

# P R O S P E C T U S

## LUMP SUM SALE

BUTTE FALLS FIELD OFFICE  
JACKSON MASTER UNIT

Medford Sale # ORM05- TS-2020.0012  
October 29, 2020 (KD)

# 1 Lodgepole (6310) Jackson County, O&C

BID DEPOSIT REQUIRED: \$223,400.00

All timber designated for cutting in; E½SW¼, W½SE¼, Sec 3; E½NE¼, Sec 9; S½NW¼, SW¼, Sec 11; E½SE¼, Sec 13; S½SE¼, Sec 14; NE¼SW¼, NW¼SE¼, Sec 15; NW¼SE¼, Sec 21; NE¼, NW¼, N½SW¼, SE¼SW¼, NE¼SE¼, W½SE¼, Sec 23; NE¼, Sec 24; NE¼NW¼, Sec 27; T. 34 S., R. 3 E.; 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
16,290	5,677	Douglas Fir	6,913	\$257.30	\$1,778,714.90
7,975	2,922	White Fir	3,568	\$94.30	\$336,462.40
3,751	458	Incense Cedar	586	\$188.10	\$110,226.60
251	100	Ponderosa Pine	129	\$49.20	\$6,346.80
53	19	Sugar Pine	23	\$69.60	\$1,600.80
28,320	9,176		11,219		\$2,233,351.50

\*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.

CRUISE INFORMATION - Douglas-fir, White fir, Ponderosa Pine, and Incense cedar have been cruised using the 3-P sampling methods to select sample trees. Sugar Pine and was 100% cruised. Maps showing the location and description of these sample trees are available at the Medford District Office. The sample trees have been measured using the volt system of measurement, and the volume expanded to a total sale volume. With respect to merchantable trees of all conifer species: the average tree is 17.9 inches DBHOB; the average gross merchantable log contains 90 bd. ft.; the total gross volume is approximately 12,448 MBF; and 90% recovery is expected (Average DF is 18.2 inches DBHOB; average gross merchantable log DF contains 91 bd. ft.). 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.

LOG EXPORT AND SUBSTITUTION RESTRICTIONS 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 use as a substitute for exported private timber.

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

CUTTING AREA Five (5) units containing approximately four hundred sixty (460) acres must be logged. Approximately one (1) right of way acre must be clear-cut for temporary road construction, and approximately twenty (17) right of way acres must be clear-cut for permanent road construction.

CUTTING TIME Contract duration will be thirty-six (36) months for cutting and removal of timber.

ACCESS - Access to the sale area is available via public roads and through the contract area using BLM Roads and via Right-of-way and Road Use Agreement M-2000C with Silver Butte Timber Company, via Right-of-way and Road Use Agreement M-2000D with Juniper Properties, LLC, via Right-of-way and Road Use Agreement M-2000E with John Hancock Life Insurance Company, via Right-of-Way and Road Use Agreement M-2000F with Siskiyou Timberlands, LLC, and via a license agreement with the Forest Service. Among other conditions, agreement M-2000C with Silver Butte Timber Company requires completion of a license agreement between the Purchaser and Silver Butte Timber Company, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$22.34. Among other conditions, agreement M-2000D with Juniper Properties, LLC requires completion of a license agreement between the Purchaser and Juniper Properties, LLC, road maintenance to be performed by the Purchaser or BLM and 100 cubic yards of 1.5" minus aggregate to be placed on Juniper owned roads in lieu of paying rockwear fees. Among other conditions, agreement M-2000E with John Hancock Life Insurance Company requires completion of a license agreement between the Purchaser and John Hancock Life Insurance Company, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$52.12. Among other conditions, agreement M-2000F with Siskiyou Timberlands, LLC requires completion of a license agreement between the Purchaser and Siskiyou Timberlands, LLC, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$5,997.98. Among other conditions, agreement with the Forest Service requires completion of a license agreement between the Purchaser and the Forest Service and a payment of a resurfacing fee of \$1,689.98 for the use of Forest Service road number FS 34.

ROAD MAINTENANCE – The Purchaser will be required to maintain all permanent roads (210.82 stations) and temporary routes (20.59 stations) they construct plus 6.61 miles of existing BLM and private roads. The BLM will maintain the approximately 6.64 miles of existing BLM and private roads. The Forest Service will maintain 1.40 miles of the FS 34 Road.

ROAD CONSTRUCTION – The contract will require the Purchaser to construct 56.04 stations and construct and surface 154.78 stations of permanent roads and construct 20.59 stations of temporary roads.

SOIL DAMAGE PREVENTION: Pursuant to Section 26 of Form 5450-3, Timber Sale Contract, the Purchaser shall not operate or cause to have operated on the contract area any tractor-type logging equipment when soil moisture content at six (6) inch depth exceeds twenty five (25) percent by weight as determined by the oven dry method.

#### EQUIPMENT REQUIREMENTS

1. A yarding tractor not greater than 9 feet in track width equipped with a integral arch and winch system capable of lining logs at least 75 feet.
2. A subsoiler, wing-toothed subsoiler, excavator with ripping attachment, or equivalent is required.

SLASH DISPOSAL Perform logging residue reduction and site preparation work on approximately four hundred (400) acres of harvest area as directed by the Authorized Officer.

CONTRACT TERMINATION 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;
2. Comply with a court order, or;
3. Protect species which were identified for protection in accordance with management direction established in the ROD and 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.

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

#### OTHER

1. Within all unit as shown on exhibit A, except unit 3-1 harvest prescriptions are a combination of thinning and group selections. The number and size of group selection areas vary by individual unit.

