5-31.2 Road, and 33-5-31.3 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside

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culverts; and roadside brushing and chipping. Unit 32-23 on left and Unit 32-25 on right.

- 0.04 Existing culvert.
- 0.10 Existing culvert.
- 0.16 Jct w/ Temp Route 32-25-A & 32-25-B on right.
 - Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 0.17 Unit 32-23 boundary on left.
- 0.27 Existing culvert.
- 0.34 Existing culvert.
- 0.47 Jct w/ 33-5-32.2 Road on left. Unit 32-25 boundary on left. End RMU.
- 0.48 Jct w/ Temp Route 32-25-C on right.
- 0.52 Existing culvert.
- 0.61 Existing culvert.
- 0.64 Unit 32-25 boundary on left and right.
- 0.66 End pre-haul road renovation. Jct w/ Op Spur on right.

33-5-32.2 Road - Miller Time - NAT - Sub: 12Ft - Ditch: 0Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-5-31.1 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; removal of existing water bars; and roadside brushing and chipping. Unit 32-35 on right.
- 0.02 Existing water bar to be graded out for haul.
- 0.05 Unit 32-25 boundary on right. Boundary line BLM/Josephine County.
- 0.06 Existing water bar to be graded out for haul.
- 0.08 End pre-haul road renovation. Jct w/ Temp Route 32-25-F on right.

33-5-30.0 Road, Seg A-B - Colby-Miller Sp - AGG - Sub: 14Ft - Ditch: 3Ft/0Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-6-24.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.

- 0.07 Existing culvert.
- 0.11 Existing culvert.
- 0.18 Existing culvert.
- 0.24 Existing culvert.
- 0.29 Jct w/ 33-5-30.1 Rd on right.
- 0.41 Existing culvert.
- 0.47 Jct w/ 33-5-30.4 Rd on right.
- 0.48 Existing culvert.
- 0.55 Existing culvert.
- 0.64 Jct w/ 33-5-31.5 Rd on left. Begin road prism w/out a ditch line.
- 0.65 Unit 31-06 boundary on left. End RMU.
- 0.66 Unit 31-06 boundary on right.
- 0.96 Large landing on right. Begin road reconstruction w/ heavy maintenance and clearing and grubbing.

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1.10 End pre-haul road renovation and reconstruction. Op Spur/Tractor Swing ahead.

33-5-31.5 Road - Miller Gulch J Sp - AGG - Sub: 14Ft - Ditch: 0Ft

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 33-5-30.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping. Unit 31-06 boundary on right.
- 0.01 Jct w/ 33-5-31.6 Rd on left. Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
- 0.19 Jct w/ Temp Route 31-06-A on right.
- 0.31 Jct w/ Temp Route 31-06-B on right.
- 0.36 End RMU.
- 0.40 End pre-haul road renovation. Jct w/ Temp Route 31-06-C on right.

33-5-30.3 Road -Miller Mobile 1 - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-6-24.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.

- 0.05 Existing culvert.
- 0.08 End pre-haul road renovation. End RMU.

33-5-30.2 Road -Miller Mobile - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 33-6-24.0 Road on left and right. Begin pre-haul road renovation which includes removal of existing barricade/berm; reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Unit 30-02 on left.
- 0.01 Remove existing barricade/berm/tank-trap.
- 0.05 Existing culvert. Unit 30-02 boundary on left.
- 0.07 Unit 30-02 boundary on left. Large landing area. Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
- 0.13 End pre-haul road renovation. Unit 30-02 boundary on left.

Frontage Road Area - See Exhibit C2-15 for Map

33-6-14.0 Road, Seg A-B - Wolf Orch Road - AGG - Sub: 12Ft - Ditch: 0Ft/3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ Frontage Road (County). Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Begin road surfacing. Upon completion of all other road renovation items and approval of

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the road subgrade, properly place, water, and roll a 12' wide by 4" depth aggregate surface course which shall consist of 1-1/2"-minus crushed rock compacted in place from an approved weed free commercial source per contract specifications and details. Surface 4 turnouts per mile (3 total) approximately 10' wide by 50' long with 25' tapers. The Purchaser shall be required to furnish and apply non-saline water, or approved equal, during dry hauling periods (dust abatement) per the acquired easement and its Letter of Agreement, as well as for the purpose of laying nuisance dust and to prevent loss of surface material over the entire length (0.71 miles) of road.

- 0.01 Jct w/ Private driveway on left.
- 0.03 Existing culvert in Frontage Road drainage ditch. Remove and replace the existing culvert with a new 18" x 30' Aluminized 16-gauge CMP per contract details and specifications. Upon approval of the roadbed after the culvert replacement, properly place, water, and roll a 12' wide (with curve widening at aprons) by 50' long by 4" depth aggregate cap which shall consist of 1-1/2"-minus crushed rock (15 CYs) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.14 Jct w/ Private driveway on left.
- 0.23 Jct w/ Private driveway on right.
- 0.29 Jct w/ Private driveway on left.
- 0.41 Jct w/ Private driveway on left.
- 0.45 Jct w/ Private driveway on left and right.
- 0.49 Existing culvert.
- 0.56 Existing culvert.
- 0.60 Existing culvert.
- 0.63 Jct w/ Private driveways on left and right.
- 0.64 Property line Private Civilian/BLM.
- 0.65 Existing culvert.
- 0.67 Reconstruct a 0.8-acre heli-landing area on right (along road). Properly excavate, place, grade, and compact clean embankment material per specifications. Upon completion of helilanding construction, properly place, water, and roll a 4" depth aggregate base course which shall consist of 4"-minus crushed rock (563 CY) compacted in place from an approved weed free commercial source per contract specifications and details.
- 0.70 Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of landing area so not to impede drivability of traffic or use.
- 0.71 End pre-haul road renovation and surfacing. Jct w/ Temp Route 23-07 straight ahead.

Boardtree Road System - See Exhibit C2-17 for Map

33-5-7.0 Road, Seg A – Board Tree Road – AGG – Sub: 14Ft – Ditch: 3Ft

- MP
 Description

 0.00
 Jct w/ Speaker Road (County). Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. The Purchaser shall be required to furnish and apply non-saline water, or approved equal, during dry hauling periods (dust abatement), when directed by the Contract Officer, for the purpose of laying nuisance dust and to prevent loss of surface material over the next 0.50 miles of road.
- 0.02 Jct w/ Private driveway on right.
- 0.04 Existing bridge at Wolf Creek crossing. A BLM haul authorization form for oversize loads can be obtained from the Authorized Officer. This form shall be properly filled out and submitted for approval a minimum of 14 days prior to driving oversized loads across the bridge.

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	Hydrologic Point of Concern: Install check dams, or other approved BMPs, per contract specifications and Exhibit C11-2. This creek is noted for critical fish habitat (<i>Coho</i>).
0.06	Jct w/ Private driveway on left. Existing culvert.
0.14	Jct w/ Private driveway on right.
0.16	Existing culvert.
0.20	Jct w/ Private driveway on right.
0.21	Existing culvert.
0.28	Existing culvert.
0.30	Property line Private Civilian/BLM.
0.31	Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.32	Existing culvert.
0.36	Existing culvert.
0.41	Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.43	Existing culvert.
0.52	Existing culvert.
0.55	Existing culvert.
0.64	Existing culvert.
0.68	Existing culvert.
0.72	Existing culvert.
0.80	Existing culvert.
0.83	Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.93	Existing culvert.
1.05	Existing culvert.
1.23	Existing culvert.
1.27	Existing culvert.
1.30	Existing culvert.
1.33	Existing culvert at Board Tree Crk crossing. Hydrologic point of concern. Install check
	dams or other approved BMPs per Exhibit C11-2 details and specifications.
1.45	Existing culvert. Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running
1.47	surface of road and outside of turnoff area so not to impede drivability of traffic.
1.55	Existing culvert at Board Tree trib crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C11-2 details and specifications. Downspout missing.
	Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free
	commercial source at pipe outlet for fill-slope protection and energy dissipation per contract
	specifications and details.
1.59	Existing culvert at Board Tree trib crossing. Hydrologic point of concern. Install check dams
	or other approved BMPs per Exhibit C11-2 details and specifications.
1.69	Existing culvert.
1.80	Existing culvert.
1.96	Existing culvert.
1.98	Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and
2.00	Exhibit C6-2. See Exhibit A for additional information.
2.06	Waste Disposal Sight (WDS) on right. Place slump material on stable area well off running
2.00	surface of road and outside of turnoff area so not to impede drivability of traffic.
2.09	Existing culvert.
2.14	Existing culvert.
2.23	End pre-haul road renovation. Jct w/ 33-5-18.0 Road on left. End RMU.

<u>33-5-18</u>	.0 Road, Seg A-B – Board Tree Sp – AGG – Sub: 14Ft – Ditch: 3Ft
MP	Description
0.00	Jct w/ 33-5-7.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.04	Begin Roadside Management Unit (RMU). Upon completion of RMU timber removal, grub all stumps that would hinder typical road maintenance operations per Specifications and Exhibit C6-2. See Exhibit A for additional information.
0.31	Existing culvert.
0.39	Existing culvert.
0.42	Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.47	End RMU.
0.49	Existing culvert.
0.60	Existing culvert.
0.72	Existing culvert.
0.75	Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.79	Existing culvert. Downspout missing. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
0.95	Existing culvert.
1.08	Existing culvert.
1.20	Existing culvert.
1.24	Jet w/ 33-5-17.1 Road on right.
1.32	Existing culvert. Downspout missing. Supply and properly place 2 CYs of Class 2 Riprap material from an approved weed free commercial source at pipe outlet for fill-slope protection and energy dissipation per contract specifications and details.
1.38	Jct w/ 33-5-17.0 Road on left.
1.41	Waste Disposal Sight (WDS) on left. Place slump material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.56	Unit 17-03A boundary on left.
1.70	End pre-haul road renovation. Unit 17-03A boundary on left (downhill).
	.1 Road, Seg A – Jackpot Mine PVT Rd – NAT – Sub: 14Ft – Ditch: 0Ft
MP	Description
0.00	Jct w/ 33-5-18.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; removal of existing water bars; scarify rutted road surface as needed; and roadside brushing and chipping.
0.01	Existing water bar to be graded out for haul.
0.02	Existing water bar to be graded out for haul.
0.03	Existing PVT gate.

- 0.03
- 0.04
- 0.06
- Existing PVT gate. Existing water bar to be graded out for haul. Existing water bar to be graded out for haul. End pre-haul road renovation. Jct w/ Temp Route 17-03B on right. 0.08

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Temporary Routes

All Temporary Routes are native surface and out-sloped, unless noted otherwise. Subgrade width shall not exceed 15 feet (not including turnouts and landings). All temp routes shall be winterized by October 15th if access is needed over two dry seasons. Winterization includes water barring, seeding, mulching, and temporarily barricading per Exhibit D details and specifications.

Sunny Valley Loop Area

Temp Route 01-02-A (See Exhibit C2-3 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 34-6-1.1 Rd. Begin temp route construction (typical cut-fill).
- 0+25 Unit 01-02 boundary.
- 5+75 Construct truck turnaround/landing area.
- 6+05 End temp route construction.

Temp Route 01-02-B (See Exhibit C2-3 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 34-6-1.1 Rd. Begin temp route construction (typical cut-fill).
- 0+25 Unit 01-02 boundary.
- 4+15 Construct truck turnaround/landing area.
- 5+30 End temp route construction.

Temp Route 35-12 (See Exhibit C2-4 for Map)

<u>STA</u> <u>Description</u>

- 0+00 End of 33-6-35.2 Rd at large landing area. Begin temp route construction (typical cut-fill). The first 144 feet of temp route shall be constructed under the terms and conditions set in the executed License Agreement and Crossing Plat with Oregon Dept. of Forestry.
- 1+44 Property line ODF/BLM.
- 1+45 Unit 35-12 boundary.
- 1+90 Jct w/ new temp construction (end of this temp loop) on right.
- 7+30 End temp route construction. Jct w/ temp construction (close loop).

Miller Gulch Road Area

Temp Route 31-06-A (See Exhibit C2-6 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-31.5 Rd. Begin temp route construction (minor cut-fill).
- 0+10 Unit 31-06 boundary.
- 1+33 Jct w/ Op Spur on left.
- 2+50 Construct truck turnaround/landing area.
- 2+80 End temp route construction.

Temp Route 31-06-B (See Exhibit C2-6 for Map)

- STA Description
- 0+00 Jct w/ 33-5-31.5 Rd. Begin temp route reconstruction (minor cut-fill).
- 0+17 Unit 31-06 boundary.
- 2+22 Reconstruct truck turnaround/landing area.
- 2+52 End temp route reconstruction.

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Temp Route 31-06-C (See Exhibit C2-6 for Map)

- STA Description
- 0+00 End of 33-5-31.5 Rd. Begin temp route reconstruction (minor cut-fill). Existing landing area.
- 0+60 End landing area.
- 1+00 Remove existing berm/barricade.
- 3+23 Unit 31-06 boundary.
- 3+50 Reconstruct truck turnaround/landing area.
- 3+80 End temp route reconstruction.

Temp Route 32-25-A (See Exhibit C2-7 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-31.1 Rd. Begin temp route reconstruction (minor cut-fill).
- 0+10 Unit 32-25 boundary.
- 4+10 Reconstruct truck turnaround/landing area.
- 4+40 End temp route reconstruction.

Temp Route 32-25-B (See Exhibit C2-7 for Map)

- STA Description
- 0+00 Jct w/ 33-5-31.1 Rd. Begin temp route construction (typical cut-fill).
- 0+10 Unit 32-25 boundary.
- 0+65 Construct truck turnaround/landing area.
- 2+75 End temp route construction.

Temp Route 32-25-C (See Exhibit C2-8 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-31.1 Rd. Begin temp route reconstruction (minor cut-fill).
- 0+30 Unit 32-25 boundary.
- 0+75 Remove existing berm/barricade.
- 4+63 Jct w/ Op Spur on left.
- 5+16 Jct w/ new temp construction (end of this temp loop) on right.
- 9+10 End reconstruction; Begin new construction (typical cut-fill). Jct w/ Op Spur on left.
- 15+55 End temp route construction. Jct w/ temp reconstruction (close loop).

Temp Route 32-25-D (See Exhibit C2-9 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-32.2 Rd. Begin temp route construction (typical cut-fill). The first 53 feet of temp route shall be constructed under the terms and conditions set in the executed License Agreement and Crossing Plat with Josephine County Dept. of Forestry.
- 0+53 Property line JoCo/BLM.
- 0+54 Unit 32-25 boundary.
- 2+00 Construct truck turnaround/landing area.
- 2+41 End temp route construction.

Temp Route 32-25-E (See Exhibit C2-10 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-31.3 Rd. Begin temp route construction (typical cut-fill).
- 0+59 Unit 32-25 boundary on left and right.
- 3+20 Construct truck turnaround/landing area.
- 3+50 End temp route construction.

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Temp Route 32-25-F (See Exhibit C2-10 for Map)

- STA Description
- 0+00 Jct w/ 33-5-31.3 Rd. Begin temp route construction (typical cut-fill).
- 0+39 Unit 32-25 boundary on left and right.
- 4+35 Construct truck turnaround/landing area.
- 4+65 End temp route construction.
- Temp Route 31-07 (See Exhibit C2-12 for Map)
- STA Description
- 0+00 End of 33-5-31.7 Rd. Begin temp route construction (typical cut-fill).
- 0+31 Unit 31-07 boundary on left and right.
- 3+68 End temp route construction.

Frontage Road Area

Temp Route 23-07 (See Exhibit C2-14 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 End of 33-6-14.0 Rd. Begin temp route construction (typical cut-fill).
- 0+49 Unit 23-07 boundary on left and right.
- 2+81 **CAUTION!! Natural Gas Line Crossing!** A minimum of 5-1/2 feet of cover over the existing pipeline is required at the crossing. The Purchaser or their designated representative is responsible for contacting Williams Pipeline a minimum of 72 hours prior to scheduling temp route construction activities. A Williams Pipeline representative must be on-site during construction. Existing pipe depth will be verified by on-site representative to determine additional subgrade depth requirements to achieve adequate cover.
- 4+03 Unit 23-07 boundary on left and right.
- 5+06 Unit 23-07 boundary on left and right.
- 6+95 **CAUTION!! Natural Gas Line Crossing!** A minimum of 5-1/2 feet of cover over the existing pipeline is required at the crossing. The Purchaser or their designated representative is responsible for contacting Williams Pipeline a minimum of 72 hours prior to scheduling temp route construction activities. A Williams Pipeline representative must be on-site during construction. Existing pipe depth will be verified by on-site representative to determine additional subgrade depth requirements to achieve adequate cover.
- 7+80 Construct truck turnaround/landing area.
- 8+90 End temp route construction. Op Spurs on left and right. See Exhibit A's and Timber appraisal for additional information.

Boardtree Area

Temp Route 17-03B (See Exhibit C2-17 for Map)

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 33-5-17.1 Rd. Begin temp route reconstruction (minor cut-fill).
- 0+50 Remove existing berm/barricade.
- 31+71 End reconstruction; Begin new construction (typical cut-fill).
- 31+87 Unit 17-03B boundary.
- 35+65 Construct truck turnaround/landing area.
- 35+95 End temp route construction.

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SPECIAL PROVISIONS - ROADS

1. GENERAL:

• Before the initial start of road renovation, construction, reconstruction, or surfacing operations, or after a shutdown of 7 or more days, the Purchaser, or the Purchaser's Representative, shall notify the Authorized Officer 48 hours in advance of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer if they intend to cease operations for any period of 30 or more days.

2. BRIDGE LOAD RESTRICTIONS:

- 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 (See R-4).
- Bridges and/or structures without weight restrictions are located at:
 - 1) Road Number 33-6-24.0 (Miller Gulch Road) at milepost 0.04
 - 2) Road Number 33-5-7.0 (Board Tree Road) at milepost 0.04
- BLM haul authorization form for weight restricted structures and/or oversize loads can be obtained from the Authorized Officer. This form shall be properly filled out and submitted for approval a minimum of 14 days prior to driving oversized loads across the bridge.

3. DAMAGE:

• The Purchaser's Representative/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 other 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, as good or better condition than just prior to such damage occurring.

4. PERMITS:

- All required permits are the responsibility of the Purchaser.
- 5. SEASONAL RESTRICTION. Waivers may be granted if conditions are favorable.

ACTIVITY	START DATE	END DATE
Road renovation	May 15	Oct. 15
In stream work	June 15	Sept. 15

6. STREAMS:

- All stream channel culverts and inlets shall be cleared and cleaned between June 15th and September 15th in accordance with Oregon Department of Fish and Wildlife (ODFW) in-stream work period guidelines, updated January 2022.
- Construct silt fences, or approved equal, 25 and 50 feet below culvert replacement sites (on live streams) to trap sediment and prevent it from entering nearby stream channels.

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- Live streams shall be diverted around or through the work area in a manner that will minimize sedimentation downstream. Keep excavation site dewatered so that installation of culverts can be carried out only under dry conditions. Dispose of excess water by using natural drainage ways or devices near the site to the extent of their natural capacity and in a manner that will avoid damage to adjacent property. Utilize dewatering methods such as temporary sediment traps and/or silt fences for areas to be excavated. Provide for downstream water flow without significant transport of excavated material or sediment during construction. At no time shall turbidity limits exceed DEQ's water quality standards.
- Ensure that all large wood is retained in the stream channel during culvert cleaning activities by moving logs which had accumulated on the upstream side of a culvert to the downstream side of the culvert.

7. 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 to be designated by the Authorized Officer, 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.

8. 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.

9. 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 by the Authorized Officer or Project Engineer prior to entering BLM lands. Provide a 48 hours' notice of inspection to the Authorized Officer or Project Engineer prior to mobilization.

10. SOIL STABILIZATION:

• All disturbed soil shall be seeded and mulched. The Purchaser's Representative/Contractor shall apply native grass seed and Certified Weed Free straw mulch for soil stabilization operations. The BLM will furnish native grass seed, **if available**. Acquiring certified weed free straw mulch is the responsibility of the Purchasers Representative.

11. ROAD RENOVATION:

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

12. ROADSIDE BRUSHING:

- While roadside brushing, there shall be no scarring or other damage of the tree trunk or bole allowed. All debris resulting from roadside brushing activities shall be scattered downslope or chipped according to specifications. Use of Excavators for brush removal will be at the discretion of the Authorized Officer. All culvert inlets and outlets shall be brushed for a radius of 4 feet.
- While roadside brushing through private industry lands, conifer trees at the edges of the cleared area (see cutting limit, Exhibit C6A) shall have the branches pruned rather than being felled.
- All stumps, designated by the Authorized Officer, which would interfere with normal blading and road renovation/maintenance operations (including turnouts), shall be removed in such a way as to not cause damage to the drainage ditch or the roadbed. If such damage does occur, the Purchaser's Representative/Contractor shall properly repair the road damage immediately.

13. TEMPORARY ROUTES:

- All temp routes and native surfaced roads (that were previously closed before timber sale activities began) shall be winterized by October 15th if access is needed over two dry seasons. Winterization includes water barring, seeding, mulching, and temporarily barricading. All temp routes shall be water barred, barricaded, seeded, and mulched after use, unless otherwise specified.
- Clearing, grubbing, and excavation activities of temp routes shown on Exhibit C maps shall be performed in accordance with specifications.
- Temp routes shall be constructed to the minimum necessary width for safe timber harvest activities.

14. COMMERCIAL AGGREGATE:

Aggregate supplied/furnished for this work shall be direct from an accredited commercial source and can be stockpiled during the period between November 1st and June 15th immediately prior to application. Aggregate which has been stockpiled between June 16th and October 31st of prior years will not be accepted. Aggregate crushed between June 16th and October 31st of the same application year shall not be stockpiled for more than two weeks before application.

15. 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.

16. 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

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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 shall 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 can be made during dry conditions of the wet season pending approval from a BLM Authorized Officer.

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TIMBER SALE ROAD SPECIFICATIONS

SECTION	DESCRIPTION	PAGE NO.'s
100	General	2-7
200	Clearing and Grubbing	8-10
300	Excavation and Embankment	11-13
400	Pipe Culverts	14-16
500	Renovation and Improvement of Existing Roads	17
600	Watering	18
900	Aggregate Base Course – Screened Rock	19-20
1200	Aggregate Surface Course - Crushed Rock	21-22
1400	Slope Protection	23-24
1700	Erosion Control	25-26
1800	Soil Stabilization	27-29
2100	Roadside Brushing	30

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<u>GENERAL – 100</u>

101 - Prework Conference:

A prework conference will be held prior to the start of new construction, improvement, renovation, and surfacing operations. The Purchaser shall request the conference at least **96** 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:

<u>AASHTO</u> - 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

<u>Apparent Opening Size (AOS)</u> - 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.

<u>Base Course</u> - 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.

<u>Burst Strength</u> - 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.

<u>Culvert</u> - 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.

<u>Curve Widening</u> - 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

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surface and constructed to subgrade.

<u>End Haul</u> - Excavated material moved, other than by dozer, to an embankment or waste area to prevent side-casting material outside of the road prism.

<u>Excess Excavation</u> - Material from the roadway in excess of that needed for construction of the designed roadway (waste).

<u>Grab Tensile Strength</u> - 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.

<u>Grading</u> - 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.

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

<u>Overhaul</u> - Distance excavated material is transported in excess of the distance included in the cost for excavation.

<u>Penetration Resistance</u> - The geotextile material property determined by the force required to penetrate a geotextile material with a sharp pointed object. Initial penetration is by separating the fibers. Further penetration is essentially a tearing process.

<u>Percent Open Area</u> - 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.

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

<u>Pioneer Road</u> - Temporary construction access built along the route of the project.

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

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

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

<u>Puncture Resistance</u> - 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.

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<u>Purchaser</u> - 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.

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

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

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

Road Centerline - The longitudinal center of a roadbed.

<u>Road Improvement</u> - 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.

<u>Roadway</u> - 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.

<u>Scale</u> - 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.

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

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

<u>Shoulder</u> - 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.

<u>Slope ratio notation (horizontal:vertical)</u> – Slope ratios for constructed cut and fill slopes are expressed as a ratio of horizontal units to vertical units.

Spalls - Flakes or chips of stone.

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

<u>Specific Gravity</u> - 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.

<u>Structures</u> - 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 crushed stone.

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

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

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

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

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

<u>Tensile Test</u> - 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.

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

<u>Typical Cross Sections</u> - 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.

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

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

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

<u>Woven Geotextile Material</u> - 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.

102a - Tests Used in These Specifications:

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

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

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

<u>AASHTO T 90</u> 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.

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Numerical difference between the liquid and plastic limits of the soil.

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

25 blows/layer Method C - 4" 25 blows/layer	mold, soil passing a 3/4 inch sieve
<u>AASHTO T 119</u>	Slump of hydraulic cement concrete.
<u>AASHTO T 152</u>	Air content of freshly mixed concrete.
<u>AASHTO T 166</u>	Specific Gravity of compacted Bituminous Mixtures.
AASHTO T 176 aggregate.	Shows relative portions of fine dust or claylike materials in soil or graded

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

<u>AASHTO T 191</u> <u>Sand Cone.</u> 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.

- <u>AASHTO T 205</u> <u>Rubber balloon.</u> 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.

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

<u>ASTM D 4564</u> Determination of relative density of cohensionless soils.

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

- 103 Compaction equipment shall meet the following requirements:
- 103f <u>Vibratory roller</u>. 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

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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 <u>Vibratory compactor</u>. 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.
- 103i Other. Compaction equipment approved by the Authorized Officer.

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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.
- Where clearing limits have not been staked, established by these specifications, or shown on the plans, the limits shall extend 10 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope.
- 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 Subsection 202 as shown on the plans.
- 203b Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.

- 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.
- 204c On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 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 piling and burning in accordance with Subsection 207 for the following road locations.