2. Unit 3-1 is a thinning only unit.
3. There are roadside vegetation maintenance units
4. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
5. This contract includes an additional special provision to ensure the Purchaser understands he/she is required to conduct all operations in compliance with Contract Section 12 (Purchaser's Contractual Responsibilities for Liability) and Contract Section 29 (Safety and Health) and the Special Provisions included in Section 42 of this Contract.
6. Purchaser shall be responsible for complying with all county, state, and federal laws and regulations that relate to the execution of this contract (See Sec. 29 of contract).
7. Directional falling is required.
8. There are pre-designated existing skid trails in the special yarding areas of unit 3-1. Equipment would be required to stay on pre-designated skid trails on existing footprints in special yarding areas (slopes over 35%) for yarding and felling. Temporary crossings will need to be removed immediately after harvest operations are complete.
9. Warning signs and a flagger(s) must be placed in advance of active operations or other equivalent protection must be used on roads to control traffic where hazardous conditions are created from forest activities as per OR-OSHA division 7 rules.
10. There are daily and seasonal restrictions in place on this sale.
11. Cleaning of equipment to eliminate noxious weed seeds is required prior to move-in of equipment onto federal lands.
12. There are lockable gates within the contract area.
13. Dust abatement may be required.
14. There are slash treatment and pile placement requirements in place for this sale (see SD-1 in the contract)
15. Purchaser should be aware there are logging residue reduction costs assessed under SD-5. Refer to the appraisal for total assessed costs of logging residue reduction.
16. The Purchaser may wet season haul, with the Authorized Officer's approval on the following roads: 34-3E-10.02, 34-3E-10.03 A, 34-3E-14.01 D, 34-3E-15.03 A1-A4, 34-3E-21.00 A-F, 34-3E-24.00 A, 34-3E-24.03 B, and the FS34 (Lodgepole Road).

If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.

The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer's approval on the following roads: 34-3E-11.01 A, 34-3E-11.04, 34-3E-11.05, 34-3E-11.07, 34-3E-13.04 B, 34-3E-23.00 A-B, and the 34-3E-24.01 B. If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.

The Purchaser shall have the option to rock road numbers 34-3E-03.01, 34-3E-03.02, 34-3E-10.01 A-E1, 34-3E-10.03 B, 34-3E-10.04, 34-3E-11.00 A, 34-3E-11.06, 34-3E-11.08, 34-3E-13.04 A, 34-3E-14.02, 34-3E-23.03, 34-3E-24.01 A, 34-3E-24.02, 34-3E-24.03 A, and the 34-3E-24.05, for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract.

17. Part of unit 3-1 as shown on Exhibit A has a bald Eagle timing restriction. No timber harvest operations (including road construction, tree felling, and yarding) shall be conducted on Unit 3-1 Bald Eagle Restricted area (including the construction of road 34 S 03 E 10.04) from February 1 to August 15 of each year both days inclusive as directed by the Contracting Officer.
18. Purchaser should be aware that there are currently no wildlife related restrictions other than on part of Unit 3-1 as shown on Exhibit A maps for the Lodgepole Timber Sale (see E-3 in special provisions for more information). The following bullets could be applied if the species of concern is found within the distances listed to the contract area
  - No confirmed den sites are located within 50 feet of proposed treatment areas, however, if a confirmed fisher den site is found: Maintain  $\geq$  80 percent canopy cover within at least 50 feet of documented fisher natal and maternal dens. No activities may occur within stands. Maintain sufficient (at least 60%) canopy cover on a within-stand average basis. containing known fisher den sites from March 1 to July 30. Protect

fisher denning structures by retaining  $\geq 24$ " diameter snags, down woody material, and live trees with cavities in the stand and if, for safety concerns, it is necessary to fall such snags or live trees with cavities, retain those cut trees or snags in the stand as additional down woody material. Do not apply vegetation treatments to all portions of the stand.

- Seasonally restrict timber harvest activities from March 1 to June 30 but may be extended up to September 30 if late nesting or nesting re-attempts are confirmed, within 0.25-mile of known active NSO sites or within 0.5-mile for helicopter operations and blasting. The seasonal restriction could be waived if non-nesting status is determined. If any new owls are discovered in harvest units following the sale date, activities would be halted until mitigation options are determined. Follow USFWS recommended noise disturbance distances for activities other than timber harvest to avoid disturbance to NSOs.
- Seasonally restrict prescribed burning and site preparation with chainsaws from March 1 to July 15 within 0.25-mile of known active NSO nests. The seasonal restriction could be waived if non-nesting status is determined.
- If a gray wolf den or rendezvous site is identified prior to or during project activities, implement a seasonal restriction from April 1 to July 15 and suspend project activities located within one mile of a known den or rendezvous site. Because these sites are difficult to locate and can change from year to year, this would be assessed on an ongoing basis throughout the life of this project through annual updates and communication with the USFWS and Oregon Department of Fish and Wildlife.

#### NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA –

From the city of Medford take the Rogue Valley Express Way for 4.4 miles, turn left onto OR-62 and stay on it for 9.1 miles. Turn right on the Butte Falls Hwy and continue for 16 miles till you arrive in the Town of Butte Falls. Take a slight left onto fish lake road and continue for 0.6 miles. Turn left onto the Butte Falls -Prospect Road and continue for 8.8 miles. Turn right onto Lodgepole road and continues for 1.4 miles.

ENVIRONMENTAL ASSESSMENT - Environmental assessment (DOI-BLM-ORWA M050-2020-0001-EA) were prepared for this sale, and a Finding of No Significant Impact has been documented for each environmental assessment. These documents are available for inspection as background for this sale at the Medford District Office.

Lodgepole  
SPECIAL PROVISIONS

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

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

- (A) AR-1 All timber on the Reserve Area(s) as shown on Exhibit A and all orange painted and posted trees which are on or mark the boundaries of the Reserve Area(s).
- (B) IR-1 Approximately four thousand six hundred and eighty four (4,684) trees marked with orange paint above and below stump height in units 3-1, 14-1, 23-1 as shown on exhibit A.
- (C) IR-1 Approximately five thousand seven hundred and thirty six (5,736) trees marked with pink paint above and below stump height in units, 11-1 and 24-1 as shown on exhibit A.
- (D) IR-2 All timber except approximately seven hundred and twenty eight (728) trees marked for cutting heretofore by the Government with blue paint above and below stump height in units RVM3, RVM11, RVM15, RVM21, RVM23 and RVM24 (where RVM units overlap logging units tree are included in the cruise with the adjacent harvest unit and there will be no blue paint or reserve paint color in those RVM areas) as shown on Exhibit A.
- (E) IR-5 All young growth conifers less than eight (8) inches in diameter D.B.H.O.B. not damaged in the normal course of logging in all units as shown on Exhibit A.
- (F) IR-13 All dominant madrone, bigleaf maple and oak trees > 24 inches DBH in all units as shown on Exhibit A (which do not present a safety hazard as determined by the authorized officer). Trees felled for safety reasons shall be retained on site.
- (G) IR-13 All snags in all units as shown on Exhibit A (which do not present a safety hazard as determined by the authorized officer). Snags felled for safety reasons shall be retained on site.
- (H) IR-14 Within all commercial harvest units as shown on Exhibit A retain existing large down woody material >20 inches in diameter at the large end and >20 feet in length; and down woody material 6-20 inches in diameter at the large end and >20 feet in length in decay classes III, IV, and V (USDI 2016c, pp. 62-63).