Road/Temp Route.	From MP or STA	To MP or STA	Activity Type	Disposal Method
33-5-32.1 NEW	0+00	7+89	Construction	Pile and Burn
34-6-2.0 (A-D)	0.81	1.26	RMU	Pile and Burn
34-6-2.0 (A-D)	1.52	2.04	RMU	Pile and Burn
34-6-1.1	0.00	0.56	RMU	Pile and Burn
34-6-1.0	0.00	0.45	RMU	Pile and Burn
33-6-24.0 (A-B2)	1.09	1.40	RMU	Pile and Burn

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Road/Temp Route.	From MP or STA	To MP or STA	Activity Type	Disposal Method
33-6-24.0 (A-B2)	1.62	1.77	RMU	Pile and Burn
33-6-24.0 (A-B2)	2.15	3.44	RMU	Pile and Burn
33-6-24.0 (A-B2)	3.54	3.93	RMU	Pile and Burn
33-5-31.2 (A-B)	0.00	0.67	RMU	Pile and Burn
33-5-31.3 (A)	1.54	1.84	RMU	Pile and Burn
33-5-32.0	0.00	0.15	RMU	Pile and Burn
33-5-31.1	0.16	0.47	RMU	Pile and Burn
33-5-30.0 (A-B)	0.00	0.65	RMU	Pile and Burn
33-5-30.0 (B)	0.96	1.10	Reconstruction	Pile and Burn
33-5-31.5	0.01	0.36	RMU	Pile and Burn
33-5-30.3	0.00	0.08	RMU	Pile and Burn
33-5-7.0 (A)	1.98	2.23	RMU	Pile and Burn
33-5-18.0 (A-B)	0.04	0.47	RMU	Pile and Burn
TR 01-02-A	0+00	6+05	Construction	Pile and Burn
TR 01-02-B	0+00	5+30	Construction	Pile and Burn
TR 35-12	0+00	7+30	Construction	Pile and Burn
TR 31-06-A	0+00	2+80	Construction	Pile and Burn
TR 31-06-B	0+00	2+52	Construction	Pile and Burn
TR 31-06-C	0+00	3+80	Construction	Pile and Burn
TR 32-25-A	0+00	4+40	Construction	Pile and Burn
TR 32-25-B	0+00	2+75	Construction	Pile and Burn
TR 32-25-C	0+00	15+55	Construction	Pile and Burn
TR 32-25-D	0+00	2+41	Construction	Pile and Burn
Т R 32-25-Е	0+00	3+50	Construction	Pile and Burn
TR 32-25-F	0+00	4+65	Construction	Pile and Burn
TR 31-07	0+00	3+68	Construction	Pile and Burn
TR 23-07	0+00	8+90	Construction	Pile and Burn
TR 17-03B	0+00	35+95	Construction	Pile and Burn

- Notwithstanding Subsections 204, 204a, 204c, 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.
- 207 The Purchaser shall prepare a burning plan for the disposal of clearing and grubbing debris in accordance with local and state laws, rules, and regulations. The plan shall be approved in writing by the Authorized Officer prior to burning.
- 208b Trees, firm logs, and other firm large pieces, 6 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 Rev 1-2017

by scattering – Purchaser Option.

- 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 Purchaser Option.
- Disposal of clearing and grubbing debris on non-government property by scattering this material outside of clearing limits will be permitted provided the Purchaser obtains a written permit from the property owner on whose property the disposal is to be made. The Purchaser shall furnish the Authorized Officer a certified copy of the permit and a written release from the property owner absolving the Government from responsibilities in connection with the disposal of debris on said property.
- 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.
- 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.

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EXCAVATION AND EMBANKMENT - 300

- This work shall consist of excavating, overhaul, placement of embankments, backfilling, borrowing, leveling, ditching, grading, in-sloping, out-sloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earthmoving work in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- Excavation shall also consist of the excavation of road and landing cut sections, borrow sites, backfilling, leveling, ditching, grading, compaction, and other earth moving work necessary for the construction of the roadway in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes.
- Suitable material removed from the excavation shall be used in the formation of embankment subgrade, shoulders, slopes, bedding, backfill for structures, and for other purposes as shown on the plans.
- Borrow shall consist of suitable material required for the construction of embankments or for other portions of the work; such material shall be obtained from sources selected by the Purchaser at his option and approved by the Authorized Officer.
- 305 Embankment construction shall consist of the placement of excavated and borrowed materials, backfilling, leveling, grading, compaction, and other earth-moving work necessary for the construction of the roadway and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 305a Material used in the construction of embankment sections shall be free of stumps, cull logs, brush, muck, sod, roots, frozen material, and other deleterious materials and shall be placed and compacted as specified.
- 305b Embankment materials shall be placed in successive parallel layers on areas cleared of stumps, cull logs, brush, sod, and other vegetative and deleterious materials, except as provided under Subsection 204. Roadway embankments of earth material shall be placed in horizontal layers not exceeding 8 inches in depth.
- Layers of embankment and final subgrade material as specified under Subsections 305a and 305b, shall be moistened or dried to a uniform optimum moisture content suitable for maximum density and compacted to full width with compacting equipment conforming to requirements of Subsections 103f, 103g, and 103i.
- 306a Minimum compaction for each layer of embankment material placed at optimum moisture shall be 1 hour of continuous compacting for each 4 stations of road or fraction thereof.
- The final subgrade, including turnouts and landings, shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103f, 103g, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 4 stations of road or a fraction of as measured along the center line of the constructed road.
- 306g All fill slopes shall be compacted to 75 percent of maximum density, either by walking with cat/excavator or by pressing with excavator bucket, to prevent surface erosion and raveling.

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- In the case of rock fills, placement of material in layers is not required and such material may be placed by end-dumping or other methods approved by the Authorized Officer provided that the rock be reasonably prevented from escaping beyond the embankment toe.
- The top of cut slopes shall be rounded by blending into the adjacent terrain for a distance not less than 1 foot and not more than 3 feet beyond the top of the cut. Rounding shall be performed in soils that can be shaped without ripping or blasting.
- When heavy clays, muck, clay shale, or other deleterious material for forming the roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected borrow material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306. Unsuitable material shall be disposed of as directed by the Authorized Officer.
- 316 Borrow material from sources selected at the Purchaser's option shall be inspected and approved in writing by the Authorized Officer prior to placement.
- 317 Selected borrow shall consist of talus material, finely broken rock, gravel, or other material of granular or favorable characteristics from sources shown on the plans.
- Selected borrow or selected roadway excavation material shall be uniformly spread on the roadbed in lifts not to exceed 6 inches in depth until the required thickness shown on the plans is attained.

Each layer shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.

- Ditches shall conform to the slope, grade, dimensions, and shape of the required cross section shown on the plans. Roots, stumps, rocks, and other projections shall be removed to form smooth, even slopes.
- Excess excavated, unsuitable, or slide materials shall not be disposed of on areas where the material will encroach on a stream course or other body of water. Such materials shall be disposed of in accordance with Subsection 321c. Materials not disposed of in this manner shall be retrieved and disposed of at the Purchaser's expense and at the direction of the Authorized Officer.
- 321c End-dumping will be permitted for the placement of excess materials under Subsection 321 in designated disposal areas or within areas approved by the Authorized Officer. Watering, rolling, and placement in layers are required. Materials placed shall be sloped, shaped, and otherwise brought to a visible condition acceptable to the Authorized Officer.
- When so indicated on the plans, selected coarse rock encountered in the excavation shall be conserved for slope protection or special rock embankment purposes and placed in accordance with the requirements and details of Section 1400 of these specifications and as shown on the plans.

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- 323 In the construction of channel changes and stream-crossing embankment sections, natural stream flow shall be maintained unless otherwise provided.
- 324 Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 2 feet on the uphill side.
- The finished grading shall be approved in writing by the Authorized Officer for the total project. The Purchaser shall give the Authorized Officer 3 days' notice prior to final inspection of the grading operations.

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PIPE CULVERTS - 400

- This work shall consist of furnishing and installing pipe culverts, splash pads, and downspouts in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Individual lengths and locations are approximate; final lengths and locations will be determined by the Authorized Officer upon installation of the appurtenance structures. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule. See Exhibit C7, Culvert List Sheet, and Exhibit C12, Road Renovation Worklist, for detailed roads and mile posts identified for replacement or new installation.
- Grade culverts shall have a gradient of 2 percent to 4 percent greater than the road centerline grade. Grade culverts shall be skewed down grade 30 degrees as measured perpendicular to the centerline, unless otherwise specified on the plans. See Exhibit C7, Culvert List Sheet, for detailed culvert skew information.
- Damage to the spelter, or burn back in excess of 3/8 inch, shall be wire brushed and painted with 2 coats of zinc-rich paint on zinc-coated steel pipe and 2 coats of aluminum-rich paint on aluminum or aluminum-coated pipe.
- 405a Corrugated (aluminized) steel-welded pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 36 and AASHTO M 218, AASHTO M 274, or AASHTO M 289 as specified on the plans.
- 406 Coupling bands shall conform to the requirements of AASHTO M 36 and AASHTO M 218 or AASHTO M 274 with the exception of band widths and the "Hugger"-type band which shall conform to the details, dimensions, and typical diagram shown on the plans.
- 406a "Hugger"-type coupling bands shall only be used with annular corrugated pipe and pipe-arch culverts, or helically corrugated pipe and pipe-arch culverts having annular reformed ends. Annular reformed ends shall consist of two annular corrugations.
- 406d Pipe culverts 36-inch diameter and larger shall be joined with "Hugger"-type coupling bands using 1/2-inch to 1-inch neoprene flat gaskets at each connection. All flat gasket material shall be free of tears or imperfections.
- 407b Full round culvert downspouts conforming to the material and construction requirements shall be constructed for culverts as shown on the plans and at the locations identified in Exhibit C7, Culvert List Sheet and Exhibit C12, Road Renovation Worklist.
- Pipe culverts and pipe-arch culverts shall be placed on the bed starting at the <u>downstream</u> end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Coupling bands of the type required under these specifications shall be installed to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and minimize infiltration of fill material.
- 410 Pipe shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road

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construction, it shall be replaced at the Purchaser's expense.

- 411 Trenches necessary for the installation of pipe culverts shall conform to the lines, grades, dimensions, and typical diagram included in the plans and in Exhibit C8, the Culvert Installation Detail Sheet.
- Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 24 inches below the invert grade for a width of at least one pipe diameter or span on each side of the pipe and shall be backfilled with selected granular or fine readily compactable soil material.
- 413 Pipe culverts and pipe-arch culverts shall be bedded on a selected granular or fine readily compactable soil material having a depth of not less than 6 inches, as shown on plans. Foundation material shall be of uniform density throughout the length of the structure and shall be shaped to fit the pipe.
- Inspection of pipe culverts having a diameter of 36-inches or larger shall be made before any backfill material is placed. Culverts found to be out of alignment or damaged shall be removed, replaced, and reinstalled or repaired as directed by the Authorized Officer at the Purchaser's expense and in accordance with these specifications.
- Side-fill material for pipe culverts shall be placed within 1 pipe diameter, or a minimum of 2 feet, of the sides of the pipe barrel, and to 1 foot over the pipe with fine, readily compactable soil or granular fill material free of excess moisture, muck, frozen material, roots, sod, or other deleterious or caustic material and devoid of rocks or stones of sizes which may impinge upon and damage the pipe or otherwise interfere with proper compaction.
- For pipe culvert, side-fill material conforming to the requirements of Subsection 416 shall be placed and compacted under the haunches of the pipe, and shall be brought up evenly and simultaneously on both sides of the pipe to 1 foot above the pipe, in layers not exceeding 6 inches in depth and 1 pipe diameter/span, or a minimum of 2 feet in width each side of, and adjacent to, the full length of the pipe barrel. Each layer shall be moistened or dried to a uniform moisture content suitable for maximum compaction and immediately compacted by approved hand or pneumatic tampers until a uniform density of 85 percent of the maximum density, is attained as determined by AASHTO T 99, Method C.
- 418 Side fills beyond the compaction limits specified under Subsection 417 shall be compacted as specified under Section 300.
- The pipe culverts after being bedded and backfilled as required by these specifications shall be protected by a 2-foot cover of fill before heavy equipment is permitted to cross the drainage structures. Removal of the protection fill shall be as directed by the Authorized Officer.
- 423 Construction of catch basins and ditch dams conforming to lines, grades, dimensions, and typical diagrams shown on the plans, shall be required for all grade culverts.
- 424 Construction of splash pads conforming to lines, grades, dimensions, and typical diagram shown in the details, shall be required for the grade culverts identified in the plans and as listed in Exhibit C12, Road Renovation Worklist.

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- 427 The Purchaser or Purchaser's Contractor shall record all installed culvert sizes, lengths, and locations on a copy of the Exhibit C7 Culvert List (redlines). This culvert list shall be furnished to the Authorized Officer or Project Engineer.
- The Purchaser or Purchaser's Contractor shall properly remove and dispose of old culverts in a legal manner and are responsible for any fees required in the proper disposal of such materials. The Purchaser shall remove the old culverts from the work site within 3 working days upon completion of the culvert replacement work for each road.
- Keep each excavation site dewatered so culvert installations are completed under dry conditions. Dispose of excess water by using pumping or natural drainage ways near the site in a manner that will avoid damage to adjacent property or the existing road subgrade. Provide for downstream waterflow with no more that 10% increase in natural stream turbidity due to transport of excavated material or sediment during construction. Diversion streams shall not be returned to the natural channel until all in-stream work has been completed.

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 and as shown on the plans.
- 501a This work shall include the removal and disposal of slides and slumps as specified in the worklist in accordance with these specifications.
- 502 The existing road surface shall be scarified to its full width and to a depth of 6 inches to eliminate surface irregularities and bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans and as specified in the worklist.
- 502a Rocks larger than 4 inches in maximum dimension shall be removed from the scarified layers of the roadbed. Material so removed will not be permitted to remain on road shoulders or in ditches.
- 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 slides and slumps shall be hauled to designated waste disposal sites as specified in the worklist.
- 504 The existing road surface and scarified material 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, and 103i and as specified in the worklist.
- 504a Minimum compaction required shall be 1 hour of continuous rolling for each 4 stations of road, or fraction thereof, as measured along the centerline per layer of material.
- 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.
- 507 Existing and new drainage structures shall be removed and replaced and/or placed with structures of the type, gauge, diameter, and length shown on the plans and in accordance with the placement requirements set forth under Section 400 of these specifications and as specified in the worklist.
- 508 Vegetation encroaching on the roadbed and the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Section 2100 of these specifications.
- 509 The finished grading shall be approved in writing by the Authorized Officer 1 day prior to surfacing operations. The Purchaser shall give the Authorized Officer 3 days' notice prior to final inspection of the grading operations.

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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.
- 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 where the road crosses private property.
- 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 roadbed.
- 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 BASE COURSE – 900 SCREENED ROCK MATERIAL

- 901 This work shall consist of furnishing, hauling, and placing one or more lifts of screened rock material on roadbeds, turnouts, and landings approved for placing screened rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans.
- 902a Screened rock materials to be used in this work may be obtained from commercial sources selected by the Purchaser, at his option, providing the rock materials furnished comply with these specifications and the sources are approved in writing by the Authorized Officer prior to use.
- 903 Screened rock material shall conform to the following gradation requirements:

Table 903

SCREENED ROCK MATERIAL GRADATION REQUIREMENTS Percentage by Weight Passing Square Mesh Sieves (AASHTO T 27)

Sieve	Gradation						
Designation	А	A B		D			
4 inch	100						
3 inch	95-100	100					
2 inch		95-100	100				
1-1/2 inch			95-100	100			
1 inch				95-100			
No. 4	11-44	16-49	21-54	26-59			
No. 200	2-15	2-15	0-15	0-15			

904 - Screened rock material shall not exceed 35 percent loss as determined by AASHTO T 96.

904a - Screened rock material shall show a durability value of not less than 35 as determined by AASHTO T 210.

- 905 The roadbed as shaped and compacted under Sections 300 and 500 of these specifications, shall be approved in writing by the Authorized Officer prior to placement of screened rock materials. Notification for final inspection, prior to rocking, shall be 72 hours prior to that inspection and shall be 5 days prior to start of rock operations.
- 906 Screened rock material shall be placed in layers not to exceed 6 inches in thickness. Where the required total thickness is more than 6 inches, the rock material shall be shaped and compacted in two or more layers of approximately equal thickness.
- 906a Screened rock materials used to repair or reinforce a soft, muddy, frozen, yielding, or rutted subgrade shall not be construed as surfacing under this specification.

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- 907 Filler or binder material obtained from sources shown on the plans and approved by the Authorized Officer shall be uniformly blended with the screened rock material on the road. Filler or binder materials shall be free from stones, vegetative matter, and other deleterious materials.
- 908 Screened rock material shall be blade-processed and spread to required dimensions. Processing shall be performed in such a manner as to minimize aggregate segregation.
- 910 Screened rock material, bladed and shaped as specified, shall be moistened or dried to optimum moisture content for maximum compaction and compacted to full width by compaction equipment conforming to the requirements of Subsections 103f, 103g, and 103i. Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.

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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.
- 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. If necessary to meet the above requirements or to eliminate an excess of filler, the gravel shall be screened before crushing.
- 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)

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

1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler,

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shall have a liquid limit of not more than 35 and a plasticity index of not less than 4 and not more than 12 as determined by AASHTO T 89 and AASHTO T 90.

- 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.
- Shaping and compacting of the roadbed and/or base course shall be completed and approved in writing, prior to placing crushed rock material, in accordance with the requirements of Section 500 for placing on the roadbed and Section 900 for placing on the base course. Notification for final inspection prior to rocking shall be 72 hours prior to the inspection and shall be 5 days prior to start of surfacing operations.
- 1210 Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed, turnouts, landings, and base course in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. 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 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.
- 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, or 103i. Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.

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SLOPE PROTECTION - 1400

- This work shall consist of furnishing, hauling, and placing stone materials for slope protection structures and splash pads (energy dissipaters) in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross-sections shown on the plans. Material not conforming to these specifications will be rejected and shall be removed from the slope protection structure at the purchaser's expense as directed by the Authorized Officer.
- 1402 Stone material shall consist of hard angular quarry rock of such quality that it will not disintegrate on exposure to water or weathering and shall be graded in accordance with these specifications.

Volume/ Cubic Foot	Average Dimension in inches	Approximate Weight in Pounds
12	27.5 x 27.5 x 27.5	2100
6	21.8 x 21.8 x 21.8	1050
4	19.1 x 19.1 x 19.1	700
3	17.3 x 17.3 x 17.3	525
1	12.0 x 12.0 x 12.0	175
2/3	10.5 x 12.0 x 12.0	120
1/2	9.5 x 9.5 x 9.5	88
1/3	8.3 x 8.3 x 8.3	60
1/4	7.6 x 7.6 x 7.6	44
1/6	6.6 x 6.6 x 6.6	30
1/8	6.0 x 6.0 x 6.0	22
1/100	2.6 x 2.6 x 2.6	2

NOTE: Guide for relation between volume, size, and weight. (175 lbs./cu./ft.):

1404 - The material shall be well graded from the smallest to the maximum size specified. Stones smaller than the specified 10 percent size shall consist of spalls and fine rock fragments so distributed as to provide a stable compact mass.

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1405 - Rip rap shall conform to the following gradations:

Class	Range of Intermediate Dimensions ² (inches)	Range of Rock Mass ³ (pounds)	% of Rock Equal or Smaller by Count
	6-8	18-42	100
0	5-6	10-18	85
0	2-5	1-10	50
	0-2	0-1	15
	9-15	59-270	100
1	7-11	28-110	85
1	5-8	10-42	50
	3-6	2-18	15
	15-21	270-750	100
2	11-15	110-270	85
2	8-11	42-110	50
	6-8	10-42	15
	21-27	750-1600	100
3	15-19	270-560	85
3	11-14	110-220	50
	8-10	42-81	15
4	27-33	1600-2900	100
	19-23	560-990	85
	14-17	220-400	50
	9-12	59-140	15

TABLE 1405¹

¹Gradation includes spalls and rock fragments to provide a stable, dense mass. ²The intermediate dimension is the longest straight-line distance across the rock that is perpendicular to the rock's longest axis on the rock face with the largest projection plane. ³Rock mass is based on a specific gravity of 2.65 (165#/cu.ft.) and 85 percent of the cubic volume as calculated using the intermediate dimension.

- 1406 The placement of slope protection stones by the end dumping method shall be conducted to prevent the stones from damaging drainage structures and escaping beyond the embankment toe.
- 1407 Determination of the acceptability of the slope protection material gradation will be through visual inspection and physical measurements by the Authorized Officer.

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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 Section 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.
- 1706a During the same construction season, the Purchaser or their representative shall perform erosion control measures on all exposed excavation, borrow, and embankment areas.
- 1707 Completed and partially completed segments of road construction or road reconstruction at the following location:

Road No.	From MP or STA	To MP or STA
33-5-32.1 NEW	0+00	7+89
33-5-30.0 (B)	0.96	1.10
TR 01-02-A	0+00	6+05
TR 01-02-B	0+00	5+30
TR 35-12	0 + 00	7+30
TR 31-06-A	0+00	2+80
TR 31-06-B	0+00	2+52
TR 31-06-C	0+00	3+80
TR 32-25-A	0+00	4+40
TR 32-25-B	0 + 00	2+75
TR 32-25-C	0+00	15+55
TR 32-25-D	0+00	2+41
TR 32-25-Е	0+00	3+50
TR 32-25-F	0+00	4+65
TR 31-07	0+00	3+68
TR 23-07	0+00	8+90
TR 17-03B	0+00	35+95

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

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- 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 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 sediment and check dams, catch basins, and energy dissipators (splash pads) for pipe culverts conforming to the requirements and details shown on the respective exhibits and on the plans.
- 1713 Where newly constructed logging spur roads join with existing surfaced roads, the Purchaser shall construct a sag in the spur road profile and install a culvert in accordance with the requirements and details as shown on the plans and as directed by the Authorized Officer.

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SOIL STABILIZATION - 1800

- 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, new road construction, and designated locations in accordance with these specifications as identified in the worklist and at the following locations:

Road/Temp Route.	From MP or STA	To MP or STA	Activity Type
33-5-32.1 NEW	0+00	7+89	Construction
34-6-2.0 (A-D)	0.81	1.26	RMU
34-6-2.0 (A-D)	1.52	2.04	RMU
34-6-1.1	0.00	0.56	RMU
34-6-1.0	0.00	0.45	RMU
33-6-24.0 (A-B2)	1.09	1.40	RMU
33-6-24.0 (A-B2)	1.62	1.77	RMU
33-6-24.0 (A-B2)	2.15	3.44	RMU
33-6-24.0 (A-B2)	3.54	3.93	RMU
33-5-31.2 (A-B)	0.00	0.67	RMU
33-5-31.3 (A)	1.54	1.84	RMU
33-5-32.0	0.00	0.15	RMU
33-5-31.1	0.16	0.47	RMU
33-5-30.0 (A-B)	0.00	0.65	RMU
33-5-30.0 (B)	0.96	1.10	Reconstruction
33-5-31.5	0.01	0.36	RMU
33-5-30.3	0.00	0.08	RMU
33-5-7.0 (A)	1.98	2.23	RMU
33-5-18.0 (A-B)	0.04	0.47	RMU
TR 01-02-A	0+00	6+05	Construction
TR 01-02-B	0+00	5+30	Construction
TR 35-12	0+00	7+30	Construction
TR 31-06-A	0+00	2+80	Construction
TR 31-06-B	0+00	2+52	Construction
TR 31-06-C	0+00	3+80	Construction
TR 32-25-A	0+00	4+40	Construction
TR 32-25-B	0+00	2+75	Construction
TR 32-25-C	0+00	15+55	Construction
TR 32-25-D	0+00	2+41	Construction
TR 32-25-Е	0+00	3+50	Construction
TR 32-25-F	0+00	4+65	Construction
TR 31-07	0+00	3+68	Construction

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Road/Temp Route.	From MP or STA	To MP or STA	Activity Type	
TR 23-07	0+00	8+90	Construction	
TR 17-03B	0+00	35+95	Construction	

- 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: September 1	To: October 15
	(of the same year)

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.
- 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 Section 12 of the contract, 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 9.70 acres designated for treatment as

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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

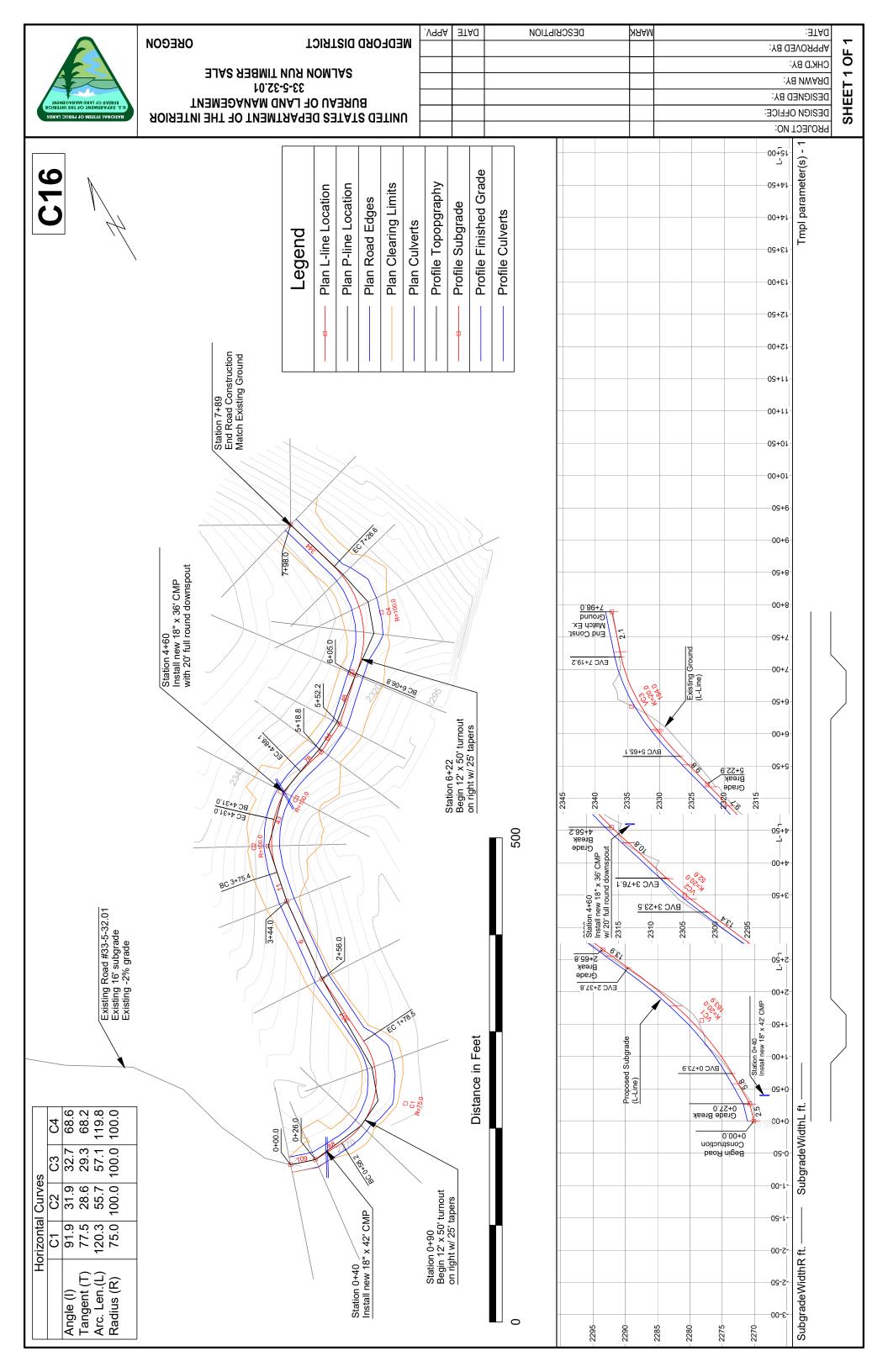
The above proportion and application rate are subject to adjustment by the Authorized Officer during the application operation.

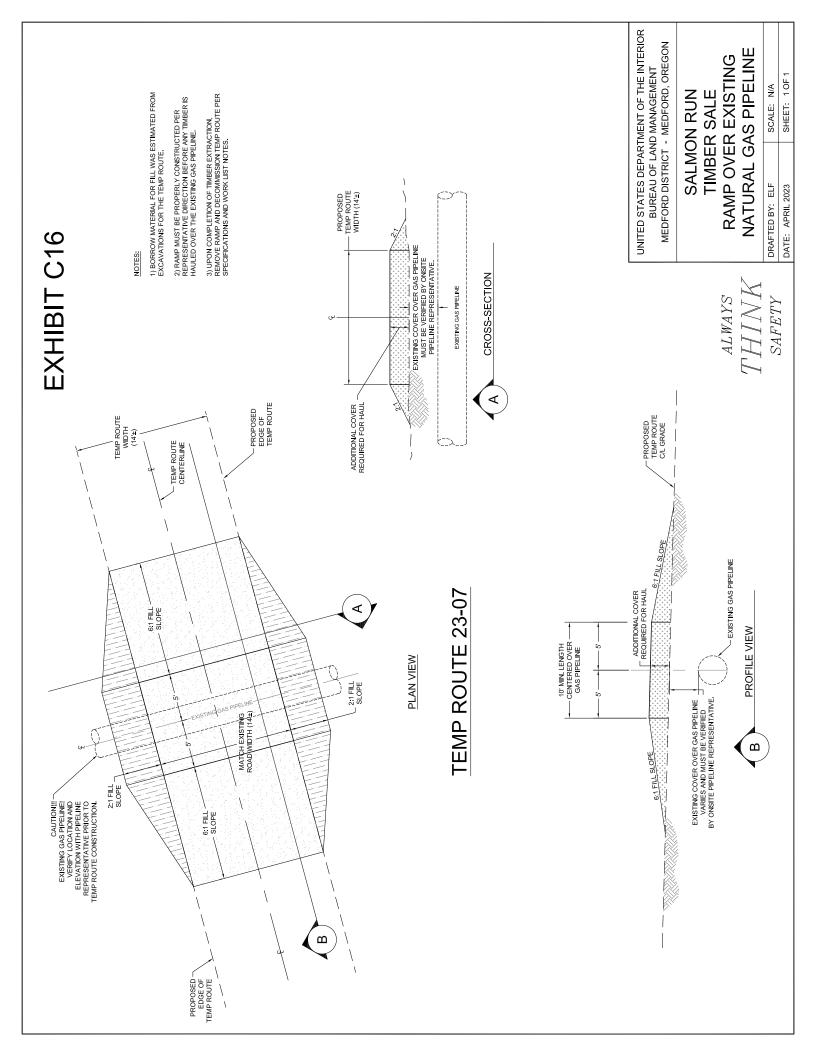
- 1814 The Purchaser may reduce the application rate on partially covered slopes and refrain from application on areas already well stocked with grass or on rock surfaces as determined by the Authorized Officer.
- 1815 The seed and mulch materials shall be placed by the dry method in accordance with the requirements set forth in Subsection 1815b.
- 1815b Dry Method Blowers, mechanical seeders, seed drills, landscape seeders, cultipaker seeders, or other approved mechanical seeding equipment may be used when seed is to be applied in dry form.
- 1819 The Purchaser shall notify the Authorized Officer at least 3 days in advance of date they intend 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.

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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 of this exhibit, at designated locations as shown in the plans.
- 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 roadbed between the outside shoulder and the ditch centerline and such vegetation shall be flush-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.
- Trees more than 6 inches in diameter at D.B.H. shall be delimbed, 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.
- 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 more than 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.
- 2110 Vegetation 6 inches and smaller in diameter shall be chipped. Chips shall be scattered downslope from the roadway. Vegetation over 6 inches in diameter shall be disposed of by direction of the Authorized Officer.
- 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 active work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.





Sale: Salmon Run TS Sale Date: July 2023 UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization: \$1,452.60/9276 MBF = \$0.16/MBF

Road Maintenance Obligation:

(2.1) BLM Maintenance	\$0.00
(2.2) BLM Rockwear	\$0.00
(5.1) Purchaser Maintenance Rockwear	\$23,772.85
Total Rockwear Payable to BLM	\$23 , 772.85
(3.1) 3rd Party Maintenance	\$0.00
(3.2) 3rd Party Rockwear	\$124.85
(4.1) Other Maintenance Payments	\$0.00
Total Maintenance Fee Obligation (2.1-5.1)	\$23,897.70

Purchaser Maintenance Allowances:

(5.2A) Move In	\$25 , 170.00
(5.2B) Culverts, Catch Basins, Downspouts	\$9,049.41
(5.2C) Grading, Ditching	\$18,205.98
(5.2D) Slide Removal and Slump Repair	\$2,931.50
(5.2E) Dust Palliative (Water)	\$43,740.00
(5.2F) Surface Repair (Aggregate)	\$82,644.00
(5.2G) Other	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	<u>181,740.88</u>
(2.1-5.2G) Cost (\$23,897.70 + 181,740.88) = \$205,638.58	
Cost/MBF 205638.58 / 9276 MBF =	\$22.17/MBF
(5.2H) Decommissioning	\$20,254.66
(5.2H) Cost/MBF \$20,254.66/9276 MBF =	\$2.18/MBF

(2.1-5.2H) Cost (\$23,897.70 + \$181,740.88 + \$20,254.66) = \$225,893.24

Total Cost/MBF (Excluding Road Use) \$225,893.24/9276 MBF = <u>\$24.35/MBF</u>

1) Road Use Fees - Amortization

De	etails		Interim	Fee	assesse	ed	on tl	ne	33-6-35.1 A	Road
I	R/W				Rd Us	se	Vol		Road Use	
Nι	umber	Road	Number		Fee	Х	MBF	=	Obligation	
M-	-2000EA	33-	5-17.1 A		4.20		273		\$1,146.60	
M-	-2000EA	33-	6-35.1 A		2.00		153		\$306.00	
	Subtotal by agreement number: M-2000EA \$1,452.60									
(]	(1.1) Subtotal <u>\$1,452.60</u>									

2) BLM Maintenance - Timber Haul

	MAINT	ENANCE (2.1)		ROCI	KWEAR (2.2)	
Road Number A	Surf	Maint	Vol			
and Segment N	Туре М	li x Fee x	MBF =	Maint Fee	x MBF = Rkwe	ar
	<u> </u>			<u> </u>		
(2.1) Subtotal	\$0.00	(2.2)	Subtotal	<u>\$0.00</u>		

3) Third Party Maintenance and Rockwear

			MAINTENANCE (3.	.1) ROCKWEAR	(3.2)
Agrmnt	Surfa	ce Road			
Number	Туре	Number	Mi x Fee x MBF = Mai	int Fee x MBF	= Rkwear
M-1538	NAT	33-5-32.2	0.08	\$0.00 x 50	= \$0.00
M-1538	NAT	34-6-1.2	0.02	\$0.00 x 100	= \$0.00
M-2000EA	AGG	33-6-35.1 A	0.75	\$0.85 x 153	= \$97.54
M-2000EA	NAT	33-5-17.1	0.08	\$0.00 x 273	= \$0.00
ODF MOU	NAT	33-6-35.1 C	0.30	\$0.00 x 153	= \$0.00
ODF MOU	AGG	33-6-35.1 В	0.21	\$0.85 x 153	= \$27.31
			y agreement number: greement number:		\$0.00 \$97.54 \$27.31
(3.1) Sub	ototal			\$0.00	
(3.2) Sub	ototal				\$124.85

4) Other Maintenance Payments - USFS or Others Perform Maintenance

Agency	Road	Number	Miles (Log)		Fee MBF/MI	=	Cost	
(4.1) ST	ubtotal	\$0.00						

5) Purchaser Maintenance - Rock Wear

Only BLM roads listed. TIMBER HAUL (5.1)

Dood No	7			DINGON		Vol		Totol
Road No and Segment	A N	Mi	x	RkWear Fee		Vol MBF	=	Total RkWear
33-5-18.0 A-B	A	0.46	X	\$0.85	x x	68	=	\$26.59
33-5-18.0 A	A	1.24	x	\$0.85	X	341	=	\$359.41
33-5-7.0 A	A	2.23	X	\$0.85	x	351	=	\$665.32
33-6-14.0 A-B	N	0.71	x	\$0.85	x	2283	=	\$1,377.79
34-6-2.0 A-D	A	1.52	X	\$0.85	X	1400	=	\$1,808.80
34-6-2.0 D(1)	A	0.23	x	\$0.85	x	1122	=	\$219.35
34-6-2.0 D(2)	A	0.29	x	\$0.85	x	717	=	\$176.74
34-6-1.1(1)	A	1.14	x	\$0.85	x	712	=	\$689.93
34-6-1.1(2)	A	0.31	x	\$0.85	x	477	=	\$125.69
34-6-1.0	A	0.45	x	\$0.85	x	98	=	\$37.49
34-6-1.2	А	0.02	х	\$0.00	х	100	=	\$0.00
34-6-1.3	А	0.05	х	\$0.00	х	90	=	\$0.00
33-5-30.2	Ν	0.13	х	\$0.85	х	50	=	\$5.53
33-5-30.3	Ν	0.08	х	\$0.85	х	3	=	\$0.20
33-5-31.5	Ν	0.40	х	\$0.85	х	313	=	\$106.42
33-5-30.0 B(2)	Ν	0.14	х	\$0.00	х	75	=	\$0.00
33-5-30.0 B(1)	Ν	0.32	х	\$0.85	х	375	=	\$102.00
33-5-30.0 A	Ν	0.64	х	\$0.85	х	712	=	\$387.33
33-5-31.1(1)	Ν	0.19	х	\$0.85	х	1073	=	\$173.29
33-5-31.1(2)	Ν	0.31	х	\$0.85	х	750	=	\$197.63
33-5-31.1(3)	Ν	0.16	Х	\$0.85	Х	200	=	\$27.20
33-5-32.0	Ν	0.39	х	\$0.85	х	277	=	\$91.83
34-5-5.0	Ν	0.21	х	\$0.85	Х	630	=	\$112.46
33-5-32.1	Ν	0.63	х	\$0.85	х	769	=	\$411.80
33-5-32.1 NEW	Ν	0.15	х	\$0.85	Х	582	=	\$74.21
33-5-31.3 A(1)	Ν	0.72	Х	\$0.85	Х	166	=	\$101.59
33-5-31.3 A(2)	Ν	0.42	х	\$0.85	х	935	=	\$333.80
33-5-31.3 A(3)	Ν	0.35	Х	\$0.85	Х	1774	=	\$527.77
33-5-31.3 A(4)	Ν	0.47	Х	\$0.85	Х	2240	=	\$894.88
34-5-6.0	Ν	0.15	х	\$0.85	Х	299	=	\$38.12
33-5-31.2 A-B	Ν	0.73	Х	\$0.85	Х	313	=	\$194.22
33-5-31.7	Ν	0.15	Х	\$0.85	Х	596	=	\$75.99
33-6-24.0 B2	Ν	0.44	Х	\$0.85	Х	603	=	\$225.52
33-6-24.0 B1-B2	Ν	1.33	Х	\$0.85	Х	4249	=	\$4,803.49
33-6-24.0 B1(2)	Ν	0.42	Х	\$0.85	Х	4961	=	\$1 , 771.08
33-6-24.0 B1(1)	Ν	0.30	Х	\$0.85	Х	4983	=	\$1,270.67
33-6-24.0 A-B1	Ν	1.47	Х	\$0.85	Х	5089	=	\$6,358.71
TR 01-02-A	Ν	0.11	Х	\$0.00	Х	120	=	\$0.00
TR 01-02-B	Ν	0.10	Х	\$0.00	Х	150	=	\$0.00
TR 17-03B	N	0.68	Х	\$0.00	Х	273	=	\$0.00
TR 23-07	Ν	0.17	Х	\$0.00	Х	90	=	\$0.00
TR 31-06-A	N	0.05	X	\$0.00	X	50	=	\$0.00
TR 31-06-B	N	0.05	X	\$0.00	Х	120	=	\$0.00
TR 31-06-C	N	0.07	X 	\$0.00	X	65 107	=	\$0.00
TR 31-07	N	0.07	X 	\$0.00	X 	197 96	=	\$0.00
TR 32-25-A TR 32-25-B	N	0.08	X	\$0.00 \$0.00	X	86 50	=	\$0.00
TR 32-25-B TR 32-25-C	N N	0.05 0.29	X	\$0.00 \$0.00	X	50 494	=	\$0.00 \$0.00
TR 32-25-C	N	0.29	X	\$0.00 \$0.00	x x	494 30	=	\$0.00
TR 32-25-E	N	0.03	X X	\$0.00 \$0.00	x	69	=	\$0.00
TR 32-25-F	N	0.09	x	\$0.00 \$0.00	x	140	=	\$0.00
TR 35-12	N	0.14	x	\$0.00	x	153	=	\$0.00
34-6-1.4	A	0.09	x	\$0.00 \$0.00	X	157	=	\$0.00
								r 0 • 0 0

(5.1) Subtotal <u>\$23,772.85</u>

Purchaser Operational Maintenance

Move In

	No	Move	Cost/	Dist Sub-
Equipment	Units	x in x	50 Mi x	Factor = total
Motor Grader:	1	10	536	1.00 = \$5,360.00
Back Hoe:	1	10	399	1.00 = \$3,990.00
Loader:				1.00 = \$0.00
Water Truck:	2	10	131	1.00 = \$2,620.00
Dump Truck:	2	10	124	1.00 = \$2,480.00
Excavator:	1	10	536	1.00 = \$5,360.00
Roller:	1	10	536	1.00 = \$5,360.00

(5.2A) Total <u>\$25,170.00</u>

Culvert Maintenance - Including Catch basins and Downpipes

Miles	Х	Cost/Mi	=	Subtotal
18.04		\$501.63		\$9,049.41

(5.2B) Total <u>\$9,049.41</u>

Grading (Includes Ditches and Shoulders)

Miles	Х	Cost/M:	i x Freq	= Subtotal		
Blade	w/	Ditch:	18.04	923.61	1	\$16,661.92
Blade	w/o	Ditch:	2.76	559.44	1	\$1,544.05

(5.2C) Total <u>\$18,205.98</u>

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

Туре	No Slides		Hours	Equip	
Equipment	/Slumps	Х	Each	x Cost	= Subtotal
Grader:	5		2	\$184.36	\$1,843.60
Loader:	0		0	\$114.30	\$0.00
Backhoe:	5		2	\$108.79	\$1,087.90

(5.2D) Total <u>\$2,931</u>.50

Dust Palliative (Water)

Spreading Hours	5								
	No	Freq	Truck						
	Miles	/ MPH	= Hours	Х	Days	Х	/Day	=	Hours
	2.71	5	0.5		100		2		100
Load & Haul =			2.0		100		1		200
Return trip =			1.0		100		1		100
Total Hours =			400						

Truck Cost: \$109.35/Hr. x 400.0 Hours = \$43,740.00

(5.2E) Total <u>\$43,740.00</u>

Surface Repair (Aggregate)

Quarry / Source Name:
Production Cost:Commercial 1-1/2" Mi
1300.0 CY x \$19.00/CY= 24,700.00Haul to Stockpile:
Grades > 15%1300.0 CY x ((\$2.43/CY x 10.00 Mi) + \$0.81) = 32,643.00Grades <= 15%</td>1300.0 CY x ((\$1.21/CY x 5.00 Mi) + \$0.81) = \$8,918.00State / Co Roads1300.0 CY x ((\$0.54/CY x 20.00 Mi) + \$0.81) = \$15,093.00Process with Grader:500.0 CY x \$1.20/CYCompaction:500.0 CY x \$1.38/CY

(5.2F) Total <u>\$82,644.00</u>

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

(5.2G) Total \$0.00

Decommissioning

Other Costs

Road	Cubic Yds		Qty		Qty		
Number	Pullback Mate	rial	Waterbars		Earthen Barriers	=	Total
TR 01-02-A	(0x2.19)	+	(6x86.27)	+	(1x258.81)	=	\$776.43
TR 01-02-B	(0x2.19)	+	(5x86.27)	+	(1x258.81)	=	\$690.16
TR 17-03B	(0x2.19)	+	(24x86.27)	+	(1x258.81)	=	\$2,329.29
TR 23-07	(0x2.19)	+	(8x86.27)	+	(1x258.81)	=	\$948.97
TR 31-06-A	(0x2.19)	+	(3x86.27)	+	(1x258.81)	=	\$517.62
TR 31-06-B	(0x2.19)	+	(2x86.27)	+	(1x258.81)	=	\$431.35
TR 31-06-C	(0x2.19)	+	(4x86.27)	+	(1x258.81)	=	\$603.89
TR 31-07	(0x2.19)	+	(4x86.27)	+	(1x258.81)	=	\$603.89
TR 32-25-A	(0x2.19)	+	(4x86.27)	+	(1x258.81)	=	\$603.89
TR 32-25-B	(0x2.19)	+	(3x86.27)	+	(1x258.81)	=	\$517.62
TR 32-25-C	(0x2.19)	+	(15x86.27)	+	(1x258.81)	=	\$1,552.86
TR 32-25-D	(0x2.19)	+	(2x86.27)	+	(1x258.81)	=	\$431.35
TR 32-25-E	(0x2.19)	+	(3x86.27)	+	(1x258.81)	=	\$517.62
TR 32-25-F	(0x2.19)	+	(5x86.27)	+	(1x258.81)	=	\$690.16
TR 35-12	(0x2.19)	+	(9x86.27)	+	(1x258.81)	=	\$1,035.24
33-5-30.0 В	(0x2.19)	+	(6x86.27)	+	(1x258.81)	=	\$776.43
33-5-30.2	(0x2.19)	+	(0x86.27)	+	(1x258.81)	=	\$258.81
33-6-35.1 C	(0x2.19)	+	(2x86.27)	+	(0x258.81)	=	\$172.54
		F0 10					

(Other Cost) Total \$13,458.12

Time & Equipment

TR 01-02-A Excavator - Large (3 CY) - Camouflage: 3 hr @ \$147.20/hr =\$441.60 TR 01-02-B Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 17-03B Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 23-07 Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 31-06-A Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 31-06-B Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 31-06-C Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 31-07 Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-A Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-B Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-C Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-D Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-E Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 32-25-F Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60 TR 35-12 Excavator - Large (3 CY) - Camouflage Entrance: 3 hr @ \$147.20/hr =\$441.60

(5.2H) Decommissioning Total \$20,254.66

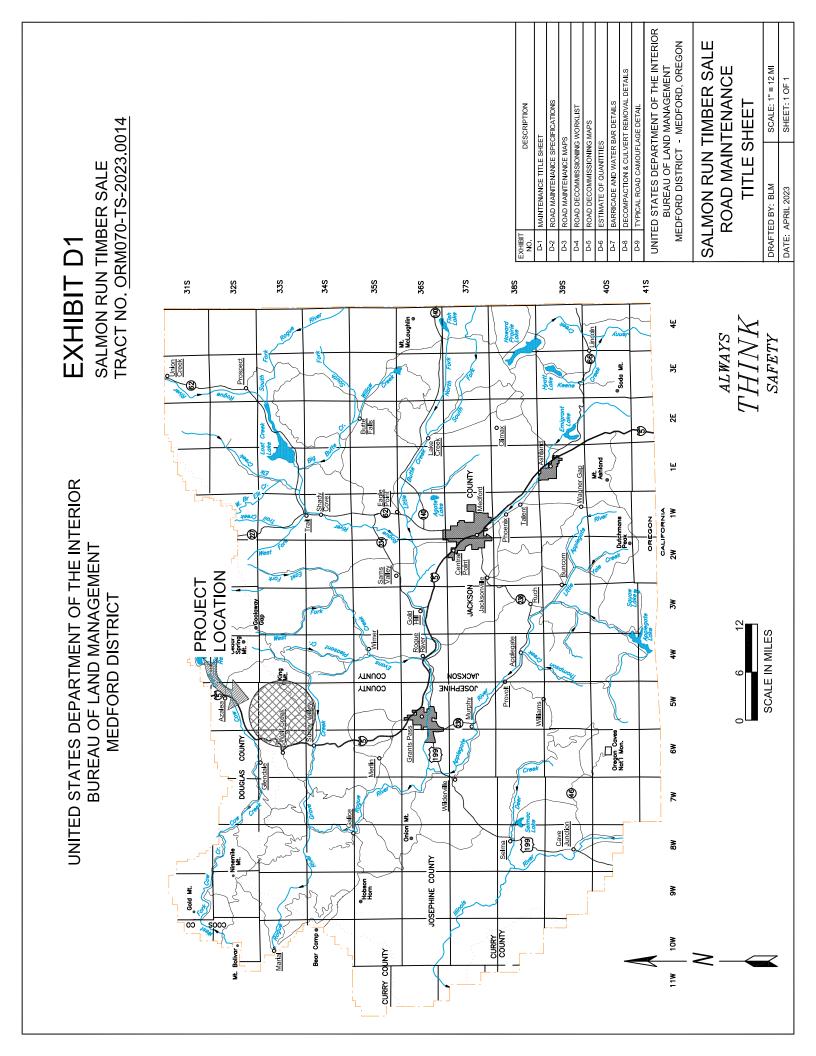


Exhibit D2

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ROAD MAINTENANCE SPECIFICATIONS

SECTION DESCRIPTION Page(s) 3000 General 2-2 3100 **Operational Maintenance** 2-4 Seasonal Maintenance 3200 4-5 3300 5-5 Final Maintenance 3400 5-10 Other Maintenance 3500 Decommissioning 10-12

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GENERAL - 3000

- The Purchaser shall be required to maintain all roads as shown on the Exhibit D3 maps and Exhibit C6 (Estimate of Quantities) of this contract in accordance with Sections 3000, 3100, 3200, 3300, 3400, and 3500 of this Exhibit.
- 3001a The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403, 3403a, 3404, 3405, and 3406.
- 3002 The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be constructed, improved, or renovated under terms of this contract shall be maintained to the geometric standards required in Exhibit C of this contract.
- 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 road(s) 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.
- 3102 The Purchaser shall furnish and place <u>1300 cu. yds. of 1.5" minus aggregate</u> conforming to the requirements in Section 1200 of Exhibit C14 of this contract on the roadway and landings at locations and in the amounts designated by this contract and the Authorized Officer.

This aggregate shall be used to resurface roads upon completion of use and repair surface failures and areas of depleted surface depth excluding damages covered by Section 12 of this contract. The aggregate shall be furnished, hauled, placed, spread, and compacted by use of dump trucks, water trucks, and motor grader or similar equipment.

3103 - The purchaser shall maintain established berms and place additional berms using

adjacent material where needed to protect fills as directed 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 include 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.

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.

- 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.
- 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

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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 C14.

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.

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 road(s) 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.
- The Purchaser shall perform and complete maintenance specified in Sections 3000, 3100, and 3200 on all roads maintained by him, prior to October 15 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.
- 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

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.

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

- The Purchaser shall repair any damage to road surfaces that was specified under Subsections 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.
- 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.

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 yd² of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds³ of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd² when a specified lesser rate is approved by the Authorized Officer.

Road Number	From M.P.	to M.P.
33-5-7.0	0.00	0.50
33-6-14.0	0.00	0.71
33-6-24.0	0.00	0.60
33-6-35.02	0.00	0.63
34-6-2.0	0.00	0.90

The following roads shall be watered:

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

During drought periods when the transportation of water from the source to the roads noted above exceeds 15 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 and restrict the number of loads hauled to reduce dust as directed by the Authorized Officer on the following roads:

Road Number	From M.P.	to M.P.
33-5-7.0	0.00	0.50
33-6-14.0	0.00	0.71

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Road Number	From M.P.	to M.P.
33-6-24.0	0.00	0.60
33-6-35.02	0.00	0.63
34-6-2.0	0.00	0.90

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.

- The Purchaser may at his option and expense substitute lignin sulfonate 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.
- 3405 **IF LIGNIN SULFONATE IS USED** The Purchaser shall be required to furnish and apply lignin sulfonate dust palliatives in accordance with these specifications.

This work shall be performed upon acceptance of the required road construction, renovation, or improvement work and be placed prior to any timber hauling other than right-of-way timber and rock hauling.

When timber hauling has commenced during the wet weather season, the Purchaser shall apply the required dust palliative during the subsequent summer hauling season as directed by the Authorized Officer.

Other means of dust abatement needed prior to the application of the required dust palliative shall be applied as approved by Authorized Officer.

The specified dust palliative shall be applied evenly over the specified road surface width of the following roads:

Road Number	From M.P.	to M.P.
33-5-7.0	0.00	0.50
33-6-14.0	0.00	0.71
33-6-24.0	0.00	0.60

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Road Number	From M.P.	to M.P.
33-6-35.02	0.00	0.63
34-6-2.0	0.00	0.90

Turnouts and extra widening shall be included in addition to the spread width.

 3405a - Additional lignin sulfonate dust palliative may be required at the option of the Authorized Officer when the functional qualities of the dust palliative have been reduced or become ineffective due to third party damage, rain, or other events not under the control of the purchaser.

> All materials and labor shall be furnished by the Purchaser and placed in amounts and locations designated by the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost. Costs will be based upon the unit prices set forth in the current BLM Road Cost Guide.

If additional dust palliative is required due to events controlled by the Purchaser, such as split hauling season, the Purchaser shall furnish and place such material at his own expense.

- 3405b The Purchaser shall notify affected residents along the roads to be treated of the planned application of lignin sulfonate dust palliatives at least 5 days prior to the work. Warning signs shall be posted at key intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within 30 days of treatment.
- Prior to the application of lignin sulfonate dust palliatives, the roadbed shall be bladed and shaped to remove surface irregularities and excess loose material.
 The prepared surface must be visibly moist and drying.
- 3406b A light application of water to promote penetration shall be made in advance of the application of the specified dust palliative to allow the drying process to begin and to eliminate any saturated surface conditions.
- 3406c The prepared roadbed shall be approved by the Authorized Officer prior to application of the specified dust palliative.
- The Purchaser shall furnish in duplicate, commercial certification signed by vendor of compliance with the lignin sulfonate dust palliatives material requirements specified under Subsection 3412b. Commercial certification includes the date, identification number of truck or trailer, net mass, and brand name with each shipment. Also provide the net volume and specific gravity at 60 degrees F,

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percent solids by mass, and PH.

- 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 5 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.
- 3411 Required lignin sulfonate dust palliatives shall only be applied when the atmospheric temperature is 45° F and steady or rising and when the weather is not foggy or rainy. Do not apply dust palliative if rain is anticipated within 24 hours of application or when the ground is frozen.
- The Purchaser shall apply to the prepared roadbed specified under Subsection 3405, a lignin sulfonate dust palliative conforming to the material requirements of Subsection 3412b. The rate of application shall be 0.5 gallons per yd² surface. A second application at the rate of 0.3 gallons per yd² shall be applied at a time designated by the Authorized Officer.

Applied materials not penetrating the road surface shall be blade mixed with additional water into the top 1 to $1\frac{1}{2}$ inches of the surfacing at the Contractor's expense.