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SPECIAL PROVISIONS

Section 42

(A) Log Exports

- (1) LE-1 All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export from the United States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8¾) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and 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 (8¾) inches in thickness or less; (6) shakes and shingles. Substitution will be determined under the definition found in 43 CFR 5400.0-5. The Purchaser is required to maintain and upon request to furnish the following information:
- (a) Date of last export sale.
  - (b) Volume of timber contained in last export sale.
  - (c) Volume of timber exported in the past twelve (12) months from the date of last export sale.
  - (d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
  - (e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.
  - (f) Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

Lodgepole  
SPECIAL PROVISIONS

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

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

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber Removed Report) which shall be executed by the Purchaser.

The purchaser shall also provide a current, interim Log Scale and Disposition of Timber Removed Report (Form 5460-15) upon request by the Authorized Officer at any time during the contract period for cutting and removal specified in Section 4 of this contract as amended.

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

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

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

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SPECIAL PROVISIONS

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.

(B) Logging

- (1) L-1 Before beginning operations on the contract area for the first time or after a shutdown of seven (7) days or more, 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 they intend to cease operations for any period of seven (7) or more days.
- (2) L-2 Prior to the commencement of operations, the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract which shall include measures needed to assure protection of the environment and watershed. (A pre-work conference between the Purchaser's authorized representative and the Authorized Officer's representative must be held at a location designated by the Authorized Officer before the logging plan will be approved.) All logging shall be done in accordance with the plan.
- (3) L-4 All trees designated for cutting shall be cut so that the resulting stumps shall not be lower than six (6) inches nor higher than twelve (12) inches measured from the ground on the uphill side of the tree. This height requirement may be reduced if approved by the Authorized Officer.
- (4) L-7 In all units shown on Exhibit A, all trees over twenty one (21) inches DBH designated for cutting shall be felled and cut into log lengths not to exceed forty-four (44) feet. before being yarded.
- (5) L-8 In all units, as shown on Exhibit A, all trees twenty one (21) inches D.B.H.O.B. and smaller 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 logs shall be completely limbed and bucked into a max log length of forty four (44) feet prior to being yarded.



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SPECIAL PROVISIONS

- (6) L-10 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of the unit boundary shall be felled way from the unit boundary. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (7) L-10 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of a private property line shall be felled away from the private property line. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (8) L-10 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of the corner monument shall be felled away from the corner monument. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (9) L-10 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of any plant site, or reserve area boundary as shown on Exhibit A shall be felled away from the painted and posted boundary. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (10) L-12 Yarding on the areas designated herein and shown on Exhibit A shall be done in accordance with the yarding requirements or limitations for the designated area.

Designated Area	Yarding Requirements or Limitations
Ground Based Units (All Units)	<p>Mechanized felling equipment must have an arm capable of reaching at least twenty (20) feet.</p> <p>No front-end loaders are permitted.</p> <p>Yarding tractor width will not be greater than twelve (12) feet as measured from the outer edges of the standard width dozer blade in the straight position, or nine (9) feet as measured from the outer edges of standard width track shoes.</p> <p>Yarding tractors will be equipped with integral arches capable of suspending one end of the log clear of the ground and winch systems capable of lining logs at least seventy five (75) feet.</p>

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SPECIAL PROVISIONS

	<p>One end suspension is required in all ground based units</p> <p>No yarding up or down draw bottoms is permitted.</p> <p>Incorporate existing skid trails and landings as a priority over creating new trails and landings where feasible, into a designated trail network for ground-based harvesting equipment.</p> <p>Locate skid trails to minimize disturbance to down woody material. Where skid trails encounter large down woody material, a section would be bucked out for equipment access. The remainder would be left in place and would not be disturbed unless they pose a safety hazard.</p> <p>Limit non-specialized skidders or tracked equipment to slopes generally less than 35%. In areas where it is necessary to exceed these gradients over short distances to access adjacent tractor area, use ridge tops where possible.</p> <p>Limit the use of specialized ground-based mechanized equipment (those machines specifically designed to operate on slopes greater than 35%) to slopes less than 50%, except when using previously constructed skid trails or accessing isolated short skid trails over steeper pitches. Also, limit the use of this equipment when surface displacement creates trenches, depressions, excessive removal of organic horizons, or when disturbance would channel water and sediment as overland flow. Unit design would be determined based on specific equipment and operator capabilities and would be monitored during implementation by the Authorized Officer with input from the soil scientist and/or hydrologist.</p> <p>The location of the tractor skid roads must be clearly designated on the ground, at locations approved by the Authorized Officer</p> <p>Block skid trails to prevent public motorized vehicle use and other unauthorized use by October 15 of the year of harvest unless a waiver is in place for ground-based yarding to extend the dry season. Place woody debris or other appropriate barriers (e.g., rocks, logs, and slash) on the first 100 feet of skid trails leading off system roads or landing areas in all ground-based yarding units upon completion of yarding to block and discourage unauthorized vehicle use. If there is not enough available slash to cover the first 100 feet of skid trails, apply seed and mulch to the area.</p>
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SPECIAL PROVISIONS