3412a - If required, the lignin sulfonate shall be field diluted within the application vehicle and be circulated at least 5 minutes to assure mixing. An air gap shall be provided between any water source and the materials being diluted. Accidental spills shall be contained to prevent entry in water courses or ponded water. The surface of adjacent structures and trees shall be protected from spattering or marring.

A wetting agent may be used in addition to the certified compound or mixed with the road surface preparation watering. A mix of less than 1:6000 is recommended.

Water used to dilute lignin sulfonate concentrate shall be clean and free of oil, salt, acid, alkali, vegetable matter, or any other substance that contaminates the finished product.

3412b - Specifications for Lignin Sulfonate:

Lignin sulfonate shall be the chemical residue produced as a byproduct of the acid sulfite pulping process and supplied as a water solution. The base cation shall be

ammonia, calcium, or sodium. The product shall be water soluble to allow field dilution. Dilute with water until the mixture contains a minimum 48 percent concentration with the following properties:

Solids	50%
Specific gravity	1.25
PH, AASHTO T289	4.5 min.

Ensure that the material does not exceed the following chemical constituents:

phosphorous	25.00 ppm
cyanide	0.20 ppm
arsenic	5.00 ppm
copper	0.20 ppm
lead	1.00 ppm
mercury	0.05 ppm
chromium	0.50 ppm
cadium	0.20 ppm
barium	10.00 ppm
selenium	5.00 ppm
zinc	10.00 ppm

Apply when the ambient air temperature is 45° F or above.

3413 - Sampling of lignin sulfonate material may be required to validate certificates furnished by the Purchaser. When sampling is directed by the Government, the actual samples will be taken by the Purchaser or his representative in the presence of the Authorized Officer.

DECOMMISSIONING – 3500

- Decommissioning work includes installing water bars, placement of slash or placement of soil stabilization material, and blocking road from access by vehicles as listed in Exhibit D4, Road Decommissioning Worklist. This work is required for road acceptance under Section 18 of this contract.
- 3503 Decommissioning shall be performed on existing roads in accordance with these specifications, as listed in Exhibit D4, Road Decommissioning Worklist, and as

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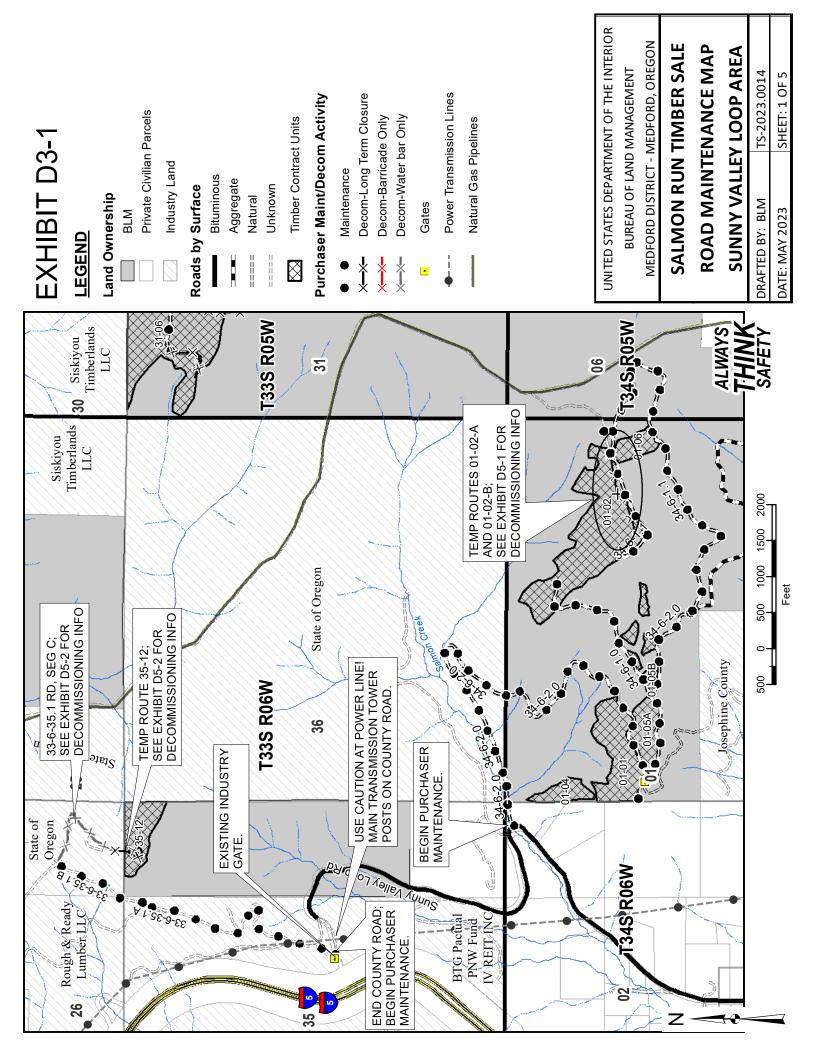
Road No or Site	From Sta/MP	To Sta/MP	Decommission or Obliterate
33-5-30.0	0.96	1.10	Decommission
33-5-30.2	0.00	0.13	Re-barricade
33-6-35.2 C	0.96	1.26	Re-water bar
TR 01-02-A	0+00	6+05	Decommission
TR 01-02-B	0+00	5+30	Decommission
TR 17-03-B	0+00	35+95	Decommission
TR 23-07	0+00	8+90	Decommission (watch for pipeline)
TR 31-06-A	0+00	2+80	Decommission
TR 31-06-B	0+00	2+52	Decommission
TR 31-06-C	0+00	3+80	Decommission
TR 31-07	0+00	3+68	Decommission
TR 32-25-A	0+00	4+40	Decommission
TR 32-25-B	0+00	2+75	Decommission
TR 32-25-C	0+00	15+55	Decommission
TR 32-25-D	0+00	2+41	Decommission
TR 32-25-E	0+00	3+50	Decommission
TR 32-25-F	0+00	4+65	Decommission
TR 35-12	0+00	7+30	Decommission

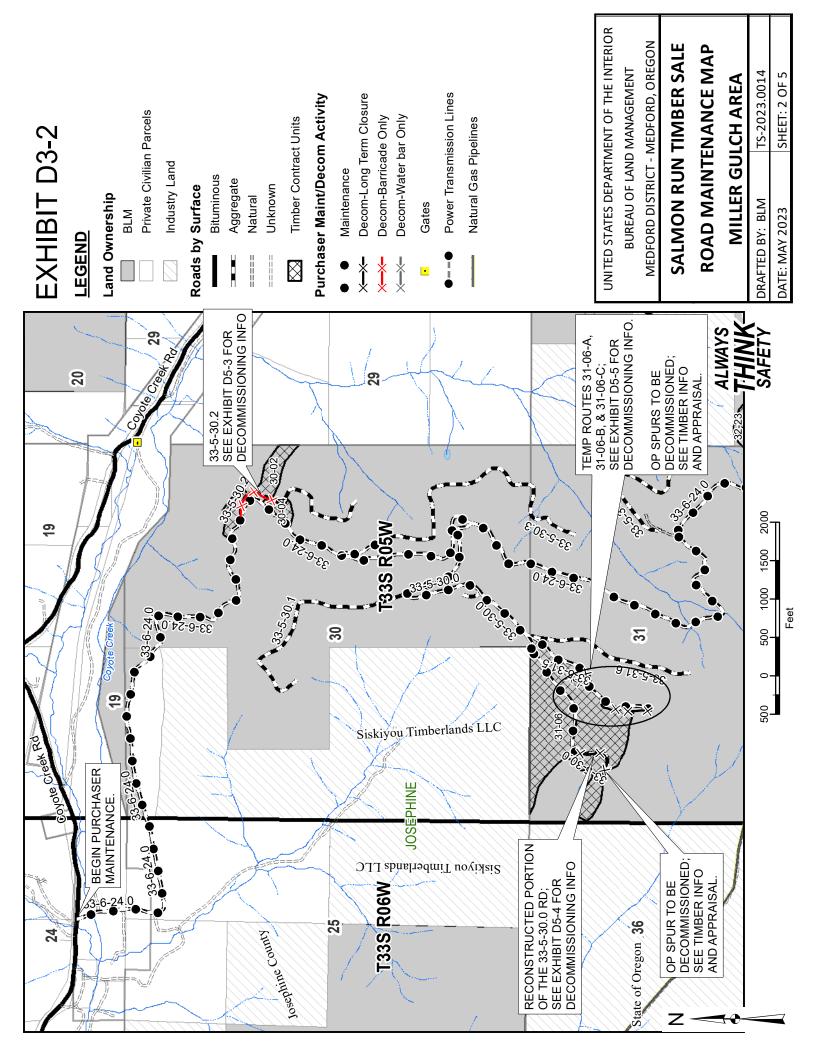
shown on the plans at the following locations:

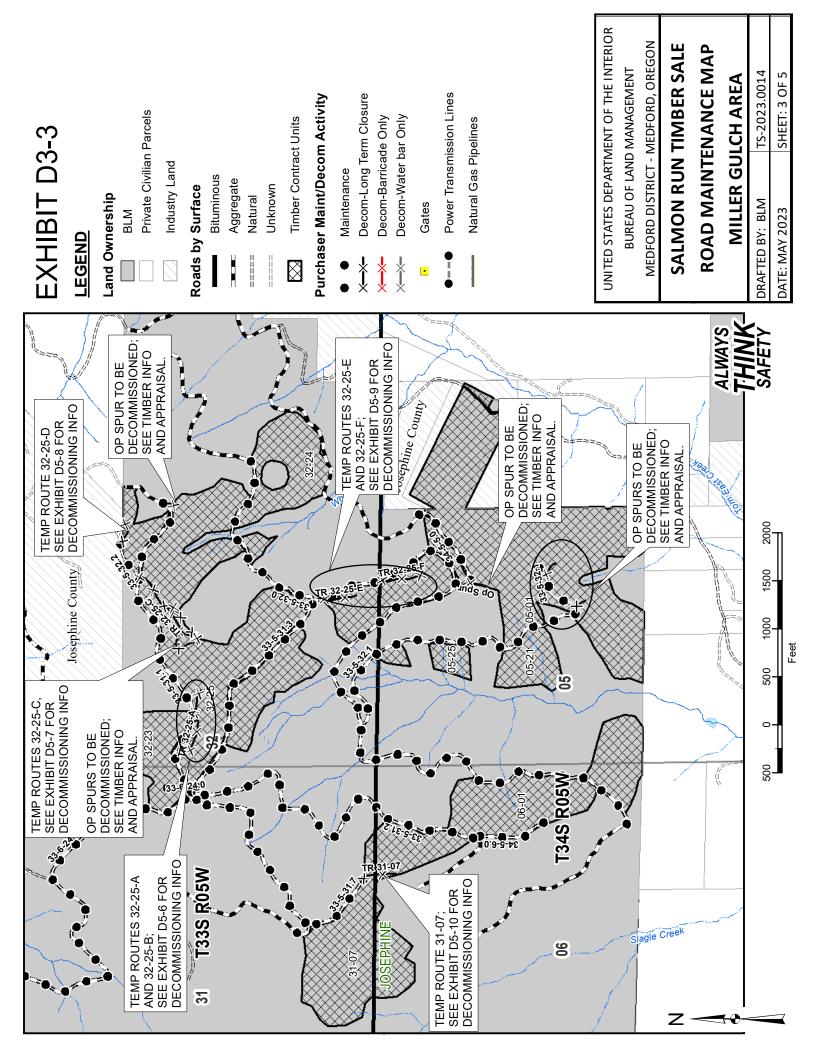
3504 - Decommissioning work shall be completed after road use. All decommissioning work shall be performed during the following seasonal periods to address soil moisture:

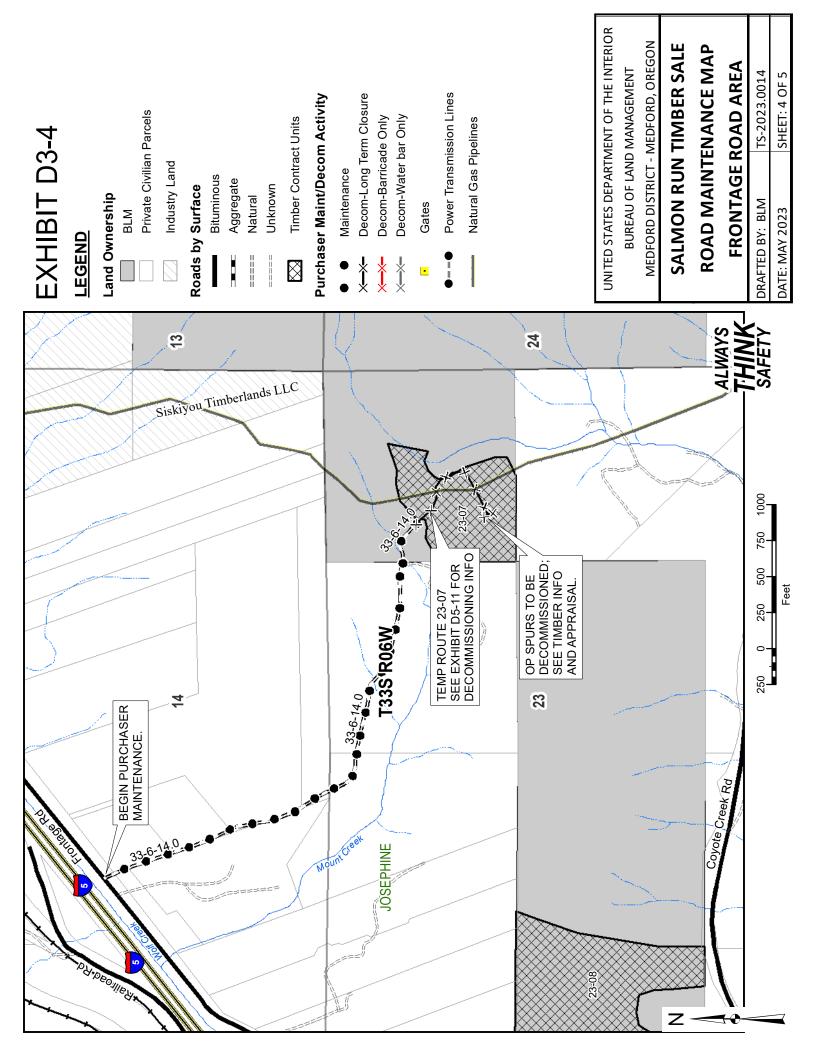
_		
F	rom: September 1	To: October 15 (of the same year)
	*	

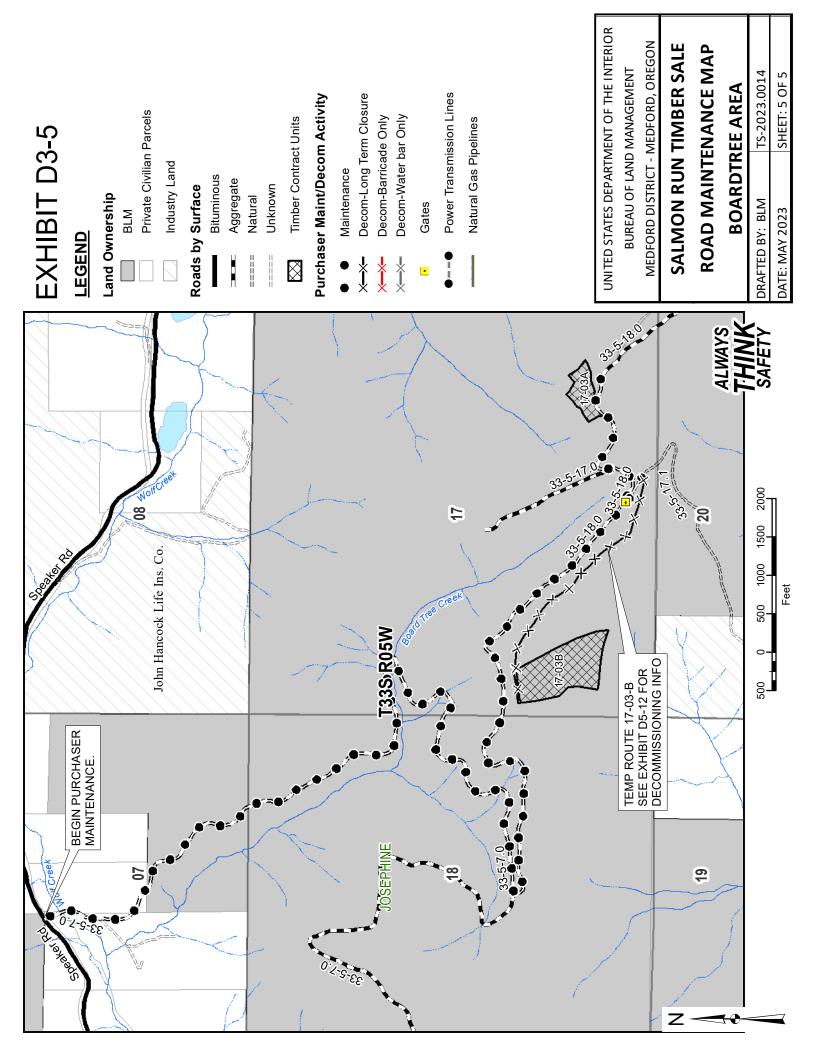
- Stockpiled slash shall be used to protect exposed areas created by the Purchaser's decommissioning operations described in these sections. Slash shall be uniformly spread and placed without bunching. The operation shall produce a dense, uniform mat. All slash stockpiles created by the purchaser shall be utilized for decommissioning operations. Where slash is not available, exposed soil areas shall be stabilized in accordance with Section 1800 of Exhibit C14.
- 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.
- 3508 Protect areas with camouflaging and soil stabilization from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- Access shall be blocked with barricades as shown on the Barricade and Water Bar Details Exhibit D7, Decompaction and Culvert Removal Details Exhibit D8, Typical Road Camouflage Details Exhibit D9, and at locations as shown on Exhibits D4 and D5.
- 3510 Sections of roadway where ripping or subsoiling is required shall be cleared of all vegetation and slash. The resultant slash shall be stockpiled in a manner that will allow retrieval and uniform spreading in accordance with Subsection 3506. No vegetation or slash shall be mixed with excavated material to be placed.
- 3511 Ripping, subsoiling, and water barring shall be done on designated roadways and landings. Ripping shall be done with wing-toothed rippers or excavators modified for tillage.
- Water bars shall be installed across full width of roadway at spacing shown in the worklist, specifications, and drawings. Water bars shall be constructed as shown on Exhibit D7. 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.











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Roads Decommissioning Work List

Definitions:

AGG = Aggregate BST = Bituminous CMP = Corrugated Metal Pipe CY = Cubic Yard Jct. = Junction/Intersection MP = Mile Post NAT = Natural/Native Surface Pvt = Private (Industry, Citizen) Seg = Segment STA = Station

Full Decommission = Full Decommissioning shall include removing temporary culverts, decompacting the surface to a depth of 12 to 18 inches (ripping, sub-soiling, or pitting), installing water bars per the Water Bar Spacing by Erosion Class Table shown in Exhibit D7, and unless otherwise noted in the work list, and camouflaging and barricading road entrances. All disturbed soils shall be seeded with approved native seed species and mulched with weed-free straw or approved native slash materials. 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 per Exhibit D9.

Long Term Closure = Long Term Closure shall include installing water bars per the Water Bar Spacing by Erosion Class Table shown in Exhibit D7, stabilizing, or removing fills on unstable areas, barricading the road entrance, camouflaging the road entrance, removing culverts (armor if needed), and 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 other debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use per Exhibit D9.

Barricade = Barricade entrance only.

33-5-30.0	Road, Seg A-B – Colby-Miller Sp – AGG – Sub: 14Ft – Ditch: 3Ft/0Ft
MP	Description
0.00	Jet. w/ 33-6-24.0 Rd.
0.29	Jct. w/ 33-5-30.1 Rd on right.
0.47	Jct. w/ 33-5-30.4 Rd on right.
0.64	Jct. w/ 33-5-31.5 Rd on left.
0.65	Unit 31-06 boundary on left.
0.66	Unit 31-06 boundary on right.
0.96	Large landing on right. Begin long term closure work. Upon completion of log haul, begin
	long term closure and entrance camouflage. See Exhibit D5-4 for map, Exhibit D7 for
	barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
0.97	Construct trench/earthen barricade.
0.99	Construct water bar.
1.01	Construct water bar.
1.03	Construct water bar.
1.05	Construct water bar.
1.07	Construct water bar.
1.09	Construct water bar.
1.10	End long term closure work.

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33-5-30.2 Road -Miller Mobile - AGG - Sub: 14Ft - Ditch: 3Ft

- <u>MP</u> <u>Description</u>
- 0.00 Jct. w/ 33-6-24.0 Rd. Unit 30-02 on left.
- 0.01 **Re-construct trench/earthen barricade.** See Exhibit D5-3 for map and Exhibit D7 for barricade construction specifications.
- 0.05 Unit 30-02 boundary on left.
- 0.07 Unit 30-02 boundary on left.
- 0.13 Unit 30-02 boundary on left.

33-6-35.1 Road, Seg A-C - No Name Pvt Rd - AGG - Sub: 15Ft - Ditch: 0Ft

- <u>MP</u> <u>Description</u>
- 0.00 End Sunny Valley Loop Road (County Road). Upon completion of log haul, begin reconstructing existing water bars. See Exhibit D5-13 for map and Exhibit D7 for barricade and water bar construction specifications.
- 0.01 Existing private Industry gate.
- 0.12 Jct. w/ powerline access road on left.
- 0.42 Jct. w/ private spur on right.
- 0.63 Jct. w/ private spur on left.
- 0.75 Property line BTG Pactual/Rough & Ready Lumber.
- 0.77 Property line Rough & Ready Lumber/ODF.
- 0.96 Jct. w/ Pvt Rd on left. Begin long term closure work water bars only.
- 1.16 Re-construct water bar.
- 1.18 Re-construct water bar.
- 1.23 Jct. w/ Pvt Rd on right. End long term closure work.
- 1.26 Large landing area.

Temp Route 01-02-A

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 34-6-1.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-1 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Unit 01-02 boundary. Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 3+00 Construct water bar.
- 4+00 Construct water bar.
- 5+00 Construct water bar.
- 5+75 Construct water bar.
- 6+05 End long term closure work.

Temp Route 01-02-B

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 34-6-1.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-1 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Unit 01-02 boundary. Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 3+00 Construct water bar.
- 4+00 Construct water bar.
- 5+00 Construct water bar.
- 5+30 End long term closure work.

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Temp Route 17-03B

- <u>STA</u> <u>Description</u>
- 0+00 Jct. w/ 33-5-17.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-12 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+50 Construct water bar.
- 4+00 Construct water bar.
- 5+50 Construct water bar.
- 7+00 Construct water bar.
- 8+50 Construct water bar.
- 10+00 Construct water bar.
- 11+50 Construct water bar. 13+00 Construct water bar.
- 13+00 Construct water bar. 14+50 Construct water bar.
- 16+00 Construct water bar.
- 17+50 Construct water bar.
- 19+00 Construct water bar.
- 20+50 Construct water bar.
- 22+00 Construct water bar.
- 23+50 Construct water bar.
- 25+00 Construct water bar.
- 26+50 Construct water bar.
- 28+00 Construct water bar.
- 29+50 Construct water bar.
- 31+00 Construct water bar.
- 31+87 Unit 17-03B boundary.
- 32+50 Construct water bar.
- 34+00 Construct water bar.
- 35+50 Construct water bar.
- 35+95 End long term closure work.

Temp Route 23-07

- STA Description
- 0+00 End of 33-6-14.0 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-11 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 0+49 Unit 23-07 boundary on left and right.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 2+81 CAUTION!! Natural Gas Line Crossing!
- 3+00 Construct water bar.
- 4+00 Construct water bar.
- 4+03 Unit 23-07 boundary on left and right.
- 5+00 Construct water bar.
- 5+06 Unit 23-07 boundary on left and right.
- 6+00 Construct water bar.
- 6+95 CAUTION!! Natural Gas Line Crossing!
- 7+20 Construct water bar.
- 8+50 Construct water bar.

Salmon Run Timber Sale Page 4 of 7

8+90 End long term closure work.

Temp Route 31-06-A

STA Description

- 0+00 Jct. w/ 33-5-31.5 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-5 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+10 Unit 31-06 boundary.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 1+33 Jct. w/ Op Spur on left.
- 1+75 Construct water bar.
- 2+50 Construct water bar.
- 2+80 End long term closure work.

Temp Route 31-06-B

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 33-5-31.5 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-5 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+17 Unit 31-06 boundary.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 2+52 End long term closure work.

Temp Route 31-06-C

STA Description

- 0+00 End of 33-5-31.5 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-5 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 2+75 Construct water bar.
- 3+23 Unit 31-06 boundary.
- 3+50 Construct water bar.
- 3+80 End long term closure work.

Temp Route 31-07

<u>STA</u> <u>Description</u>

- 0+00 End of 33-5-31.7 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-10 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 0+31 Unit 31-07 boundary on left and right.
- 1+00 Construct water bar.
- 1+75 Construct water bar.
- 2+50 Construct water bar.
- 3+25 Construct water bar.
- 3+68 End long term closure work.

Salmon Run Timber Sale Page **5** of **7**

Temp Route 32-25-A

- <u>STA</u> <u>Description</u>
- 0+00 Jct. w/ 33-5-31.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-6 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+10 Unit 32-25 boundary.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 3+00 Construct water bar.
- 4+00 Construct water bar.
- 4+40 End long term closure work.

Temp Route 32-25-B

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 33-5-31.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-6 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+10 Unit 32-25 boundary.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 1+75 Construct water bar.
- 2+50 Construct water bar.
- 2+75 End long term closure work.

Temp Route 32-25-C

STA Description

- 0+00 Jct. w/ 33-5-31.1 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-7 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Re-construct trench/earthen barricade.
- 0+30 Unit 32-25 boundary.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 3+00 Construct water bar.
- 4+00 Construct water bar.
- 4+63 Jct. w/ Op Spur on left.
- 5+00 Construct water bar.
- 5+16 Jct. w/ temp (end of this temp loop) on right.
- 6+00 Construct water bar.
- 7+00 Construct water bar.
- 8+00 Construct water bar.
- 9+00 Construct water bar.
- 9+10 Jct. w/ Op Spur on left.
- 10+00 Construct water bar.
- 11+00 Construct water bar.
- 12+00 Construct water bar.
- 13+00 Construct water bar.
- 14+00 Construct water bar.
- 15+00 Construct water bar.
- 15+55 End long term closure work. Jct. w/ temp (close loop).

Salmon Run Timber Sale Page **6** of **7**

Temp Route 32-25-D

- <u>STA</u> <u>Description</u>
- 0+00 Jct. w/ 33-5-32.2 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-8 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 0+53 Property line JoCo/BLM.
- 0+54 Unit 32-25 boundary.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 2+41 End long term closure work.

Temp Route 32-25-E

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 33-5-31.3 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-9 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 0+59 Unit 32-25 boundary on left and right.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 3+00 Construct water bar.
- 3+50 End long term closure work.