	<p>If operators are using feller-bunchers or cut-to-length harvesters off designated skid trails: Allow mechanized equipment capable of creating and walking on slash (such as a cut-to-length system) to work off designated skid trails for one or two passes on at least eight inches of slash and under dry soil conditions (less than 25% soil moisture content). The Authorized Officer, with input from the soil scientist, can provide waiver for soil moisture if minimal soil disturbance is expected to occur due to site conditions. Allow mechanized equipment (feller-buncher systems) to work off designated skid trails during the dry season (soil moisture content less than 20%) for one or two passes only (one round-trip). The BLM may issue a waiver of the soil moisture if minimal soil disturbance would occur based on site conditions. Use low, ground-pressure equipment off designated skid trails. Restrict all other use of ground-based equipment to designated skid trails. Stop equipment use off designated skid trails if logging equipment is causing soil disturbance above a Class 1 (Page-Dumroese, Abbott, Rice 2009, p. 6, 14, 15, and 27-33), or as determined by the Authorized Officer.</p> <p>Landing location must be approved by the authorized officer.</p> <p>Limit landings to 0.5-acre or less for tractor.</p> <p>Avoid creating piles greater than 16 feet in height or diameter. Pile smaller materials and leave pieces &lt; 12" diameter within the unit. Reduce burn time and smoldering of piles by extinguishment with water and tool use.</p> <p>Do not machine pile slash within riparian areas and do not hand pile slash within 35 feet from intermittent stream channels and 60 feet from perennial streams.</p> <p>In upland units, allow harvesting operations (cutting and transporting logs) when ground is frozen or adequate snow cover exists to prevent soil compaction and displacement. The Authorized Officer would consult with a watershed specialist (hydrologist, soils scientist, or fisheries biologist) to determine appropriate conditions. If conditions change during operations where detrimental soil compaction and displacement is occurring, operations would be stopped immediately.</p>
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SPECIAL PROVISIONS

	<p>During logging or forest management operations, use techniques, such as directional falling, to prevent damage to fences, cattle guards, livestock watering troughs and other improvements. If damage to range improvements does occur, the BLM shall be notified immediately, and proper repair or replacement would occur within two weeks. Proper repair of fences and gates includes keeping wire properly attached to posts, splicing or replacing broken wire in kind, repairing structures such as corners, stress panels or gates, and any other work necessary to keep improvements functional. Repair of structures such as stress or corner panels and gates requires pre-approval by BLM staff. Repair or cleaning of cattle guards damaged or filled with sediment by logging activities would require approval of BLM road engineering staff for structural integrity and public safety compliance.</p> <p>During logging and forest management activities, operators shall keep all gates closed and all livestock containment systems functional to keep livestock in authorized areas.</p> <p>Minimize the area where more than half of the depth of the organically enriched upper horizon (topsoil) is removed when conducting forest management operations.</p> <p>Any infrastructure impacted by logging or road operations (trails, service roads, kiosks, fences etc.) would be restored to their conditions as it was prior to logging operations.</p> <p>All Douglas Fir and all Pine Species over 36 inches DBH with a birthdate prior to 1850 felled for skid trails or safety reasons (in all units except 11-1 and 3-1) must be felled, bucked, and removed to an area adjacent to and outside of the skid trail ROW. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer. These trees/logs shall not be yarded to the landing.</p>
Unit 11-1	<p>All trees over 40 inches DBH with a birthdate prior to 1850 felled for skid trails or safety reasons must be felled, bucked, and removed to an area adjacent to and outside of the skid trail ROW. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer. These trees/logs shall not be yarded to the landing.</p>

Lodgepole  
SPECIAL PROVISIONS

Unit 3-1	<p>All trees over 40 inches DBH with a birthdate prior to 1850 felled for skid trails or safety reasons must be felled, bucked, and removed to an area adjacent to and outside of the skid trail ROW. Where trees are bucked at the large ends, the purchaser shall put a dot of paint with a color approved by the authorized officer. These trees/logs shall not be yarded to the landing.</p> <p>Special yarding areas within unit require equipment to stay on pre-designated skid trails for felling and yarding operations. Directional felling and /or pulling line will be required.</p> <p>In Unit 3-1, pull back fill on terraced pre-designated skid trail in special yarding area and place in a stable location outside of draw. The exposed soil would be seeded and covered in slash or mulch before the wet season. Equipment would be required to stay on pre-designated skid trails on existing footprints in special yarding areas (slopes over 35%). Skid trails would be waterbarred, stabilized, covered with slash, and ruts removed as needed.</p> <p>In Unit 3-1, waterbar, seed, and mulch the existing skid (pre-designated) trail in the Riparian Reserve (approximately 1,000 feet) after use. Use temporary sediment control measures (e.g. check dams, silt fencing, bark bags, filter strips, and mulch) to slow runoff and contain sediment from the skid trail within the Riparian Reserve.</p> <p>Temporary skid crossing as shown on exhibit A shall consist of a 36 inch by 20 foot culvert. When installing temporary culverts, use washed rock as backfill material. Use geotextile fabric as necessary where washed rock will spread with traffic and cannot be practicably retrieved.</p> <p>Remove temporary crossing structures promptly after use. Follow practices under the closure/decommissioning section for removing stream crossing drainage structures and reestablishing the natural drainage(see Exhibit A for location).</p> <p>Aggregate, including riprap, from a commercial source would be from an accredited, weed-free quarry or would have to be crushed between November 1 and June 15 immediately prior to application. Aggregate stockpiled between June 16 and October 31 of the previous year would not be accepted.</p>
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Lodgepole  
SPECIAL PROVISIONS

	If trees/snags are cut within the riparian reserve to improve the temporary crossings as shown on Exhibit A retain cut trees in adjacent stands as down woody material or move cut trees for placement in streams for fish habitat restoration, at the discretion of the BLM or as directed by the authorized officer.
Roadside Vegetation Maintenance Units	Mechanized logging equipment shall be restricted to the existing roads where clearing is to occur.

- (11) L-14 No falling, yarding or loading is permitted in or through the timber reserve area as shown in Exhibit A and as posted (unless otherwise approved by the Authorized officer).
- (12) L-16 No new landings shall be located within 50 feet of the Medco railroad grade adjacent to unit 3-1 shown on Exhibit A.
- (13) L-17 Landings shown on new road construction shall be placed at the approximate location(s) as shown on Exhibit A. Any alternative landing sites must be approved by the Contracting Officer in the written operations and logging plan.
- (14) L-19 No timber harvest operations (including road construction, tree felling, and yarding) shall be conducted on Unit 3-1 Bald Eagle Restricted area (including the construction of road 34 S 03 E 10.04) from February 1 to August 15 of each year both days inclusive as directed by the Contracting Officer.
- (15) L-19 No road construction, landing construction, skid trail construction, skid trail blocking, road renovation, road reconstruction, road decommissioning, road blocking/barricade construction, rocking, water bar construction, soil ripping, shall be conducted within contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, or when soil moisture exceeds 25% as directed by the contracting officer.
- (16) L-19 No ground-based yarding and soil decompaction operations shall be conducted within contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, or when soil moisture exceeds 25% as directed by the contracting officer.
- (17) L-19 No seeding and mulching shall be conducted within contract area between April 1 thru August 31 of the same calendar year and November 1 of one calendar year and January 31 of the following calendar year, both days inclusive.