Temp Route 32-25-F

<u>STA</u> <u>Description</u>

- 0+00 Jct. w/ 33-5-31.3 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-9 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 0+39 Unit 32-25 boundary on left and right.
- 1+00 Construct water bar.
- 2+00 Construct water bar.
- 2+75 Construct water bar.
- 3+50 Construct water bar.
- 4+25 Construct water bar.
- 4+65 End long term closure work.

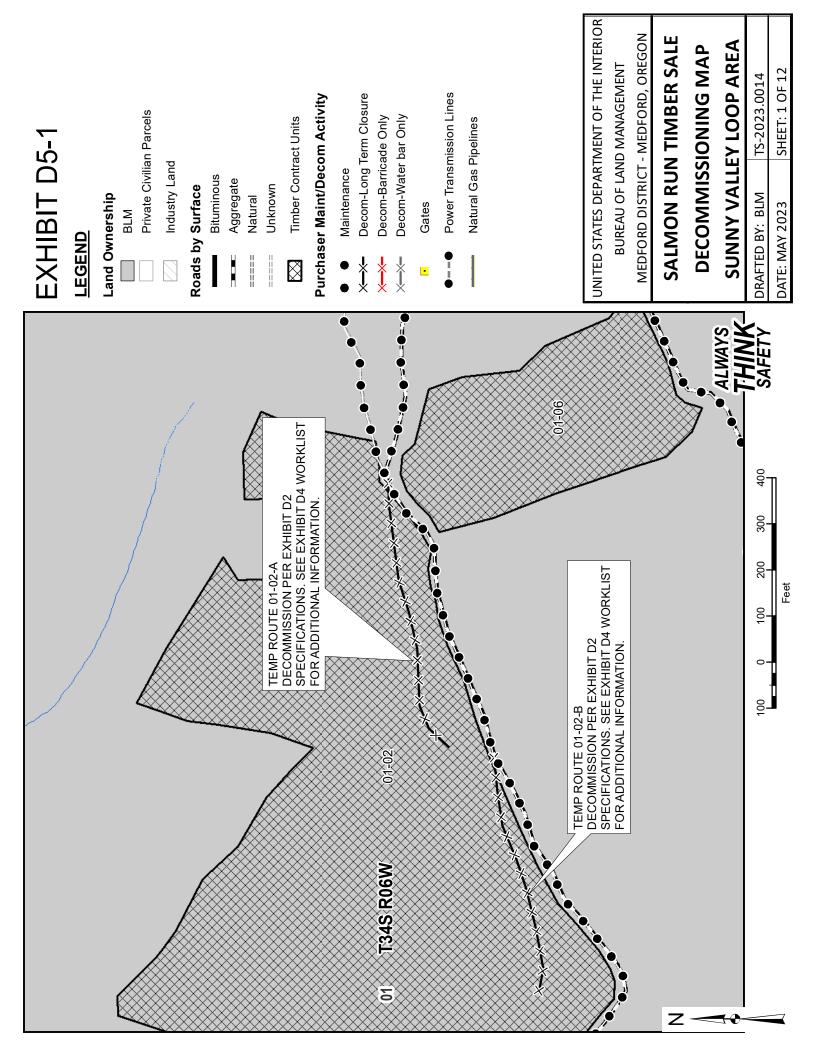
Temp Route 35-12

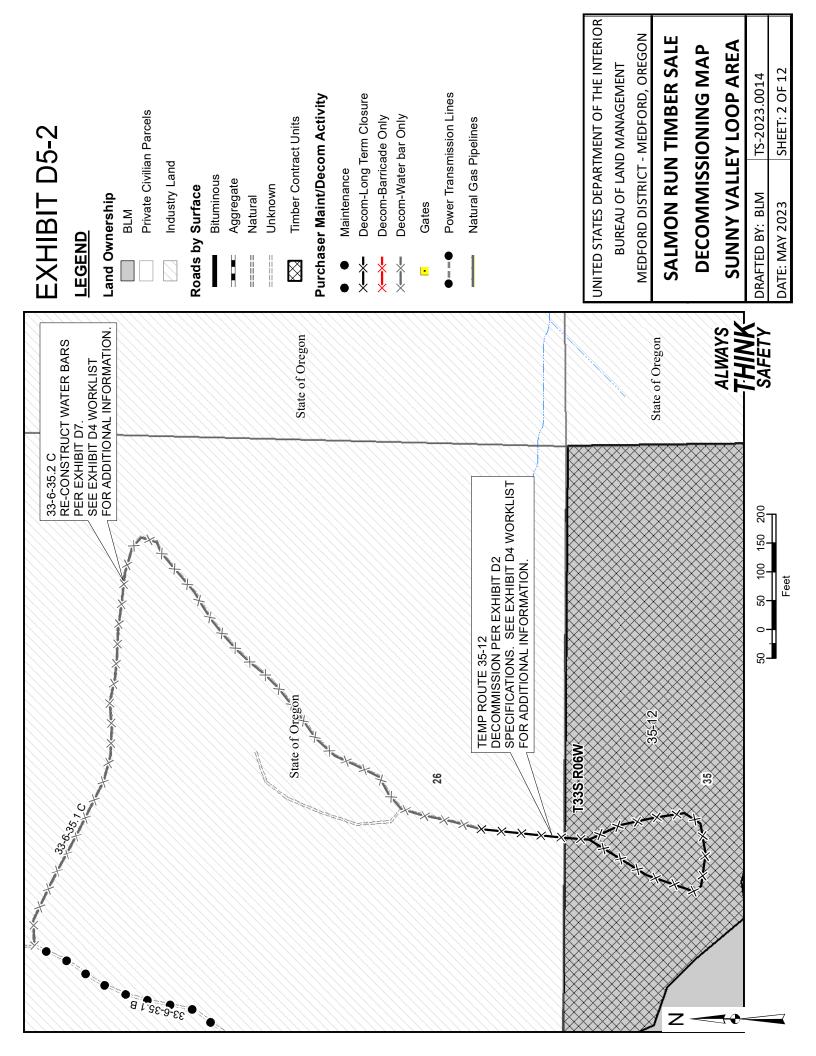
<u>STA</u> Description

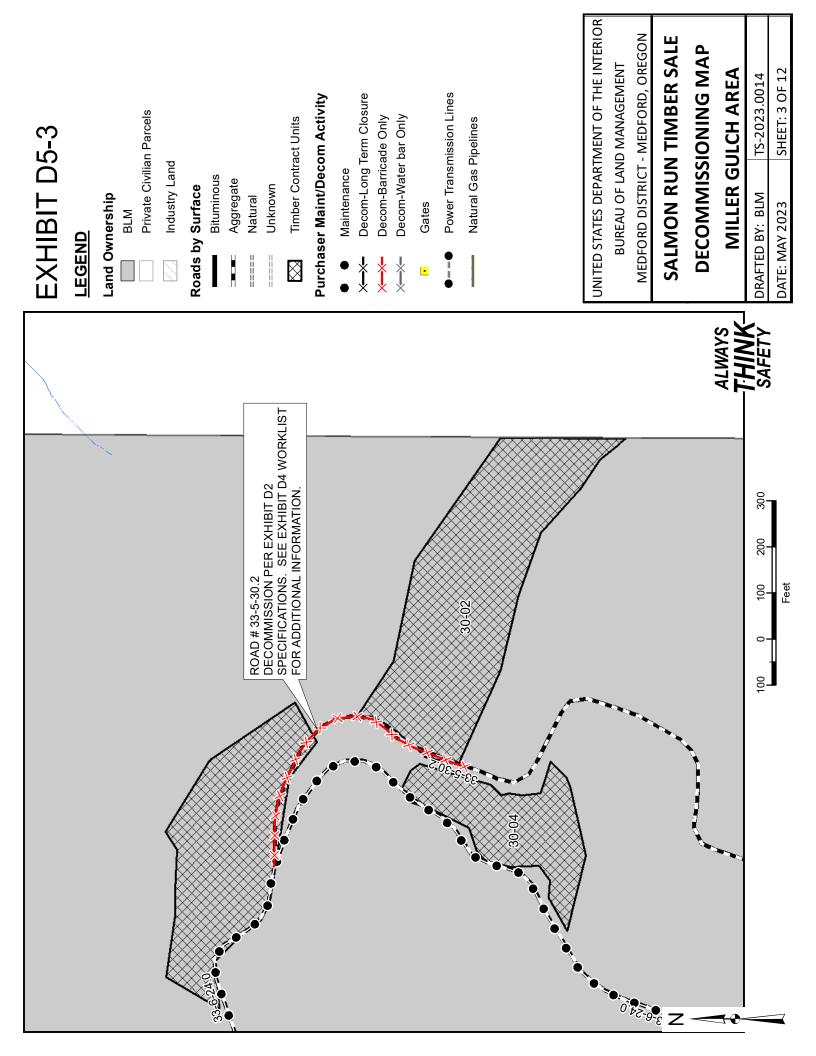
- 0+00 End of 33-6-35.2 Rd. Upon completion of log haul, begin long term closure work and entrance camouflage. See Exhibit D5-2 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
- 0+25 Construct trench/earthen barricade.
- 1+00 Construct water bar.
- 1+44 Property line ODF/BLM.
- 1+45 Unit 35-12 boundary.
- 1+75 Construct water bar.
- 1+90 Jct. w/ temp (end of this temp loop) on right.
- 2+50 Construct water bar.
- 3+25 Construct water bar.
- 4+00 Construct water bar.

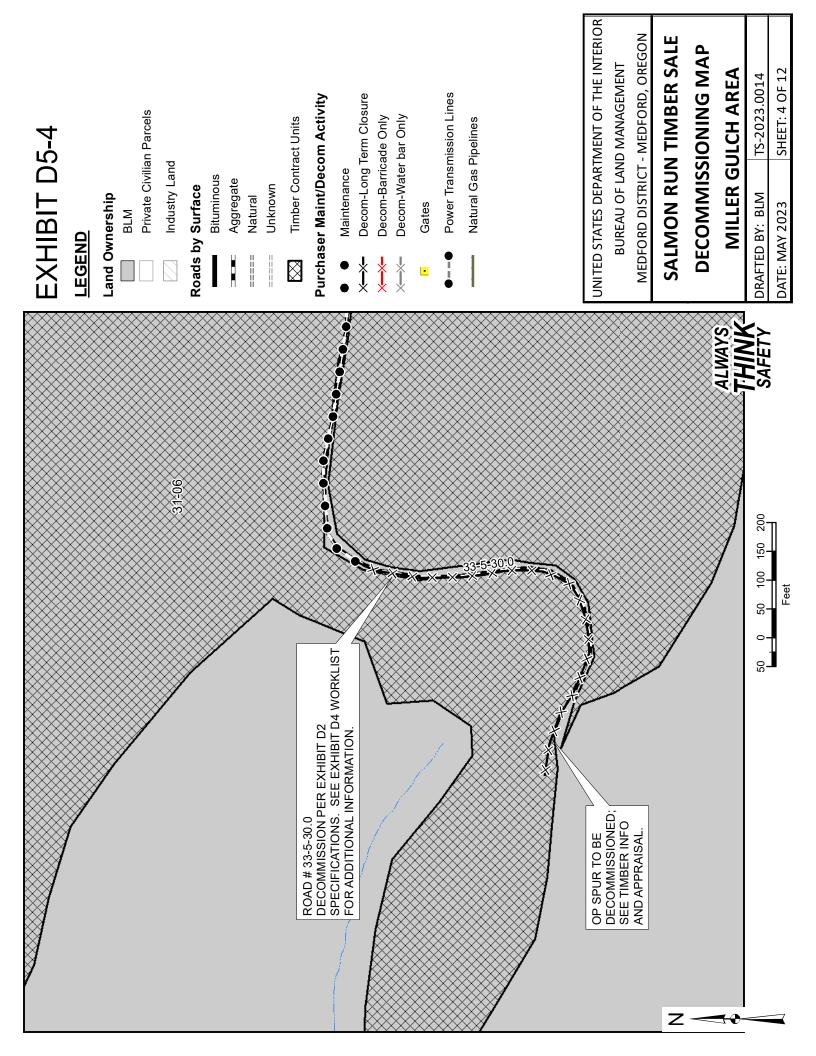
Salmon Run Timber Sale Page 7 of 7

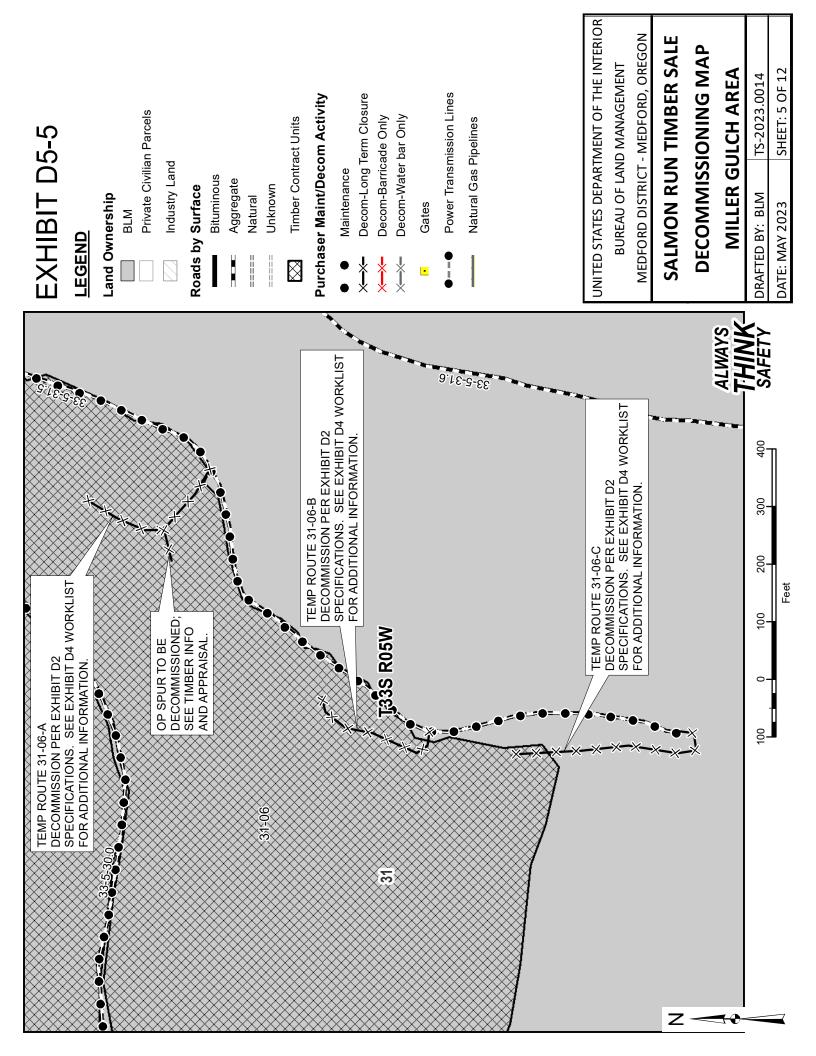
- 4+75 Construct water bar.
- 5+50 Construct water bar.
- 6+25 Construct water bar.
- 7+00 Construct water bar.
- 7+30 End long term closure work. Jct. w/ temp (close loop).