Lodgepole  
SPECIAL PROVISIONS

- (18) L-19 No landing operations, rock haul and log haul between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. If roads (The Purchaser may wet season haul, with the Authorized Officer's approval on the following roads: 34-3E-10.02, 34-3E-10.03 A, 34-3E-14.01 D, 34-3E-15.03 A1-A4, 34-3E-21.00 A-F, 34-3E-24.00 A, 34-3E-24.03 B, and the FS34 (Lodgepole Road). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul. The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer's approval on the following roads: 34-3E-11.01 A, 34-3E-11.04, 34-3E-11.05, 34-3E-11.07, 34-3E-13.04 B, 34-3E-23.00 A-B, and the 34-3E-24.01 B. If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul. The Purchaser shall have the option to rock road numbers 34-3E-03.01, 34-3E-03.02, 34-3E-10.01 A-E1, 34-3E-10.03 B, 34-3E-10.04, 34-3E-11.00 A, 34-3E-11.06, 34-3E-11.08, 34-3E-13.04 A, 34-3E-14.02, 34-3E-23.03, 34-3E-24.01 A, 34-3E-24.02, 34-3E-24.03 A, and the 34-3E-24.05, for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract.) are determined to have adequate surfacing or adequate rock is added as determined by the Contracting Officer landing operations, rock haul and log haul will be allowed.
- (19) L-24 Before cutting and removing any trees necessary to facilitate logging in all units as shown on Exhibit A, the Purchaser shall identify the location of 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 the following conditions must be met:
- (a) All skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the safe and expeditious removal of timber sold under this contact and shall be limited to the minimum width necessary

Lodgepole  
SPECIAL PROVISIONS

for yarding of logs with a minimum of damage to reserve trees; however, unless otherwise approved in writing by the Authorized Officer, the width of each skid road shall be limited to twelve (12) feet, and cable yarding roads shall be limited to fifteen (15) feet.

- (b) The Purchaser may immediately cut and remove additional timber to clear skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees when the trees have been marked with green 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 Sec. 3.(b) of the contract or sufficient bonding has been provided in accordance with Sec. 3.(e). 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 Sec. 9 of the contract; or, the Authorized Officer determines that all trees otherwise reserved in section 41 of the contract or any tree that exceeds 28 inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Sec. 8 of the contract.
- (d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.
- (e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown



Lodgepole  
SPECIAL PROVISIONS

in Exhibit B of the contract or in accordance with Sec. 8 or Sec. 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.

- (f) The Government may reserve trees previously designated for cutting and removal by applying orange paint or blacking out blue 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 prescription(s). 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.
- (20) L-32 In ROW 11, where new road construction is required for logging access as shown on exhibit A, Purchaser shall during road constructing fell, buck, and remove to an area adjacent to and outside of the road right-of-way eleven (11) trees marked with blue “C/L” which are greater than or equal to forty (40) inch diameter at breast height and a birthdate prior to 1850. Where trees are bucked at the large ends, the purchaser shall put a “X” of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (21) L-32 In ROW 14, where new road construction is required for logging access as shown on exhibit A, Purchaser shall during road constructing fell, buck, and remove to an area adjacent to and outside of the road right-of-way seven (7) trees marked with blue “C/L” which are greater than or equal to thirty six (36) inch diameter at breast height and a birthdate prior to 1850. Where trees are bucked at the large ends, the purchaser shall put a “X” of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.

Lodgepole  
SPECIAL PROVISIONS

- (22) L-32 In ROW 24, where new road construction is required for logging access as shown on exhibit A, Purchaser shall during road constructing fell, buck, and remove to an area adjacent to and outside of the road right-of-way four (4) trees marked with blue “C/L” which are greater than or equal to thirty six (36) inch diameter at breast height and a birthdate prior to 1850. Where trees are bucked at the large ends, the purchaser shall put a “X” of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (23) L-33 Purchaser’s operations shall facilitate BLM’s safe and practical inspection of Purchaser’s operations and BLM’s conduct of other official duties 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. 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.

Lodgepole  
SPECIAL PROVISIONS

(C) ROAD CONSTRUCTION, MAINTENANCE, AND USE (R)

- (1) R-1: The Purchaser shall construct, improve, renovate, and/or decommission all roads and structures in strict accordance with the plans and specifications shown on Exhibit C and Exhibit D, which is attached hereto and made a part hereof.
- (2) R-1a: Any required construction, improvement, or renovation of structures and roads shall be completed and accepted, in accordance with Section 18, prior to the removal of any timber, except right-of-way timber, over that road.
- (3) R-1b: The Purchaser shall construct, use, and decommission temporary roads 15-1, 15-2a, and 15-2b by October 15<sup>th</sup> of the same respective operating season. If temporary roads are used over two dry seasons, temporary routes must be winterized by October 15<sup>th</sup>.
- (4) R-2: The Purchaser is authorized to use the road listed and shown on Exhibit D-2 for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibit C, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 42 (C)(6). Any road listed on Exhibit D-2 and requiring construction, improvement, or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the construction, improvement, or renovation from the Contracting Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
34-3E-03.01	0.06	Juniper	NAT	Purchaser
34-3E-03.02	0.15	BLM	NAT	Purchaser
34-3E-03.03	0.06	Juniper	NAT	Purchaser