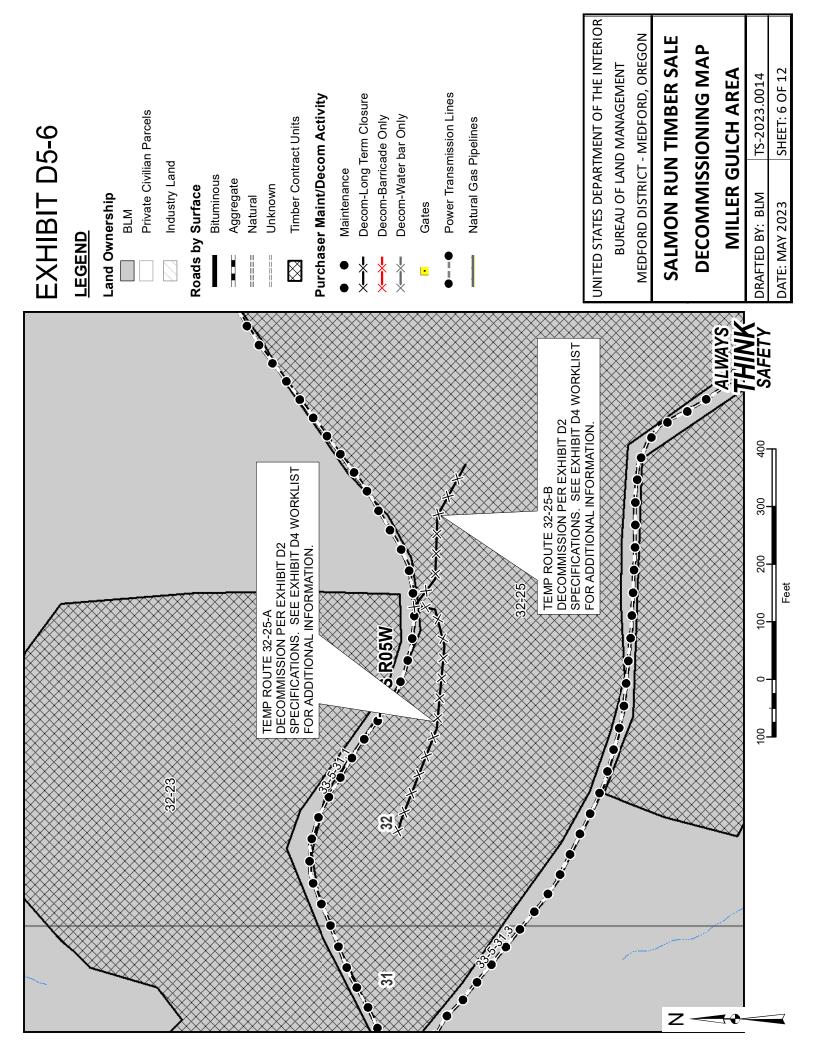


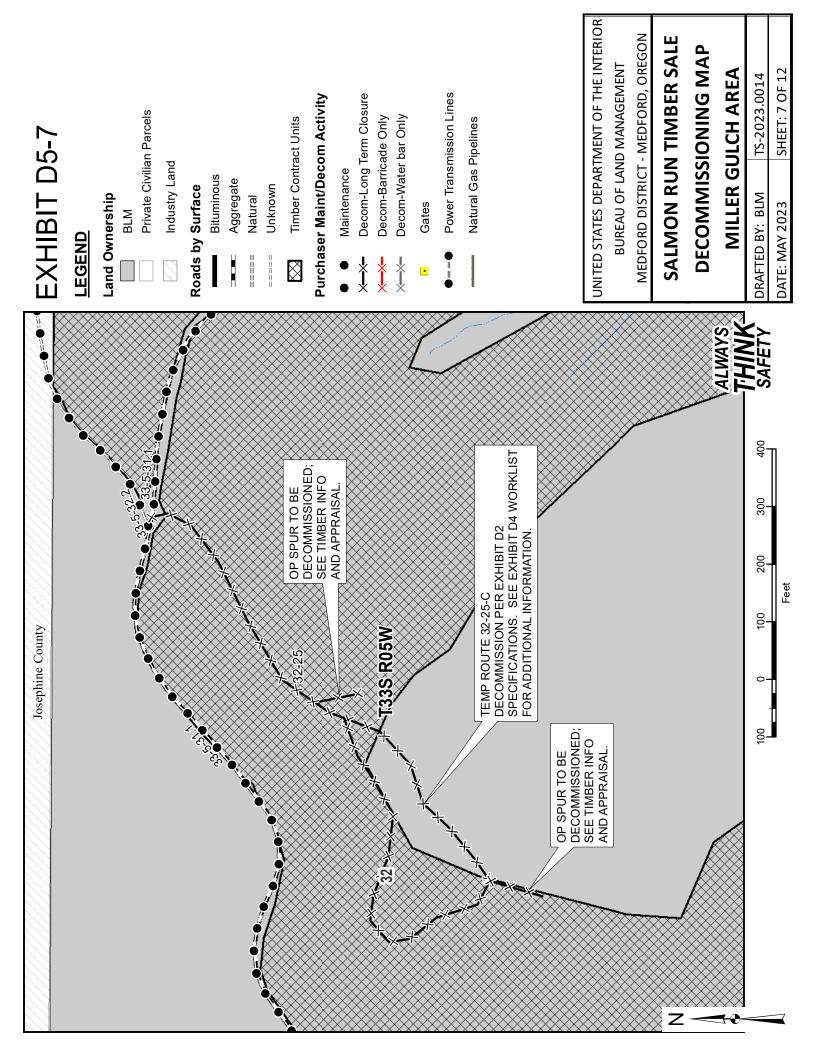


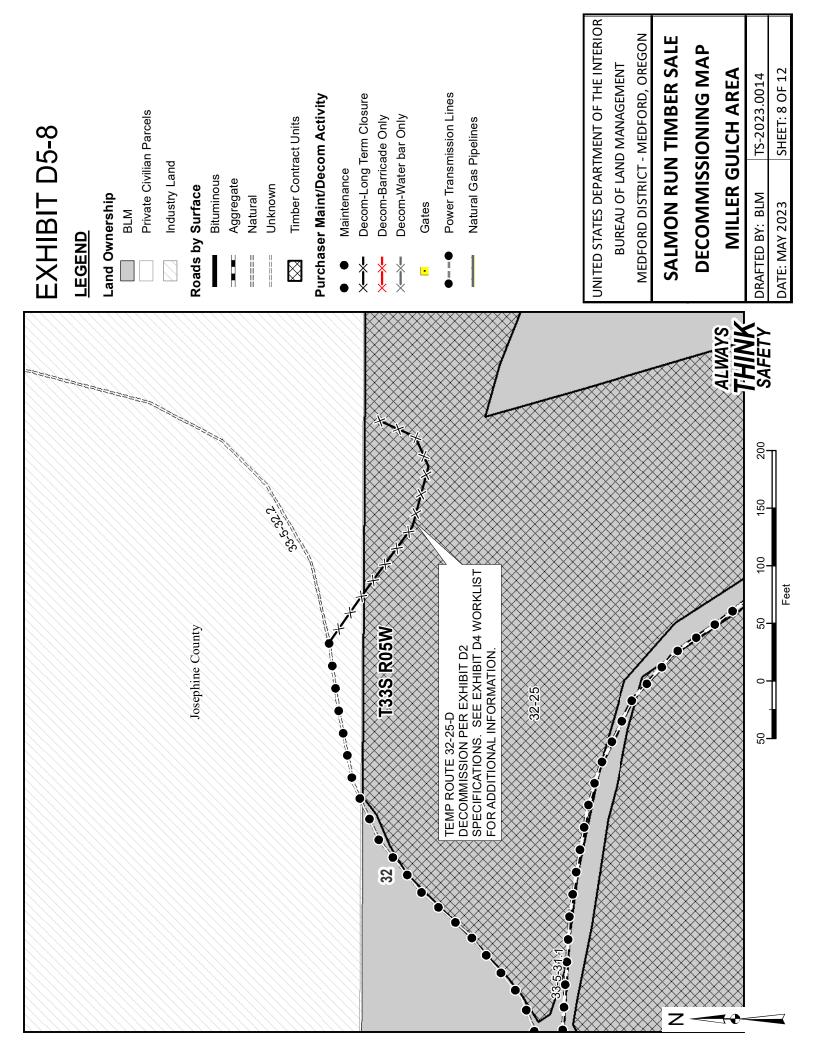


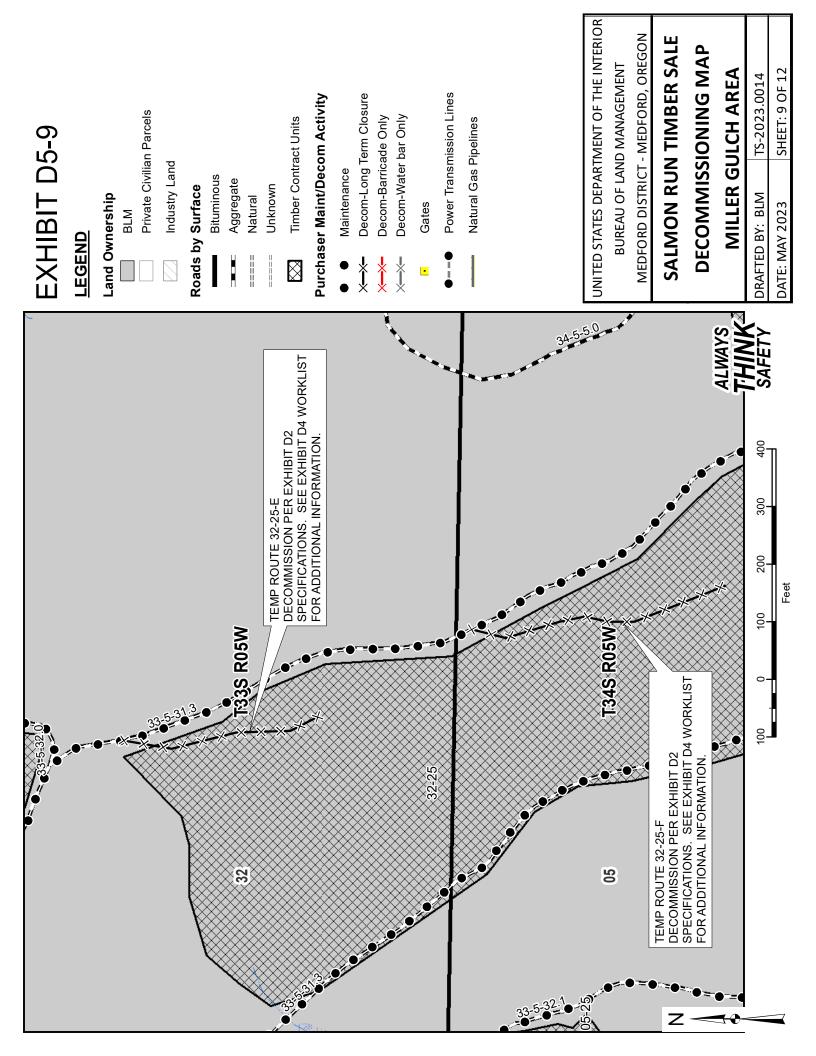


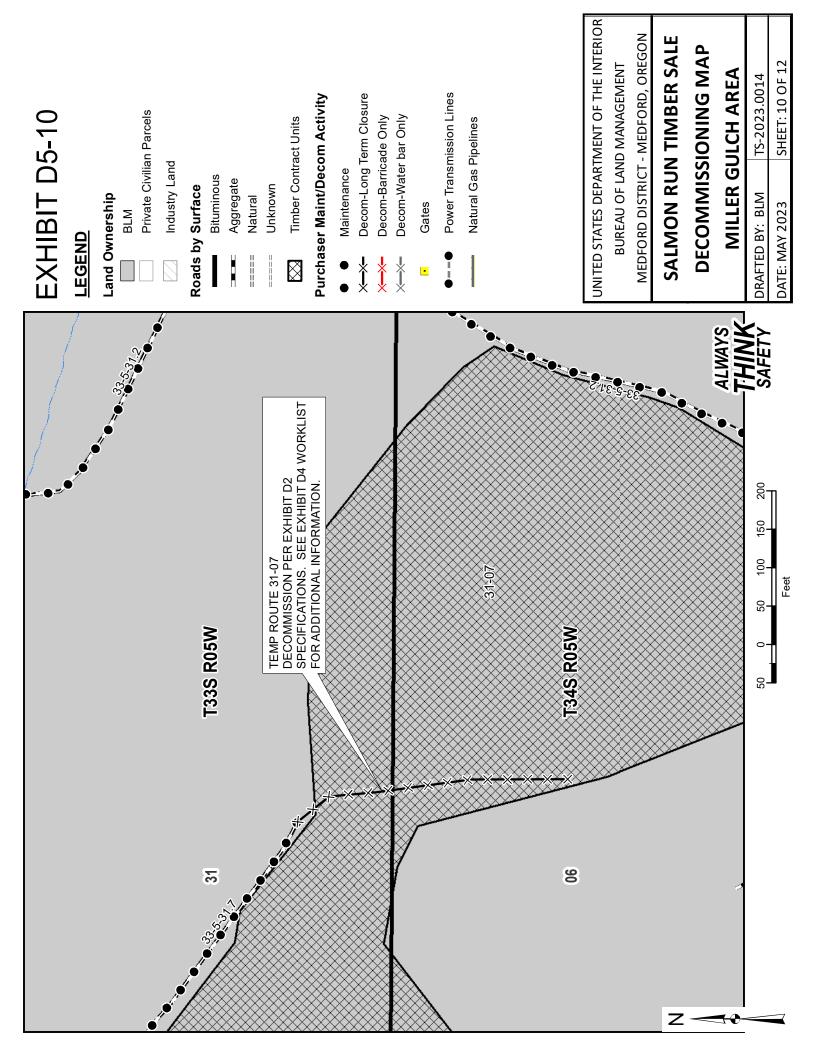


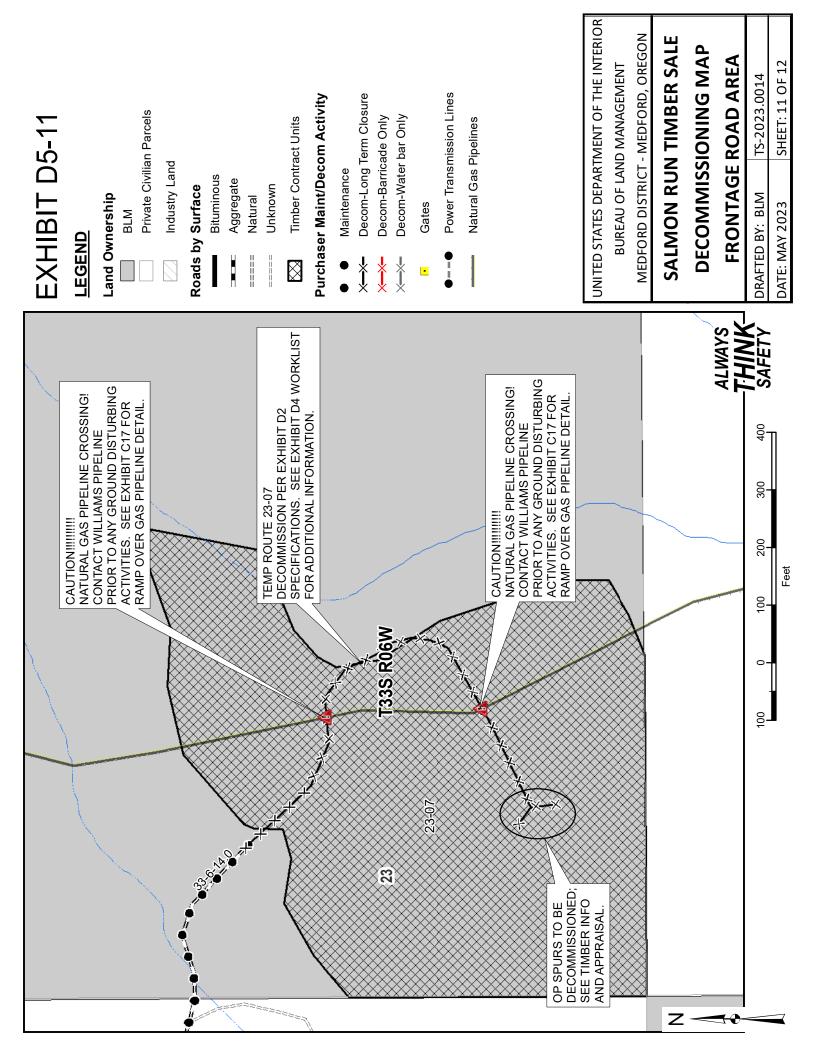












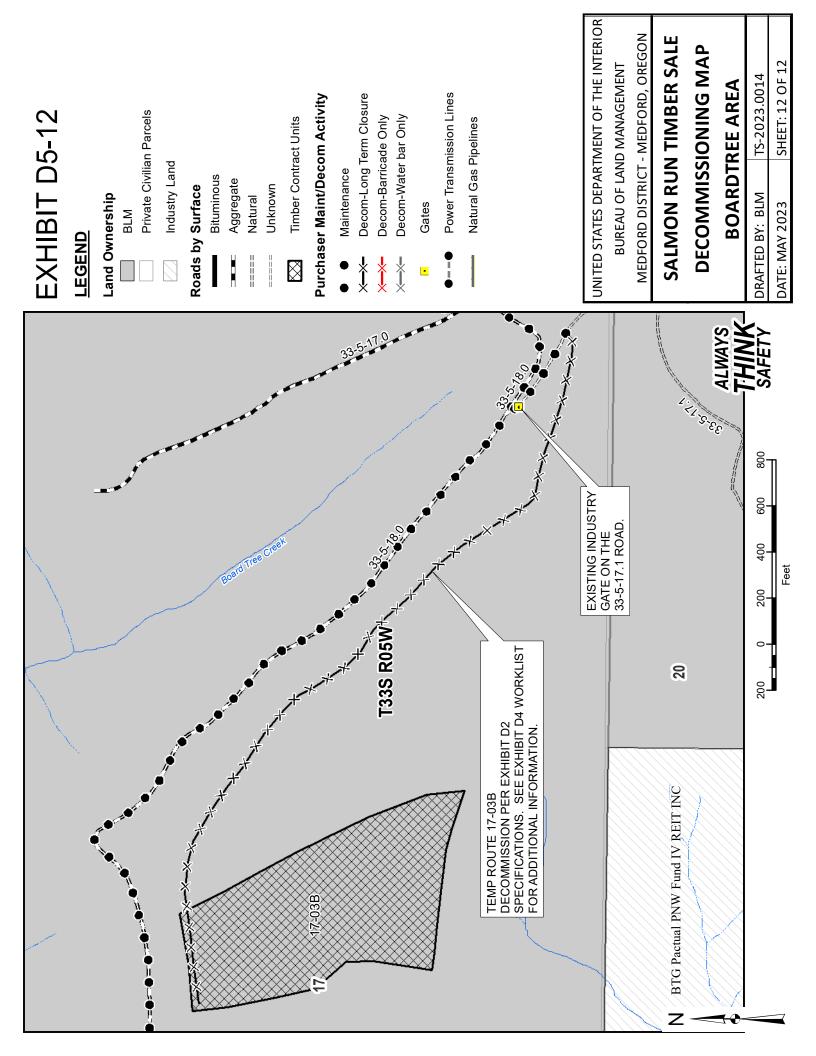
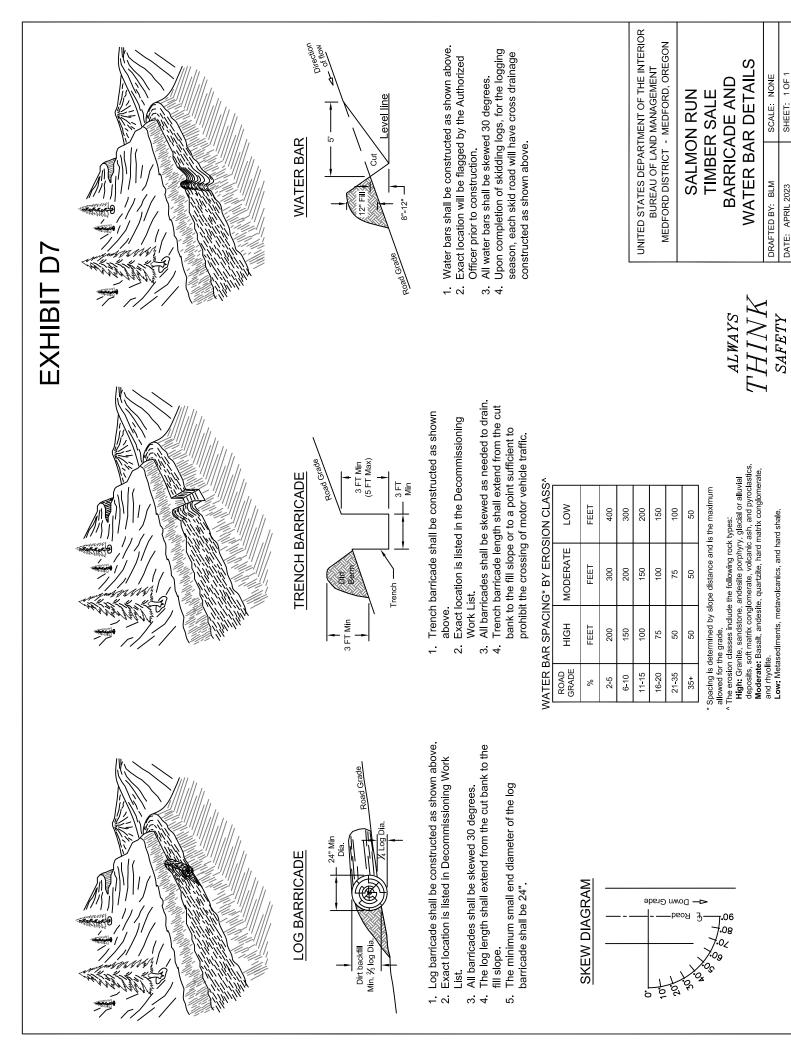


										EXHIBIT D6-1	BIT [)6-1		
				MAINTENANCE	ANCE RESPONS	NSIBILITY	/TN∃I			ROAD CLO	SURE AN	ROAD CLOSURE AND DECOMMISSIONING	SSIONING	
ROAD	FROM	TO	LENGTH	BLM MAINTENANCE	PURCHASER	THIRD PARTY MAINTENANCE	DUST ABA TSUD DNIABTAW	KOCKING ** SPOT	INSTALL EARTH/LOG BARRICADE OR MEGA-GATE	REMOVE CULVERTS	INSTALL WATER BARS	CAMOUFLAGE ROAD ENTRANCE (100 FT)	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE	SOIL STABILIZATION (SEED & MULCH)
NUMBER	MILE/STA	MILE/STA	MILE/STA MILE/STA MILE/STA	MILE	MILE	MILE	MILE	MILE	EA	EA	EA	EA	MILE/STA	ACRE
SUNNY VALLEY LOOP ROAD SYSTEM	OOP ROAL	SYSTEM												
34-6-2.0 (A-D)	00.0	2.04	2.04		2.04		06.0	**						
34-6-1.1	0.00	1.45	1.45		1.45			**						
34-6-1.4	0.00	60.0	60.0		60.0									
34-6-1.0	00.00	0.45	0.45		0.45			*						
34-6-1.2	00.0	0.02	0.02		0.02									
34-6-1.3	0.00	0.05	0.05		0.05									
33-6-35.1 (A-C)	00.00	1.26	1.26		1.26						2			
MILLER GULCH ROAD SYSTEM	TOAD SYST	EM												
33-6-24.0 (A-B2)	00.0	3.96	3.96		3.96		0.60	*						
33-5-31.7	00.0	0.15	0.15		0.15			*						
33-5-31.2 (A-B)	0.00	0.73	0.73		0.73			**						
34-5-6.0	00.0	0.15	0.15		0.15			**						
33-5-31.3 (A)	00.0	1.96	1.96		1.96			**						
33-5-32.1	0.00	0.63	0.63		0.63			**						
34-5-5.0	0.00	0.21	0.21		0.21			**						
PAGE 1 TOTALS			13.09		13.09		1.50				2			
DECOMMISSIONING NOTES	MISSION	AING NC	DTES			*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	ATIONAL IOT PAY	. USE OI ITEMS.	NLY. QUANTI	ITIES				
1. ALL EXHIBIT D	TEMP RO SPECIFIC	UTE ARE	TO BE DE	 ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS.) PER	**1300CY OF SURFACE COURSE AGGREGATE FOR			SE AGGREGA	TE FOR		UNITED STATES DEPARTMENT OF THE INTERIOR	EPARTMENT OF	THE INTERIOR
2. DEC	OMMISSIC	IS DNINC	HALL INCL	 DECOMMISSIONING SHALL INCLUDE WATER BARRING 	tring	FURNISHED AND PLACED ON AGGREGATE ROADS		SED ON	AGGREGATE	SHALL BE ROADS		BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	BUREAU OF LAND MANAGEMENT -ORD DISTRICT - MEDFORD, ORE	EMENT RD, OREGON
AND BARF	RICADING					AFTER USE. ROCK SHALL BE OBTAINED FROM A COMMERCIAL SOURCE AND SHALL MEET EXHIBIT	SOURCE	HALL BE E AND S	: OBTAINED FF SHALL MEET E	ROM A EXHIBIT		SAL	SALMON RUN	~
3. FULI		MISSION	NG SHALL	3. FULL DECOMMISSIONING SHALL INCLUDE RIPPING,	NG,	C-14 SECTION 1200 SPECIFICATIONS.	1200 SF	PECIFIC,	ATIONS.	ALWAYS		TIM	TIMBER SALE	ш
WALEKB	AKKING, "	SEEUING	& MULCH	ING, AND BARRIC	AUING.				L	<i>THINK</i>		ESTIMATE OF QUANTITIES*	OF QUAN	VTITIES*
									- 4	SAFETY		DRAFTED BY: BLM DATE: APRIL 2023	SCALE: NONE SHEET: 1 OF 4	NONE 1 OF 4
											_			

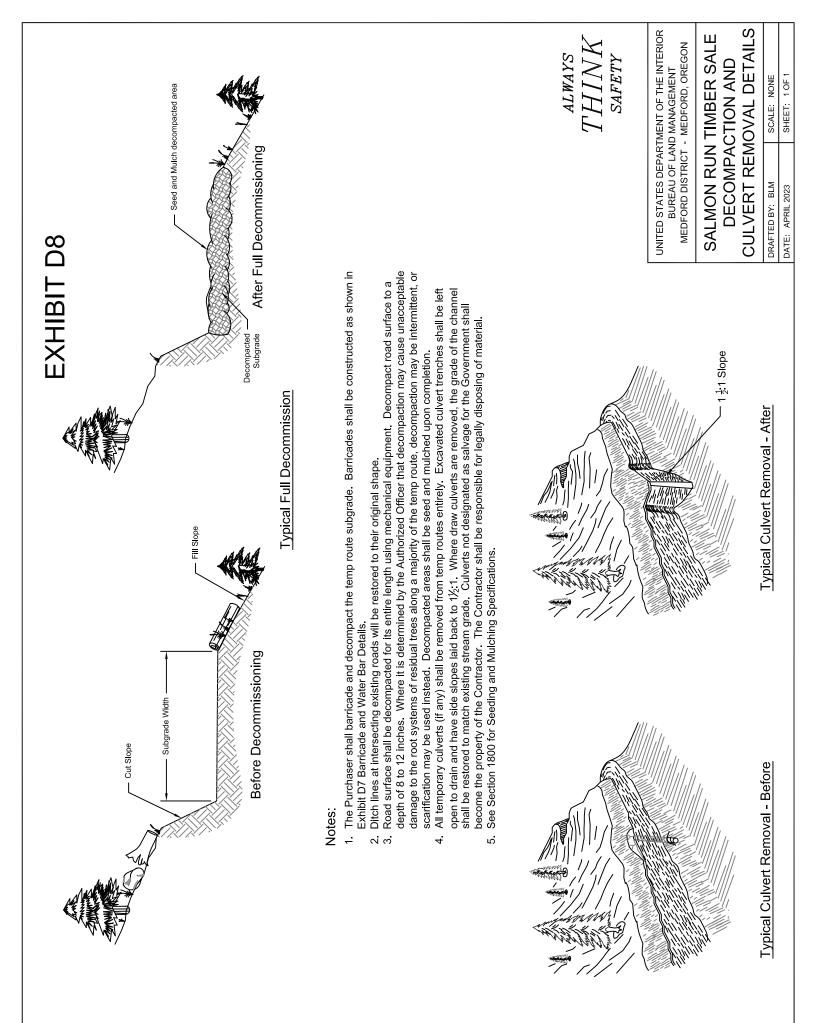
										EXHI	EXHIBIT D6-2)6-2		
				MAINTENANCE		RESPONSIBILITY	VENT/			ROAD CLO	SURE AN	ROAD CLOSURE AND DECOMMISSIONING	SSIONING	
ROAD	FROM	TO	LENGTH	BLM MAINTENANCE	PURCHASER MAINTENANCE	THIRD PARTY MAINTENANCE	DUST ABATEN DUISTAW	ВОСКІИС 8601	INSTALL EARTH/LOG BARRICADE	INSTALL MEGA-GATE	INSTALL WATER BARS	CAMOUFLAGE ROAD ENTRANCE (100 FT)	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE	SOIL STABILIZATION (SEED & MULCH)
NUMBER	MILE/STA	MILE/STA MILE/STA MILE/STA	MILE/STA	MILE	MILE	MILE	MILE	MILE	EA	EA	EA	EA	STA	ACRE
33-5-32.0	00 [.] 0	0.39	0.39		0.39			*						
33-5-31.1	00 [.] 0	0.66	0.66		0.66			**						
33-5-32.2	00.00	0.08	0.08		0.08			*						
33-5-30.0 (A-B)	00 [.] 0	1.10	1.10		1.10			**	£-		9			
33-5-31.5	00.0	0.40	0.40		0.40			*						
33-5-30.3	00 [.] 0	0.08	0.08		0.08			*						
33-5-30.2	00.0	0.13	0.13		0.13			**	1					
FRONTAGE ROAD SYSTEM	D SYSTEM													
33-6-14.0 (A-B)	0.00	0.71	0.71		0.71		0.71	*						
BOARDTREE ROAD SYSTEM	AD SYSTEA	/												
33-5-7.0 (A)	00.0	2.23	2.23		2.23		0.50	**						
33-5-18.0 (A-B)	0.00	1.70	1.70		1.70			**						
33-5-17.1 (A)	0.00	0.08	0.08		0.08									
PAGE 2 TOTALS			7.56		7.56		1.21		2		9			
DECOM	DECOMMISSIONING NOTES	N DNIN)TES			*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	ATIONAL JOT PAY	USE O	NLY. QUANT	ITIES				
1. ALL EXHIBIT D	, TEMP RC) SPECIFI(DUTE ARE CATIONS /	TO BE D{ AND DET≄	 ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS. 	PER	**1300CY OF SURFACE COURSE AGGREGATE FOR ROAD RESURFACING AND SPOT ROCKING SHALL BE		E COUR AND SP	SE AGGREGA OT ROCKING	VTE FOR SHALL BE	Ō	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAGEMENT	MENT MENT
2. DEC AND BARF	COMMISSI	ONING SF	HALL INCL	2. DECOMMISSIONING SHALL INCLUDE WATER BARRING AND BARRICADING.	RING	A CONTRACT AND FLACED ON AGGINED FROM A ACTIVE ACTION ACTIVE	SOLING SP	HALL BE	OBTAINED FI	ROM A			SAI MON RIIN	C, CAEGON
3. FUL		MISSIONII	NG SHALL	3. FULL DECOMMISSIONING SHALL INCLUDE RIPPING, WATER RAPRING SEFDING & MULTCHING AND RAPPICADING	IG, ADING	C-14 SECTION 1200 SPECIFICATIONS.	1200 SF	ECIFIC	ATIONS.	ALWAYS		TIMIT	TIMBER SALE	
										r HINK		ESTIMATE OF QUANTITIES*	OF QUAN	TITIES*
									-	SAFETY	DF	DRAFTED BY: BLM DATE: APRIL 2023	SCALE: NONE SHEET: 2 OF 4	IONE : OF 4

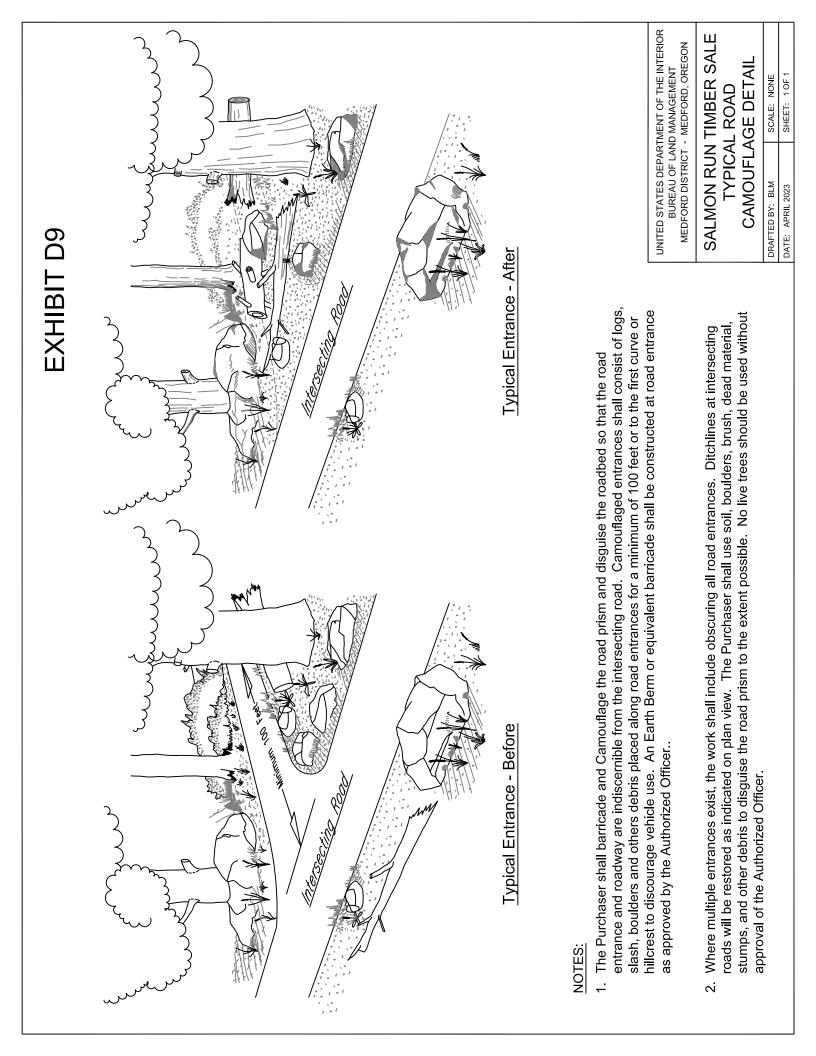
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MAINTENANCE RESPONSIBILITY	NCEF	RESPO	VSIBILITY	TEMENT 5			ROAD CLO	SURE AN	ROAD CLOSURE AND DECOMMISSIONING	SSIONING	
TO LENGTH MAINTENANCE MAINTENANCE	PURCH	ASER VANCE	THIRD PARTY MAINTENANCE	ААА ТЕОО ЭИІЯЭТАМ	ROCKING SPOT	INSTALL EARTH/LOG BARRICADE	INSTALL MEGA-GATE	INSTALL WATER BARS	CAMOUFLAGE ROAD ENTRANCE (100 FT)	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE	SOIL STABILIZATION (SEED & MULCH)
MILE/STA MILE/STA MILE MILE MILE	MILE		MILE	MILE	MILE	EA	EA	EA	EA	STA	ACRE
7+89 0.15 0.15	0.1				*						
	13.00							~			
	7.56			1.21		2		9			
0.15 0.15	0.15										
20.80	20.80			2.71	1300	2		ω			
DECOMMISSIONING NOTES 1. ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS. 2. DECOMMISSIONING SHALL INCLUDE WATER BARRING AND BARRICADING. 3. FULL DECOMMISSIONING SHALL INCLUDE RIPPING, WATER BARRING, SEEDING & MULCHING, AND BARRICADING.	ER DING.		*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS. **1300CY OF SURFACE COURSE AGGREGATE FOR ROAD RESURFACING AND SPOT ROCKING SHALL BE FURNISHED AND PLACED ON AGGREGATE ROADS AFTER USE. ROCK SHALL BE OBTAINED FROM A COMMERCIAL SOURCE AND SHALL MEET EXHIBIT C-14 SECTION 1200 SPECIFICATIONS. AL WAYS SAFETY	ATIONAL IOT PAY SURFACE ACING / ND PLAC SOURCE 1200 SP	USE O ITEMS. E COUR AND SP AND SP AND SP E AND S E AND S E AND S	NLY QUANT SE AGGREGA OT ROCKING OT ROCKING ACT ROCKING ATIONS ATIONS T	JANTITIES REGATE FOR RING SHALL BE SATE ROADS ED FROM A EET EXHIBIT AL WAYS THINK SAFETY		UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON SALMON RUN TIMBER SALE ESTIMATE OF QUANTITIES* DATE: APRIL 2023 SHEET: 3 07 4	STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAGEMENT BUREAU OF LAND MANAGEMENT CORD DISTRICT - MEDFORD, ORE CORD DISTRICT - MEDFORD, ORE CORD DISTRICT - MEDFORD, ORE CORD DISTRICT - MEDFORD, ORE SALMON RUN TIMBER SALE IMATE OF QUANTIT BY: BLM SCALE: NONE SRIL 2023 SHEET: 3.0F 4	HE INTERIOR AENT , OREGON TITIES*

EXHIBIT D6-4	MAINTENANCE RESPONSIBILITY	VCE MAINTENANCE MAINTENANCE 28 0.2 BARRICADE MEGA-GATE WATER BARS (100 FT) SUBGRADE MULCH)		MILE MILE MILE EA EA EA EA EA ACRE	0.11 0.11 6 1 6 1	0.10 5 1	0.68 1 24 1	0.17 1 8 1	0.05	0.05 1 2 1	0.07 1 1 4 1	0.07 1 4 1	0.08 1 1 4 1 1	0.05 1 1 3 1	0.29 1 15 1	0.05 1 1 2 1	0.07 1 3 1	0.09 1 5 1	0.14 1 9 1	2.07 15 97 15	*FOR INFORMATIONAL USE ONLY. QUANTITIES *FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS. **1300CY OF SURFACE COURSE AGGREGATE FOR **1300CY OF SURFACE COURSE AGGREGATE FOR TURNISHED AND PLACED ON AGGREGATE ROADS AFTER USE. ROCK SHALL BE OBTAINED FROM A COMMERCIAL SOURCE AND SHALL MEET EXHIBIT C-14 SECTION 1200 SPECIFICATIONS. AL WAYS THINK ESTICATIONS. AL WAYS THINK ESTICATIONS. ESTI
	NCE RESPONSIBILI		_		0.11	0.10	0.68	0.17	0.05	0.05	0.07	0.07	0.08	0.05	0.29	0.05	0.07	60.0	0.14	2.07	
	MAINTENAI	BLM MAINTENANCE		MILE																	DECOMMISSIONING NOTES 2.07 2.07 2.07 2.07 2.07 2.07 2.07 2.07
		LENGTH	LENGIN	MILE/STA MILE/STA MILE/STA	0.11	0.10	0.68	0.17	0.05	0.05	0.07	0.07	0.08	0.05	0.29	0.05	0.07	60.0	0.14	2.07	OTES E TO BE D AND DET HALL INC BARRICK ING SHAL & MULCH
		5		MILE/ST/	6+05	5+30	35+95	8+90	2+80	2+52	3+80	3+68	4+40	2+75	15+55	2+41	3+50	4+65	7+30	rs T	ALS NUTE ARE CATIONS ONING S ING, AND MISSION SEEDING
		FROM	L L C M	MILE/ST ^A	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	UTE TOT	MISSIO TEMP RC SPECIFIC SPECIFIC MULCH & MULCH L DECOM
		ROAD			TR 01-02-A 0+0	TR 01-02-B 0+0	TR 17-03B 0+0	TR 23-07 0+0	TR 31-06-A 0+00	TR 31-06-B 0+00	TR 31-06-C 0+00	TR 31-07 0+00	TR 32-25-A 0+0	TR 32-25-B 0+0	TR 32-25-C 0+0	TR 32-25-D 0+0	TR 32-25-E 0+0	TR 32-25-F 0+0	TR 35-12 0+0	TEMPORARY ROUTE TOTALS	DECOMMISSIONING NOTES 2.00 DECOMMISSIONING NOTES 1. ALL TEMP ROUTE ARE TO BE EXHIBIT D SPECIFICATIONS AND D 2. DECOMMISSIONING SHALL IN SEEDING & MULCHING, AND BARRI 3 FULL DECOMMISSIONING SH



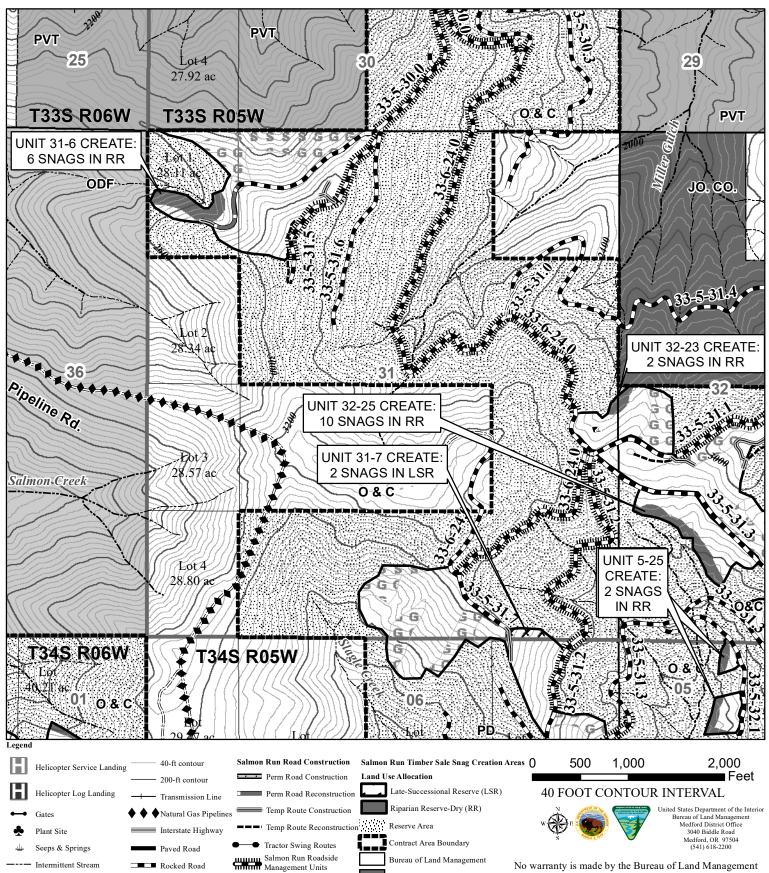
DATE: APRIL 2023





U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 31 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 1 OF 7



Josephine County

Private

Oregon Department of Forestry

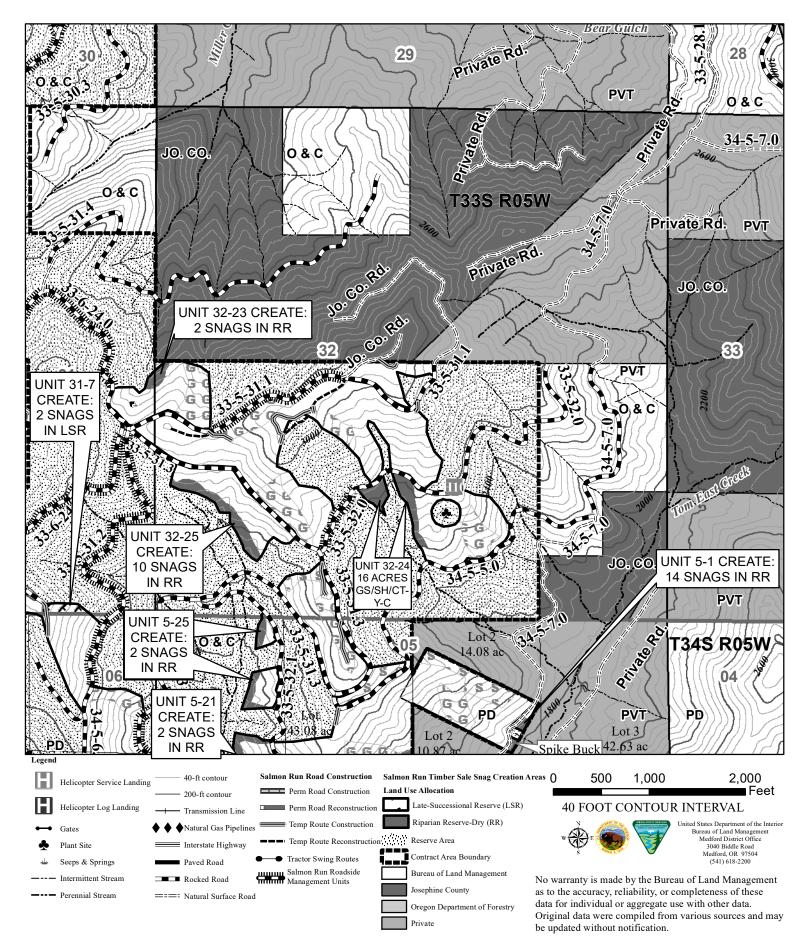
Perennial Stream

==== Natural Surface Road

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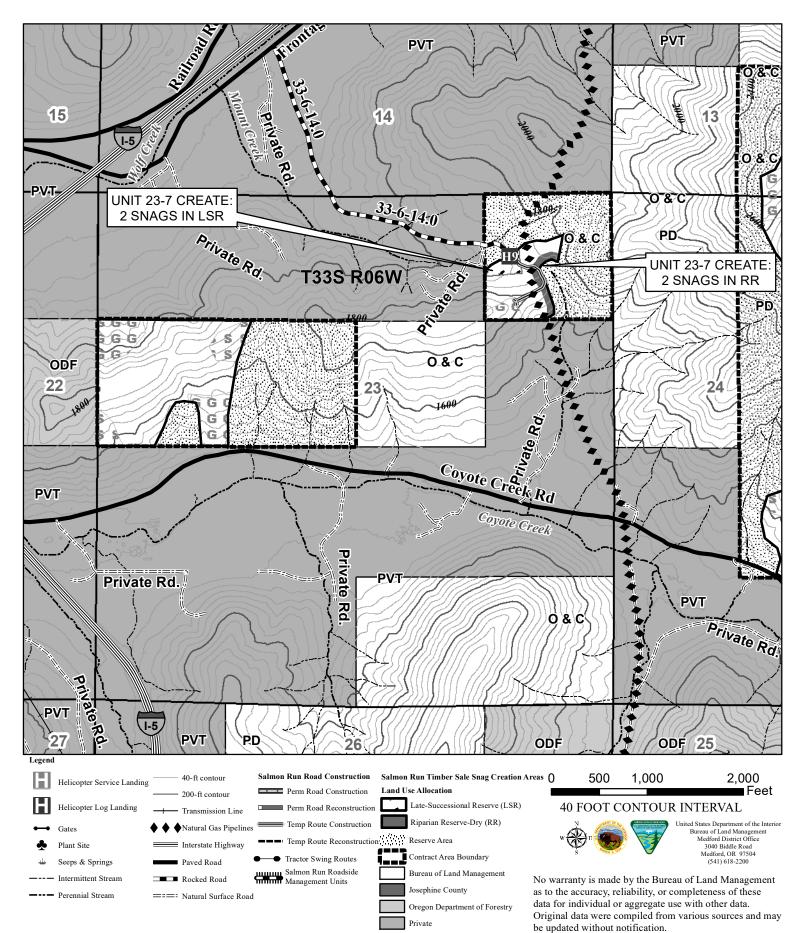
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 32 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 2 OF 7



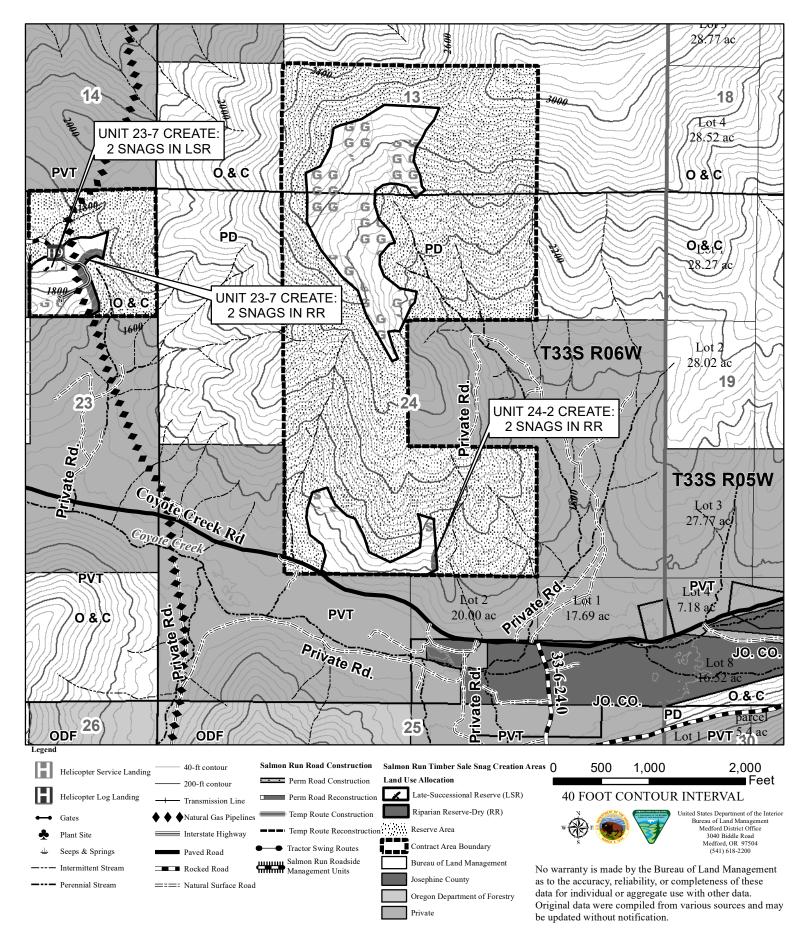
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 6 W., SEC. 23 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 3 OF 7



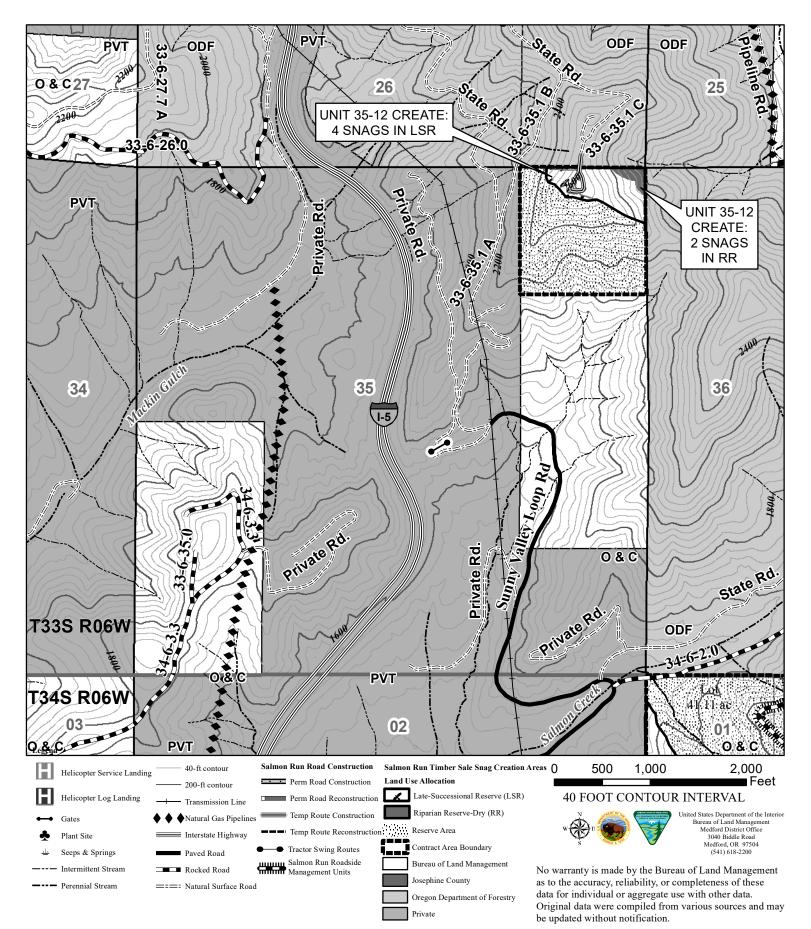
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 6 W., SEC. 24 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 4 OF 7



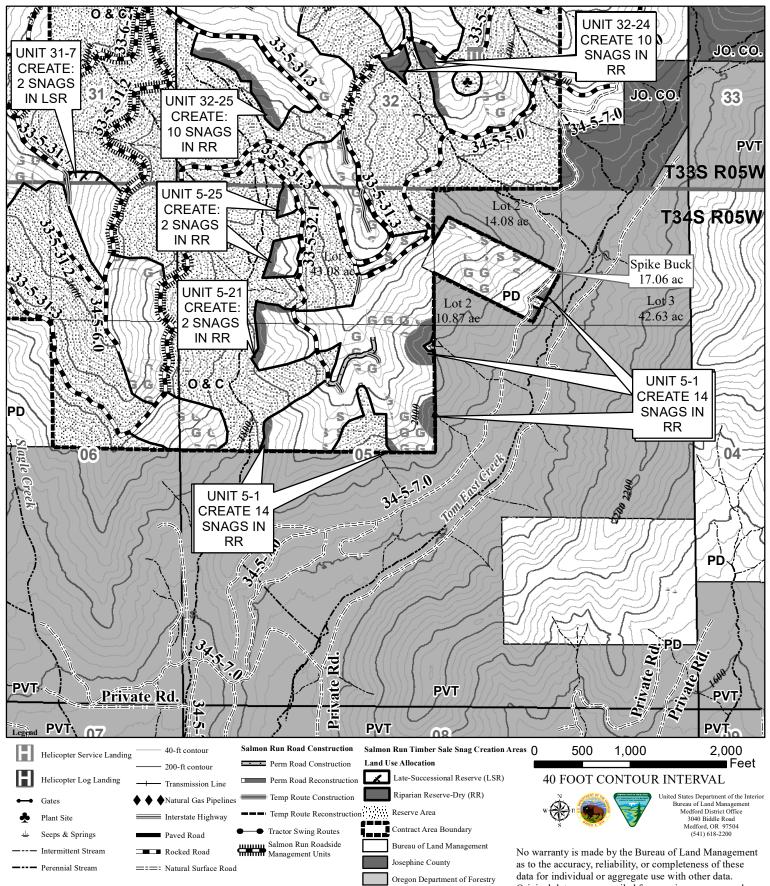
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 6 W., SEC. 35 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 5 OF 7



U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 34 S., R. 5 W., SEC. 5 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 6 OF 7

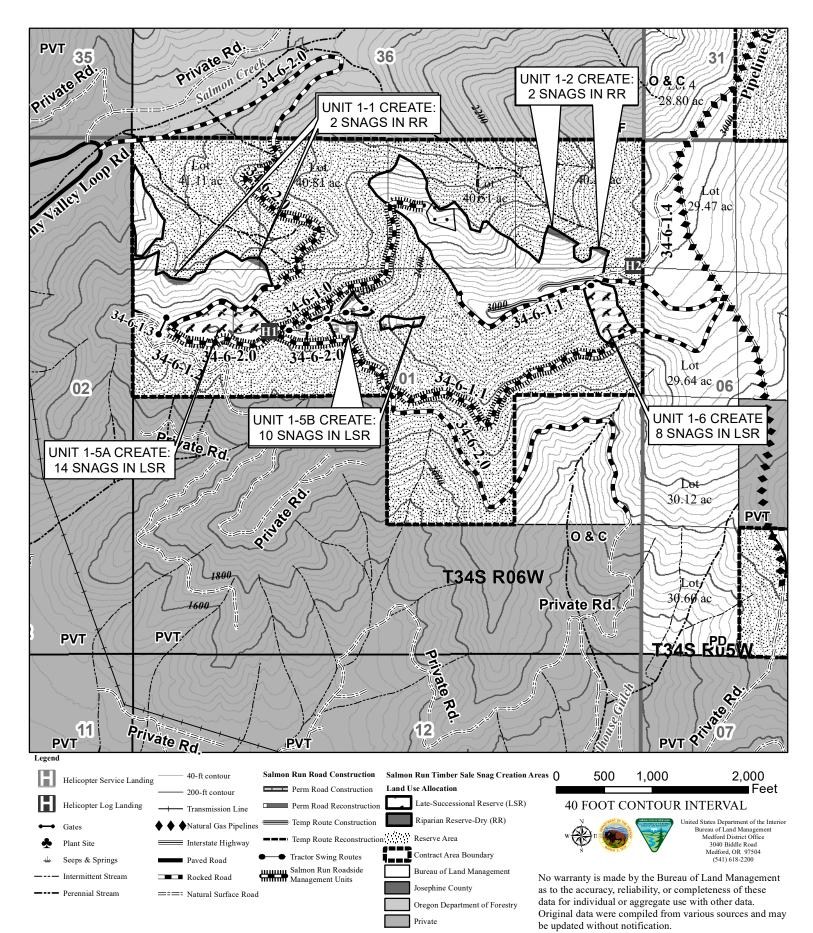


Private

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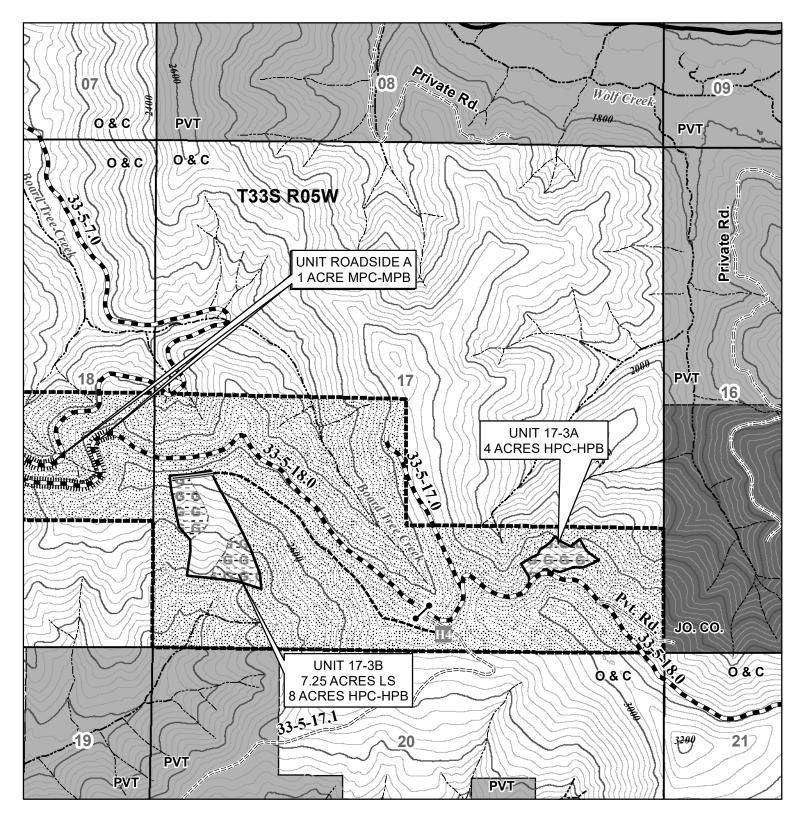
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 34 S., R. 6 W., SEC. 1 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

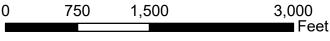
TIMBER SALE CONTRACT MAP EXHIBIT E PAGE 7 OF 7



U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 1 OF 15





1 inch = 1,000 feet

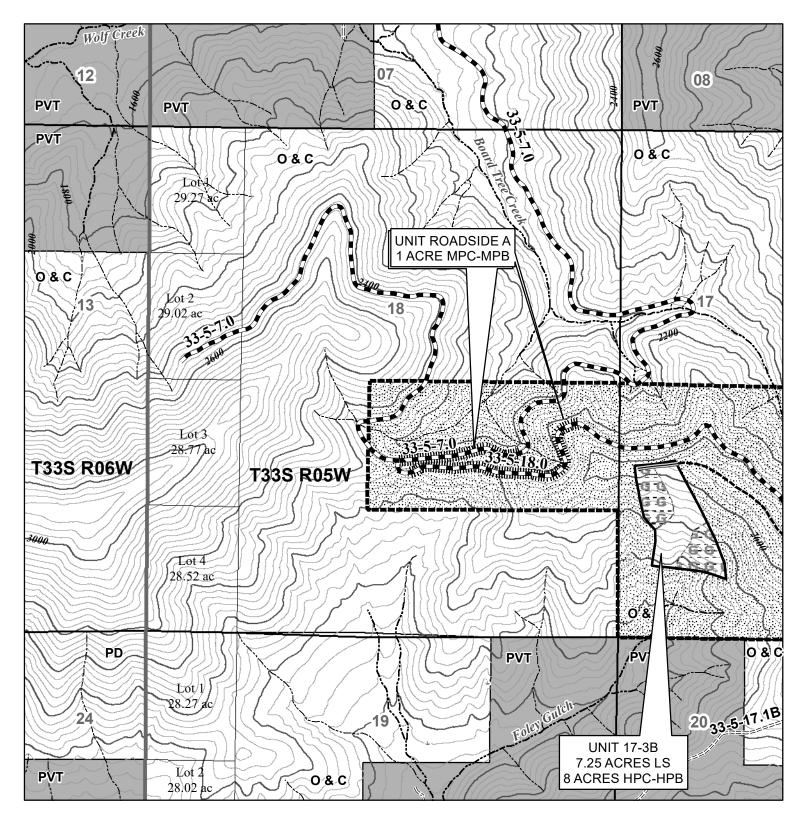
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 2 OF 15





1 inch = 1,000 feet

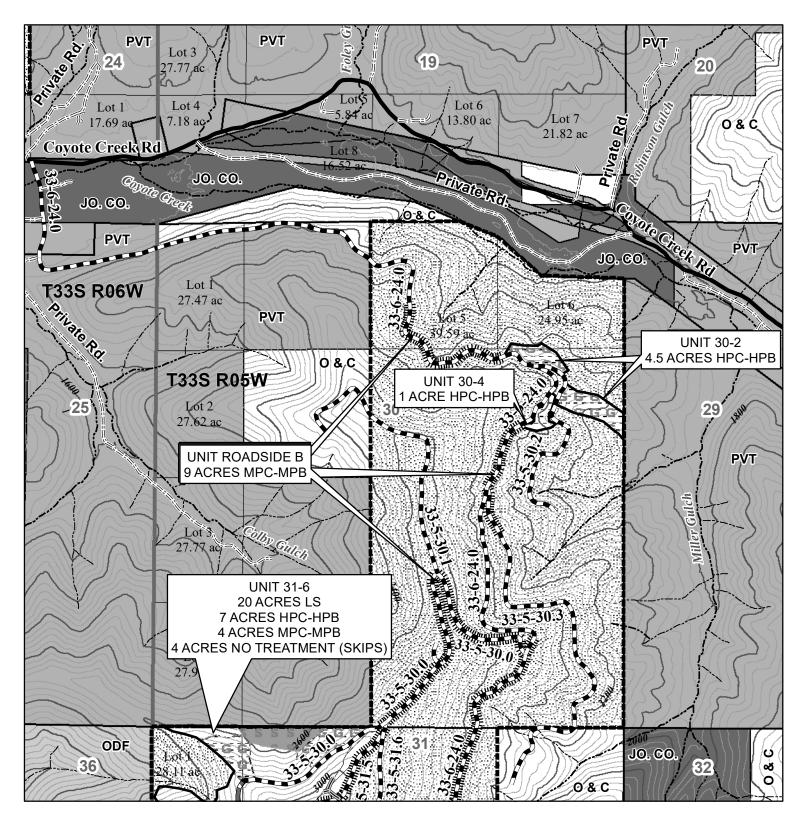
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 3 OF 15





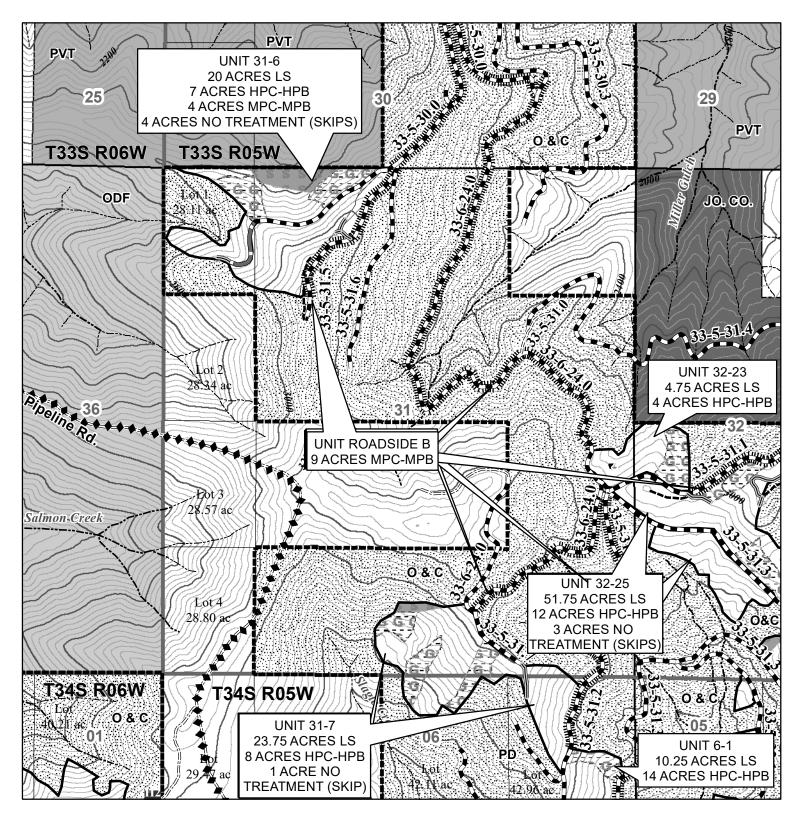
1 inch = 1,000 feet

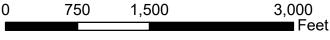
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 4 OF 15