Lodgepole  
SPECIAL PROVISIONS

34-3E-10.01 A	0.13	Juniper	NAT	Purchaser
34-3E-10.01 B	0.37	BLM	NAT	Purchaser
34-3E-10.01 C	0.24	Juniper	NAT	Purchaser
34-3E-10.01 D-E1	0.68	BLM	NAT	Purchaser
34-3E-10.02	1.16	Juniper	AGG	Purchaser
34-3E-10.03 A	0.70	Juniper	AGG	Purchaser
34-3E-10.03 B	0.22	Juniper	NAT	Purchaser
34-3E-10.04	0.22	BLM	NAT	Purchaser
34-3E-11.00 A	0.30	BLM	AGG	Purchaser
34-3E-11.01 A	0.18	BLM	AGG	Purchaser
34-3E-11.04	0.41	BLM	AGG	Purchaser
34-3E-11.05	0.35	BLM	AGG	Purchaser
34-3E-11.06	0.19	BLM	NAT	Purchaser
34-3E-11.07	0.63	BLM	AGG	Purchaser
34-3E-11.08	0.12	BLM	NAT	Purchaser
34-3E-13.03	0.34	Juniper	AGG	Purchaser
34-3E-13.04 A	0.36	Juniper	AGG	Purchaser
34-3E-13.04 B	0.10	BLM	AGG	Purchaser
34-3E-14.01 D	0.13	Juniper	AGG	Purchaser
34-3E-15.03 A1	0.32	BLM	AGG	BLM
34-3E-15.03 A2	0.42	J.H.L.I.C.	AGG	BLM
34-3E-15.03 A3	0.18	Silver Butte	AGG	BLM
34-3E-15.03 A4	0.25	BLM	AGG	BLM
34-3E-21.00 A	0.16	BLM	AGG	BLM

Lodgepole  
SPECIAL PROVISIONS

34-3E-21.00 B	0.86	Siskiyou	AGG	BLM
34-3E-21.00 C1-C2	0.93	BLM	AGG	BLM
34-3E-21.00 D	0.34	Siskiyou	AGG	BLM
34-3E-21.00 E	0.89	BLM	AGG	BLM
34-3E-21.00 F	0.17	Juniper	AGG	BLM
34-3E-21.00 A	0.78	BLM	AGG	Purchaser
34-3E-21.00 B	1.43	BLM	AGG	Purchaser
34-3E-23.03	0.21	BLM	AGG	Purchaser
34-3E-24.00 A	0.46	Juniper	AGG	BLM
34-3E-24.01 A	0.94	BLM	AGG	BLM
34-3E-24.01 B	0.31	BLM	NAT	Purchaser
34-3E-24.02	0.53	BLM	AGG	BLM
34-3E-24.03 A-B	0.54	0.54	AGG	Purchaser
34-3E-24.05	0.17	BLM	NAT	Purchaser
FS 34	1.40	FS	BST	FS
Temp Road 13-3B	0.23	BLM	NAT	Purchaser
Temp Road 23-2	0.30	BLM	NAT	Purchaser

- (5) R-2a: With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of road(s) included in Section 42(C)(8) 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.

Lodgepole  
SPECIAL PROVISIONS

- (6) R-2b: The Purchaser shall pay the Government a road maintenance and rockwear fee of **Forty thousand eight hundred forty four and 63/100 dollars (\$40,844.63)** for the transportation of timber included in this contract price over said roads. The above maintenance amount is for the use of 6.64 miles of road or less. If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (7) R-2e: The Contracting Officer may at any time, by written notice, terminate the Purchaser's operator road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance and rockwear fees for the particular surface type of the road(s) 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 road(s) listed in Section 42(C)(4). If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligation(s).
- (8) R-2f: The Purchaser shall perform any required road repair and maintenance work on roads identified as Purchaser maintenance, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof. The Purchaser shall perform any required road repair and maintenance work on roads used by them, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.
- (9) R-3: In the use of Road No. 34-3E-15.03 A3, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-2000C, between the United States of America and Silver Butte Timber Company. This document is available for inspection at the Medford District Office.

These conditions include:

Lodgepole  
SPECIAL PROVISIONS

- (a) Payment of a road rockwear obligation of **twenty two and 34/100 dollars (\$22.34)** to Silver Butte Timber Company, payable at the time indicated in the License Agreement.
  - (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
  - (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (10) R-3: In the use of Road Nos. 34-3E-03.01, 34-3E-03.03, 34-3E-10.01 A&C, 34-3E-10.02, 34-3E-10.03 A-B, 34-3E-13.03, 34-3E-13.04 A, 34-3E-14.01 D, 34-3E-21.00 F, 34-3E-24.00 A, and 34-3E-24.03 A-B, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000D, between the United States of America and Juniper Properties LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Placement and compaction of 100 CY of aggregate conforming to Exhibit C-31, Section 1200 (Gradation C-1) on Juniper Properties owned roads in lieu of paying rockwear fees as indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Prior to cutting or removing any timber resulting from the permanent road construction of road nos. 34-3E-10.04 and 34-3E-13.04B and temporary road 13-3B, the Purchaser shall pay to Juniper Properties LLC, the owner of the right-of-way timber, the total value of that timber as shown below based upon the indicated estimated volume and species price per unit used in the

Lodgepole  
SPECIAL PROVISIONS

Government's contract as set forth on the Exhibit B.

Species	Estimated Volume MBF	Price Per MBF	Estimated Volume times Unit Price
Douglas-fir	7.1	*	*

\*These figures will not be available until after the timber sale.

- (d) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (11) R-3: In the use of Road No. 34-3E-15.03 A2, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-2000E, between the United States of America and John Hancock Life Insurance Company. This document is available for inspection at the Medford District Office.

These conditions include:

- (b) Payment of a road rockwear obligation of **fifty two and 12/100 dollars (\$52.12)** to John Hancock Life Insurance Company, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid



Lodgepole  
SPECIAL PROVISIONS

fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.

- (12) R-3: In the use of Road Nos. 34-3E-21.00 B and 34-3E-21.00 D, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000F, between the United States of America and Siskiyou Timberlands, LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road rockwear obligation of **Five thousand nine hundred ninety-seven and 98/100 dollars (\$5,997.98)** to Siskiyou Timberlands, LLC., payable at the time indicated in the License Agreement.
  - (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
  - (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (13) R-3a: In the use of Road No. FS 34, the Purchaser shall comply with the conditions of the Bureau of Land Management and Forest Service Interagency Right-of-Way and Road Use Agreement No. dated May 20, 1980, and Exhibit A.

These conditions include:

- (a) Payment of a road surface replacement obligation of **one thousand six hundred eighty nine and 98/100 dollars (\$1,689.98)** to the Forest Service, payable at the time indicated in the License Agreement.

Lodgepole  
SPECIAL PROVISIONS

- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
  - (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
  - (d) Road maintenance and haul by the Purchaser in accordance with specifications set forth in the USFS Standard Road Maintenance Specifications for the Pacific Northwest Region and Commercial Road Use Rules and Road Use Permit Requirements (Rogue River – Siskiyou National Forest – August 2012).
  - (e) Purchaser shall have a pre-maintenance/pre-haul meeting with the Forest Service prior to beginning operations on Forest Service roads.
- (14) R-3c: The Purchaser agrees that if they elect to use any other private road, which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, Purchaser shall request and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.
- (15) R-4: The Purchaser shall be required to secure written approval to use vehicles or haul forest products and equipment over Government owned or controlled roads when such vehicles or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit or if vehicles meet allowable non-permitted State vehicle weights, but the haul route crosses a structure or segment of road that is posted for reduced weights. The Purchaser agrees to abide by any special requirements included in said written approval.

Lodgepole  
SPECIAL PROVISIONS

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.

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

The Purchaser shall be responsible for 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.

Lodgepole  
SPECIAL PROVISIONS

(D) Environmental Protection

- (1) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. In addition, such plan shall follow all applicable State of Oregon Department of Environmental Quality guidelines for spill prevention and containment of petroleum products (Oregon Administrative Rules, Chapter 340, Department of Environmental Quality, Division 142, Oil and Hazardous Materials Emergency Response Requirements). During operations the operator would be required to have a BLM-approved spill plan or other applicable contingency plan. In the event of any release of oil or hazardous substance, as defined in Oregon Administrative Rules (OAR) 340-142-0005 (9)(d) and (15), into the soil, water, or air, the operator would immediately implement the site's plan. As part of the plan, the operator would be required to have spill containment kits present on the site during operations. The operator would be required to be in compliance with OAR 629-605-0130 of the Forest Practices Act, Compliance with the Rules and Regulations of the Department of Environmental Quality. Notification, removal, transport, and disposal of oil, hazardous substances, and hazardous wastes would be accomplished in accordance with OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements, contained in Oregon Department of Environmental Quality regulations (SP-05, SP-06, and SP-07).
- (2) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall store all hazardous materials and petroleum products in durable containers placed outside of Riparian Reserves. Locate so an accidental spill would be contained nor drain into any stream system (SP-03).  
Refuel equipment a minimum of 175 feet from streams, ponds, or other wet areas. Store equipment containing reportable quantities of toxic fluids outside of the Riparian Reserve. Hydraulic fluid and fuel lines would be in proper working condition in order to minimize leakage into streams (SP-03).
- (3) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall restrict ground-based yarding and soil decompaction operations from October

Lodgepole  
SPECIAL PROVISIONS

15 to May 15 generally, or when soil moisture exceeds 25%. The Authorized Officer may issue a waiver, with support from the BLM soil scientist and based on site conditions.

- (4) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall comply with the following. Road renovation and improvement would occur during the dry season (May 15 to October 15). Variations in these dates would be permitted dependent upon weather and soil moisture conditions and with a specific erosion control plan (e.g., rocking, waterbarring, seeding, mulching, barricading) as determined by the Authorized Officer in consultation with aquatic and/or soils scientists. All road and landing construction activities would be stopped when a storm event resulted in degrading conditions as evidenced by turbid runoff, turbid ditch flow, ponding, or rutting or other displacement in excess of two inches. Watershed specialists would closely monitor storms that result in precipitation and would convey pertinent information to the Authorized Officer. Similarly, the Authorized Officer would convey road, landing, and ditch conditions to the aquatic and/or soil specialists.
- (5) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall construct road barricades as specified on Exhibit C, at locations where an existing barricade has been removed to provide for harvest access. Barricades shall be in place by October 15 of each calendar year.
- (6) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall block skid trails to prevent public motorized vehicle use and other unauthorized use by October 15 of the year of harvest unless a waiver is in place for ground-based yarding to extend the dry season. Place woody debris or other appropriate barriers (e.g., rocks, logs, and slash) on the first 100 feet of skid trails leading off system roads or landing areas in all ground-based yarding units upon completion of yarding to block and discourage unauthorized vehicle use. If there is not enough available slash to cover the first 100 feet of skid trails, apply seed and mulch to the area.
- (7) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall revegetate disturbed soils with locally adapted native seeds and plant materials as prescribed by the field office botanist, and mulch. Need would be determined by the authorized officer in consultation with the field office botanist, based on the level of disturbance and the presence of priority non-native invasive plants. Planting and/or seeding would occur between September 1 to October 31, or February 1 to March 31 or as otherwise approved by authorized officer in consultation with the field office botanist.

Lodgepole  
SPECIAL PROVISIONS

The Purchaser shall furnish the specific seed mixture prescribed by the Authorized Officer, which will include up to 3 grasses and 2 forbs from the following list, but may include substitutions approved by the Authorized Officer:

Grasses: *Achnatherum lemmonii*, *Bromus carinatus*, *Brumus vulgaris*, *Elymus glaucus*, *Festuca californica*, *Festuca roemerii*, *Koeleria macrantha*, *Poa secunda*, *Vulpia microstachys*

Forbs: *Achillea millefolium*, *Clarkia purpurea*, *Clarkia rhomboidea*, *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 and October 31, and/or between February 1 and March 31 of the year of harvest. 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:

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

Furnished seed shall meet the minimum requirements for either Yellow Tag Source Identified Seed or Blue Tag Certified Class Seed, as defined by the Association of Official Seed Certifying Agencies. Seed source shall be approved by the Authorized Officer and shall be from the EPA Level III Ecoregion in which the project occurs. For each lot of seed, the Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (e.g., Oregon State University), which shall include: test date; lot number; seed source; and results of test for purity, germination, and weed content. All seed lots must have been tested within the previous 12 months to be accepted. Seed that has become wet, moldy, or otherwise damaged shall not be accepted. Seed must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work.