1 inch = 1,000 feet

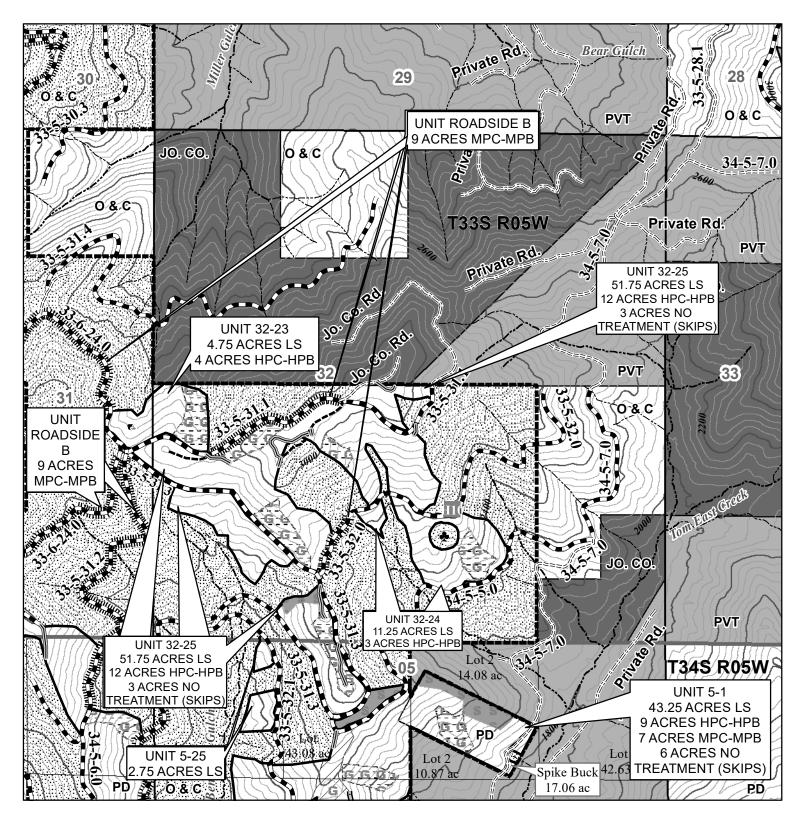
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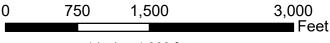
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 5 OF 15





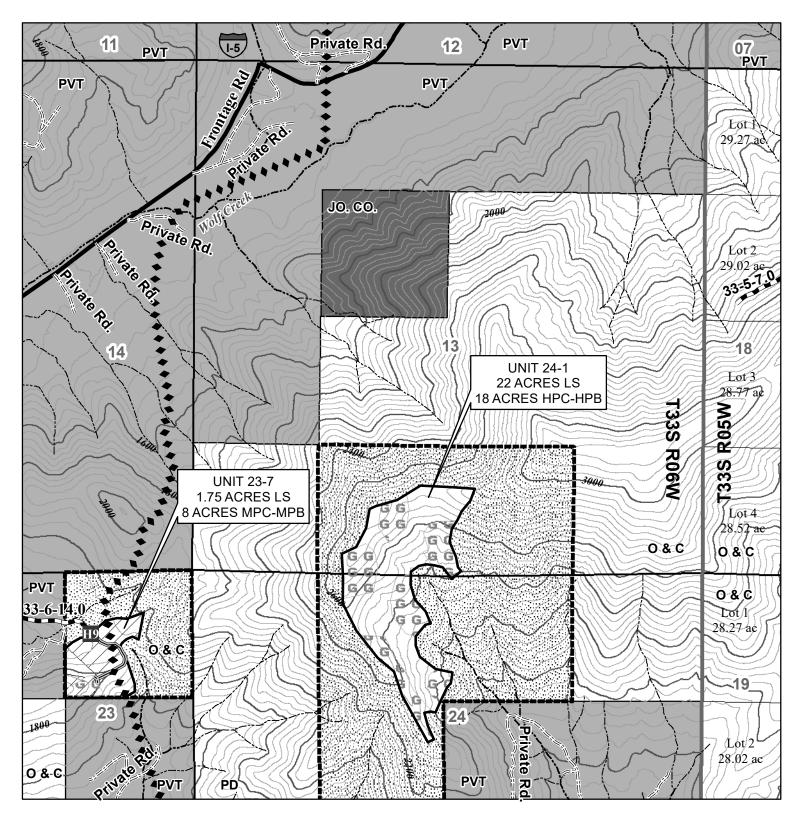
1 inch = 1,000 feet

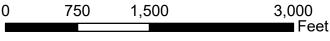
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 6 OF 15





1 inch = 1,000 feet

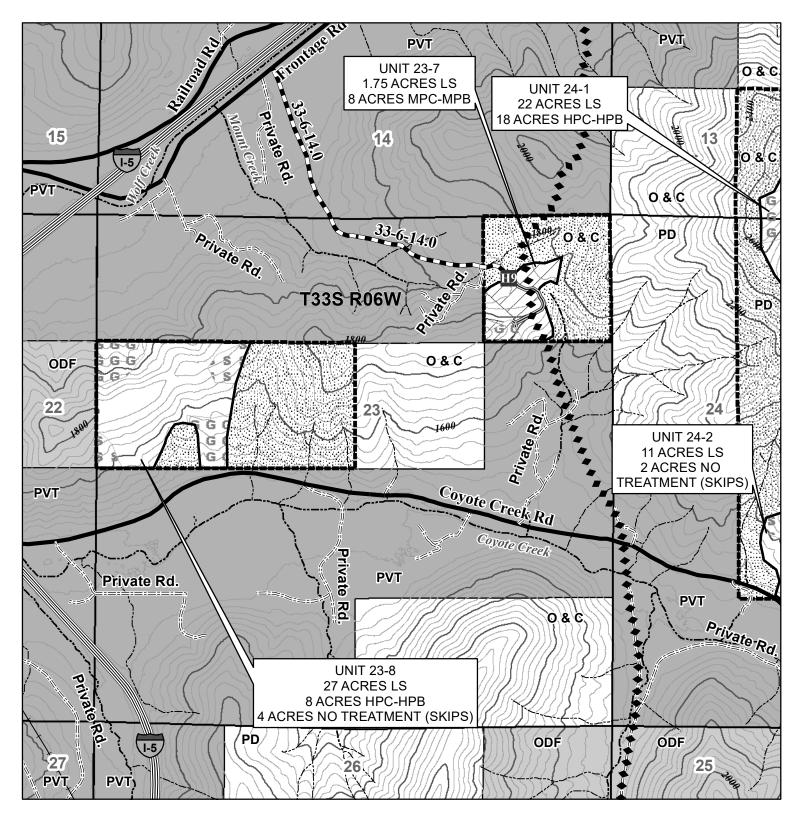
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 7 OF 15



0 750 1,500 3,000

1 inch = 1,000 feet

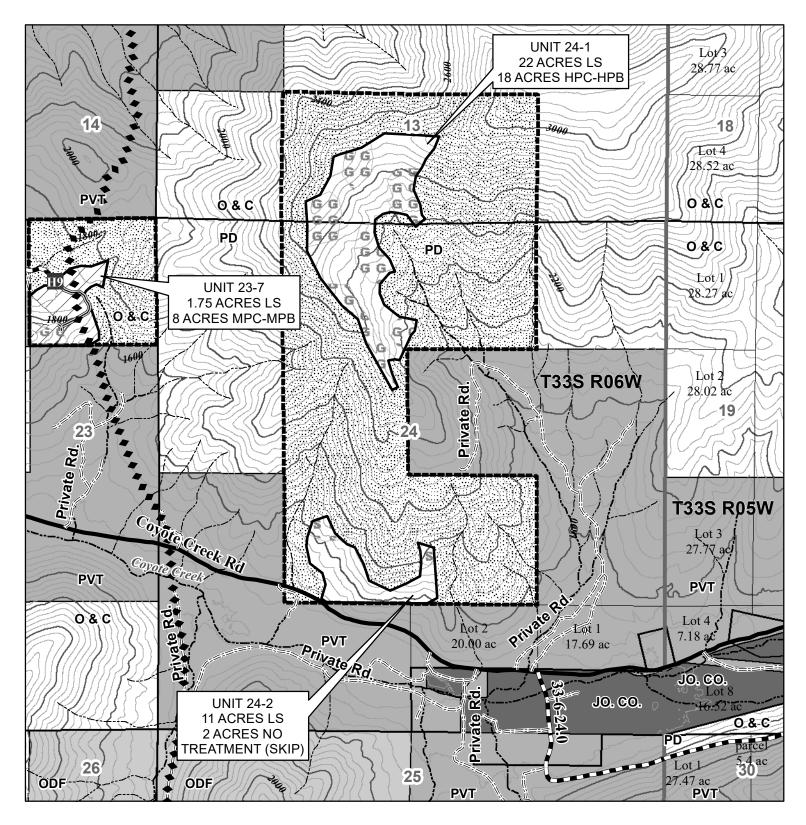
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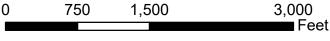
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 8 OF 15





1 inch = 1,000 feet

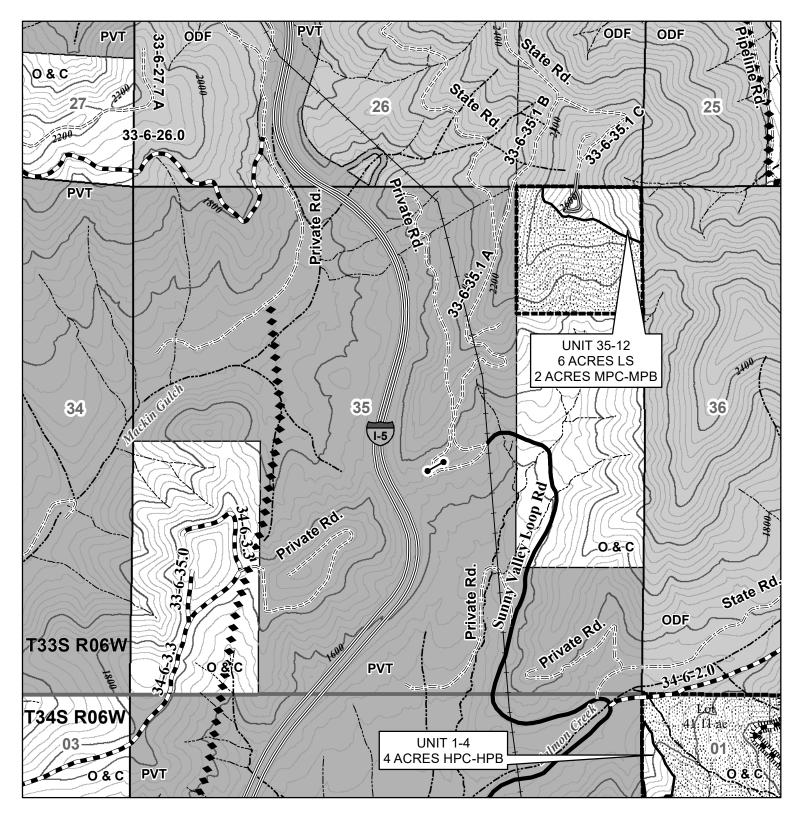
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 9 OF 15





1 inch = 1,000 feet

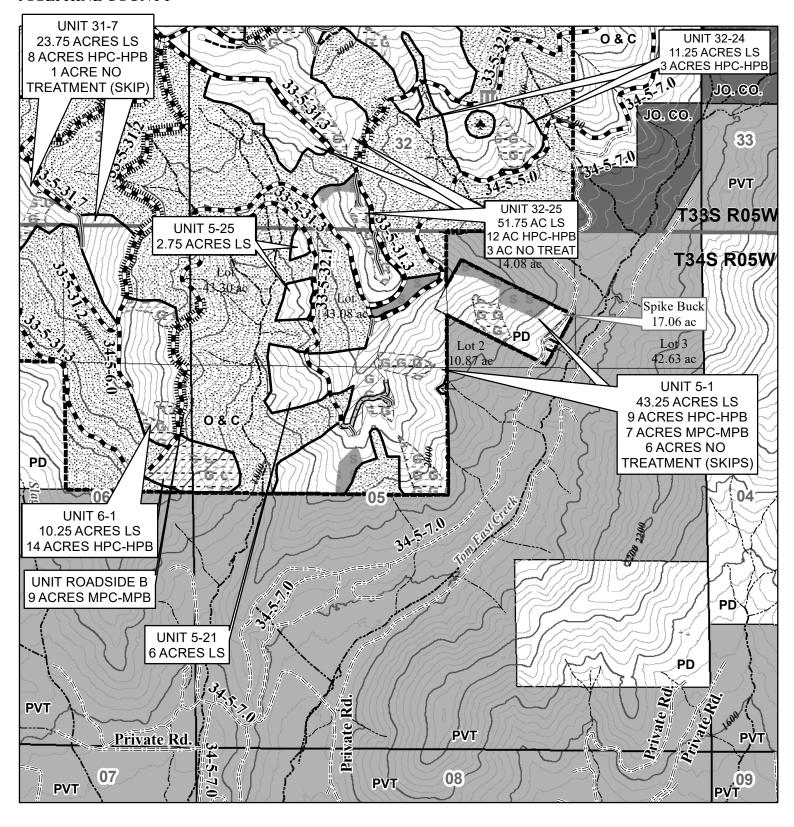
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TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 10 OF 15





1 inch = 1,000 feet

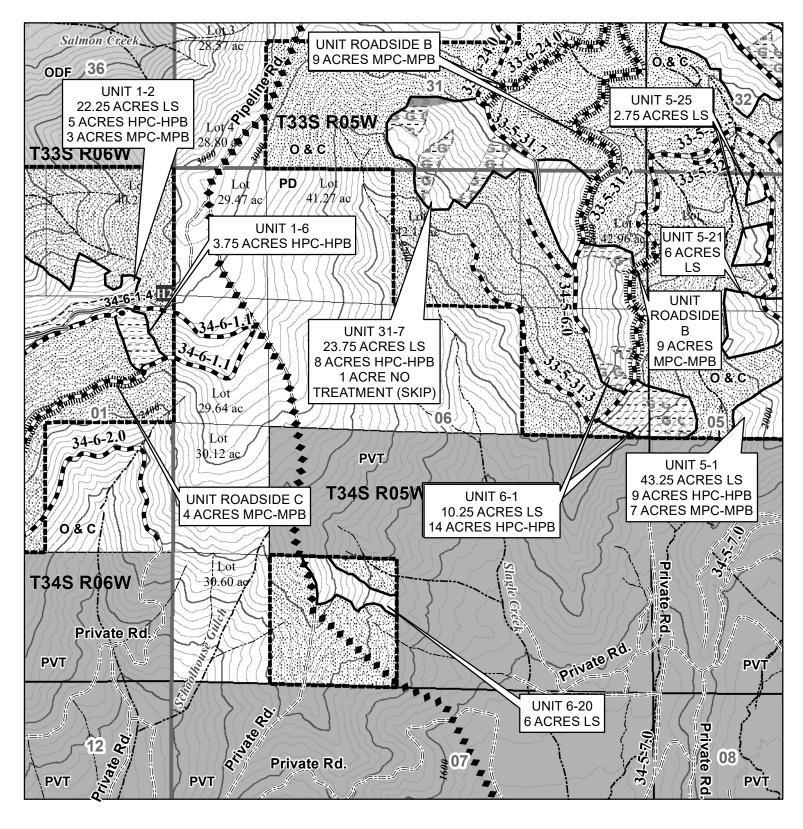
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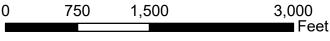
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U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 34 S., R. 5 W., SEC. 6 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 11 OF 15





1 inch = 1,000 feet

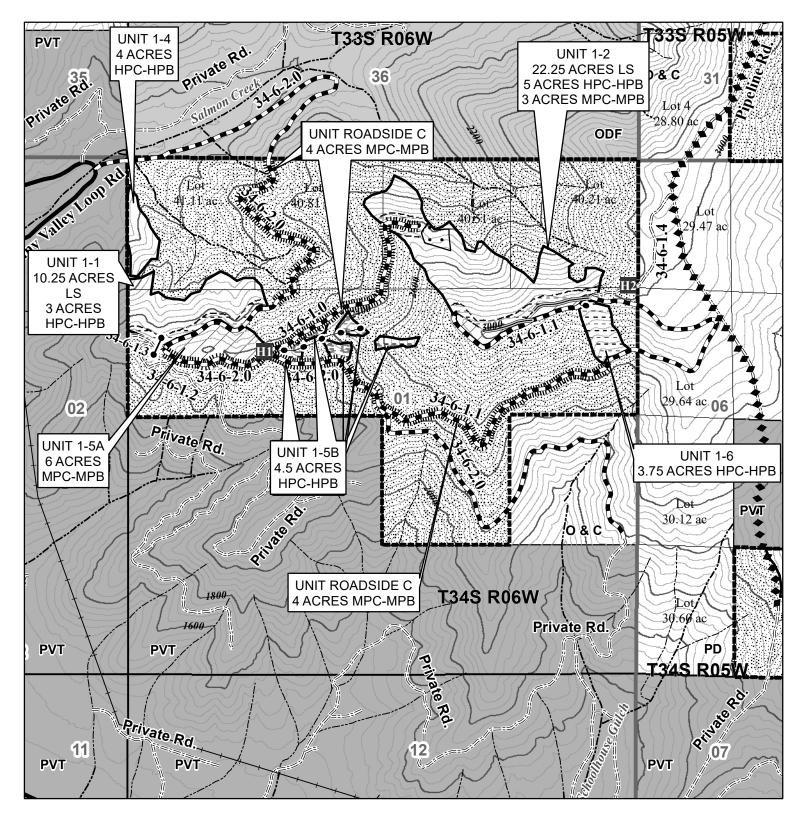
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U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 34 S., R. 6 W., SEC. 1 WILL. MER. SALMON RUN TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 12 OF 15





1 inch = 1,000 feet

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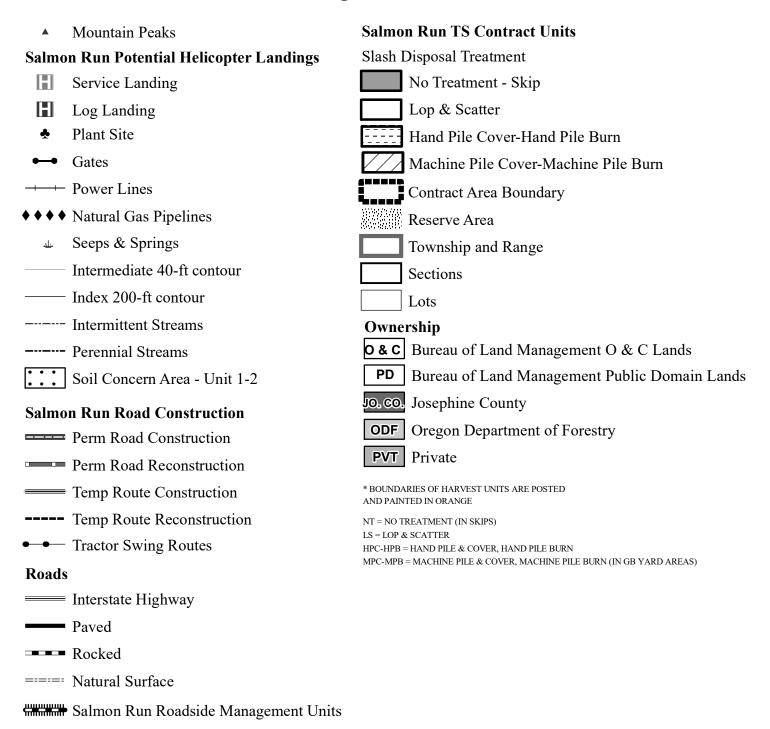
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U.S.D.I. BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17, 18, 30, 31, 32; T. 33 S. R. 6 W., SEC. 13, 23, 24, 35; T. 34 S., R. 5 W., SEC. 5, 6; T. 34 S., R. 6 W., SEC. 1, WILL. MER. JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 13 OF 15

Legend



0	750	1,500	3,000
			Feet

1 inch = 1,000 feet

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U.S.D.I. BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17, 18, 30, 31, 32; T. 33 S. R. 6 W., SEC. 13, 23, 24, 35; T. 34 S., R. 5 W., SEC. 5, 6; T. 34 S., R. 6 W., SEC. 1, WILL. MER. JOSEPHINE COUNTY

LEGEND

UNIT	UNIT ACRES	SLASH DISPOSAL TREAMENT PRESCRIPTION	HAND PILE TREATMENT AREA DES CRIPTION		
1-1	16	LS/HPC-HPB	100 FEET ALONG ROADS 34-6-1.2 & 34-6-2.0		
1-2	34	LS/MPC-MPB/HPC-HPB	100 FEET ALONG ROADS 34-6-1.0 & 34-6-1.1		
1-4	4	HPC-HPB	WHOLE UNIT		
1-5A	7	MPC-MPB	N/A		
1-5B	5	HPC-HPB	WHOLE UNIT		
1-6	4	HPC-HPB	WHOLE UNIT		
5-1	69	LS/MPC-MPB/HPC-HPB/NT	GROUP SELECTION HARVEST AREAS		
5-21	7	LS	N/A		
5-25	4	LS	N/A		
6-1	27	LS/HPC-HPB	GROUP SELECTION HARVEST AREAS		
6-20	6	LS	N/A		
17-3A	4	HPC-HPB	WHOLE UNIT		
17-3B	16	LS/HPC-HPB	GROUP SELECTION HARVEST AREAS		
23-7	11	LS/MPC-MPB	N/A		
23-8	39	LS/HPC-HPB/NT	GROUP SELECTION HARVEST AREAS		
24-1	40	LS/HPC-HPB	GROUP SELECTION HARVEST AREAS		
24-2	13	LS/NT	N/A		
30-2	6	HPC-HPB	WHOLE UNIT		
30-4	1	HPC-HPB	WHOLE UNIT		
31-6	40	LS/MPC-MPB/HPC-HPB/NT	GROUP SELECTION HARVEST AREAS		
31-7	35	LS/HPC-HPB/NT	GROUP SELECTION HARVEST AREAS		
32-23	11	LS/HPC-HPB	GROUP SELECTION HARVEST AREAS		
32-24	16	LS/HPC-HPB	GROUP SELECTION HARVEST AREAS		
32-25	77	LS/HPC-HPB/NT	GROUP SELECTION HARVEST AREAS		
35-12	9	LS/MPC-MPB	N/A		
Roadside A	1	MPC-MPB	N/A		
Roadside B	9	MPC-MPB	N/A		
Roadside C	4	MPC-MPB	N/A		
TOTAL	515				

* BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE

NT = NO TREATMENT (IN SKIPS)

LS = LOP & SCATTER

HPC-HPB = HAND PILE & COVER, HAND PILE BURN

MPC-MPB = MACHINE PILE & COVER, MACHINE PILE BURN (IN GB YARD AREAS)

0 750 1,500

3,000 Feet

1 inch = 1,000 feet

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U.S.D.I. BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0014 T. 33 S., R. 5 W., SEC. 17, 18, 30, 31, 32; T. 33 S. R. 6 W., SEC. 13, 23, 24, 35; T. 34 S., R. 5 W., SEC. 5, 6; T. 34 S., R. 6 W., SEC. 1, WILL. MER. JOSEPHINE COUNTY

						D PRESCRI	
UNIT	UNIT ACRES	SLASH TREAT MENT ACRES	NO TREAT MENT (SKIP) ACRES	LOP & SCATTER ACRES	HAND PILE, COVER & BURN ACRES	MACHINE PILE, COVER & BURN ACRES	LANDINGS: COVER & BURN ACRES
1-1	16	16	0.00	10.25	3.00	0.00	2.75
1-2	34	34	0.00	22.25	5.00	3.00	3.75
1-4	4	5	0.00	0.00	4.00	0.00	1.00
1-5A	7	7	0.00	0.00	0.00	6.00	1.00
1-5B	5	5.5	0.00	0.00	4.50	0.00	1.00
1-6	4	4	0.00	0.00	3.75	0.00	0.25
5-1	69	63.25	6.00	43.25	9.00	7.00	3.75
5-21	7	7	0.00	6.00	0.00	0.00	1.00
5-25	4	4	0.00	2.75	0.00	0.00	1.25
6-1	27	27	0.00	10.25	14.00	0.00	2.75
6-20	6	7	0.00	6.00	0.00	0.00	1.00
17-3A	4	5.25	0.00	0.00	4.00	0.00	1.25
17-3B	16	16.75	0.00	7.25	8.00	0.00	1.50
23-7	11	11	0.00	1.75	0.00	8.00	1.25
23-8	39	36	4.00	27.00	8.00	0.00	1.00
24-1	40	40	0.00	22.00	18.00	0.00	0.00
24-2	13	11	2.00	11.00	0.00	0.00	0.00
30-2	6	6	0.00	0.00	4.50	0.00	1.50
30-4	1	1.25	0.00	0.00	1.00	0.00	0.25
31-6	40	36	4.00	20.00	7.00	4.00	5.00
31-7	35	34	1.00	23.75	8.00	0.00	2.25
32-23	11	11	0.00	4.75	4.00	0.00	2.25
32-24	16	16	0.00	11.25	3.00	0.00	1.75
32-25	77	74	3.00	51.75	12.00	0.00	10.25
35-12	9	9	0.00	6.00	0.00	2.00	1.00
Roadside A	1	1	0.00	0.00	0.00	1.00	0.00
Roadside B	9	9	0.00	0.00	0.00	9.00	0.00
Roadside C	4	4	0.00	0.00	0.00	4.00	0.00
TOTAL	515	501	20.00	287.25	120.75	44.00	48.75

SLASH DISPOSAL SUMMARY BY UNIT AND PRESCRIPTION



3,000 Feet

4

United States Department of the Interior Bureau of Land Management

Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200 40 FOOT CONTOUR INTERVAL



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,500

1 inch = 1,000 feet