Lodgepole  
SPECIAL PROVISIONS

- (8) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall ensure hay, straw, and mulch are certified as free of prohibited noxious vegetative parts or seeds, per 75 FR 159:51101-02. Hay must be from native grasses only. Straw or hay must be obtained from the BLM or purchased from growers certified by the Oregon Department of Agriculture's Weed Free Forage and Mulch Program or approved by the project botanist.
- (9) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall apply erosion-control techniques (e.g. water bar, seed, mulch, scatter chipped material, or scatter limbs and other fine material) on skid trails, forwarder trails, yarding corridors, landings, and other disturbed areas where potential for soil erosion or delivery to waterbodies, floodplains, and wetlands exist, or as identified by the Authorized Officer.
- (10) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall de-compact landings and heavily compacted skid trails in regeneration units. Depth needed to be ripped would be dependent on how deep the compaction layer is and would be site-specific.
- (11) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall decompact (using equipment approved by Authorized Officer) and water bar all temporary routes and associated landings, and roads identified for full decommissioning to a depth of 18 inches or bedrock (whichever is shallower). Avoid subsoiling areas near tree roots and where there are rocks larger than 2 feet across. Apply seed and mulch and block upon completion of use. Seeding and mulching would occur in the same operational season that construction activities.
- (12) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall in Unit 3-1, pull back fill on terraced pre-designated skid trail in special yarding area and place in a stable location outside of draw. The exposed soil would be seeded and covered in slash or mulch before the wet season. Equipment would be required to stay on pre-designated skid trails on existing footprints in special yarding areas (slopes over 35%). Skid trails would be waterbarred, stabilized, covered with slash, and ruts removed as needed.
- (13) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall in in Unit 3-1, waterbar, seed, and mulch the existing skid trail in the Riparian Reserve (approximately 1000 feet) after use. Use temporary sediment control measures (e.g. check dams, silt fencing, bark bags, filter strips, and mulch) to slow runoff and contain sediment from the skid trail within the Riparian Reserve.

Lodgepole  
SPECIAL PROVISIONS

- (14) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall in in Unit 3-1 at the temporary skid crossing as shown on Exhibit A, install a temporary culvert 36 inches in diameter and 20 feet long. When installing temporary culverts, use washed rock as backfill material. Use geotextile fabric as necessary where washed rock will spread with traffic and cannot be practicably retrieved. Aggregate, including riprap, from a commercial source would be from an accredited, weed-free quarry or would have to be crushed between November 1 and June 15 immediately prior to application. Aggregate stockpiled between June 16 and October 31 of the previous year would not be accepted. Remove temporary crossing structures promptly after use. Follow practices under the closure/decommissioning section for removing stream crossing drainage structures and reestablishing the natural drainage.
- (15) E-2 The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the specifications shown on Exhibit C Package (special provisions), which is attached hereto and made a part hereof.
- (a) Water-bar all pre-designated skid trails, designated skid trails, and forwarder trails used for logging activities in all ground based units shown on Exhibit A., at locations approved by the authorized officer, by October 15 of the year of harvest.
- (b) Install water-bars at the same time as subsoiling (if both are required) unless skid trails are needed to complete harvest the following season. In that case, water bars would be constructed and straw would be applied to exposed soil prior to fall rains to reduce sedimentation during winter months. Water-bar spacing on tractor skid trails would be based on the RMP erosion-control measures for timber harvest, which considers slope and soil series.
- (16) E-3 The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:
- (1) 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;
- (2) 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



Lodgepole  
SPECIAL PROVISIONS

Management Plan (RMP), the Contracting Officer determines it may be necessary to modify or terminate the contract, or;

- (3) Federal proposed, Federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 - Special Status Species Management - have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
- (4) 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;
- (5) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (6) 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;
- (7) 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;
- (8) 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.

Lodgepole  
SPECIAL PROVISIONS

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

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

In the event that operating time is lost as a result of the incorporation of additional contract requirements, or delays due to Endangered Species Act consultation with the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service, 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.

Lodgepole  
SPECIAL PROVISIONS

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 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.

- (17) E-5 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

Lodgepole  
SPECIAL PROVISIONS

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

- (18) E-7 In order to prevent the spread of noxious weeds (and *Phytophthora lateralis*), the Purchaser shall (steam clean or pressure wash) all equipment traveling off system roads or temporary routes prior to entry onto BLM lands (and between sale locations if operating in areas infested with weeds.) as directed by the Authorized Officer. Cleaning shall be defined as removal of all dirt, grease, plant parts and material that may carry noxious weed seeds.

(E) Miscellaneous

- (1) M-2 The Government at its option may check scale any portion of the timber removed from the contract area. The Purchaser hereby agrees to make such contract timber available for scaling at a location designated by the Authorized Officer. In the event that BLM elects to check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows. If the entire sale is check scaled, the purchase price of this contract shall be reduced by fourteen hundred thirty two dollars and fifty cents (\$1,432.50). In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of \$0.75 per net thousand board foot of timber scaled which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling.

(F) Fire Prevention and Control

1. F-1a Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:
1. 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, the purchaser shall ensure that planned operations will be in full compliance with the current Fire Season Requirements issued by the State of Oregon, Department of Forestry and the Medford District Bureau of Land Management.

Lodgepole  
SPECIAL PROVISIONS

Current State of Oregon, Department of Forestry requirements can be found online at: <https://www.oregon.gov/ODF/Fire/Pages/Restrictions.aspx>

(G) Slash Disposal and Site Preparation

1. SD-4 Logging Residue Reduction. In addition to the requirements of Sect.15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following logging residue reduction and site preparation measure(s) required by this contract:

Prior to commencement of any operation under this section of the contract, a slash disposal and site preparation pre-work conference between the purchaser's representative and the Authorized Officer must be held at a location designated by the Authorized Officer. All slash disposal and site preparation shall be done in accordance with the plans developed at this pre-work conference.

Slash, as defined for this section, shall mean all material (brush, limbs, tops, unmerchantable stems, and chunks) severed or knocked over as a result of purchasers operations under the terms of this contract, including material cut during slashing activities for the purposes of fuels reduction.

Refueling of chainsaws and other equipment will be done no closer than one hundred fifty (150) feet of any stream or wet area. Spilled fuel and oil would be cleaned-up and would be disposed of at an approved disposal site.

1. For Igniting, Burning, Mop-up of Piles on Units:

- a. One work leader(s) Firefighter Type 1 (FFT1) qualified according to National Wildfire Coordinating Group (NWCG) Wildland Fire Qualifications System guide, PMS 310-1) to supervise crew and equipment operations, and to serve as Purchaser's representative.

- b. Two-person crew Firefighter Type 2 (FFT2) qualified according to National Wildfire Coordination Group (NWCG) Wildland Fire Qualifications System guide, PMS 310-1, with sufficient fuel for burning, four (3) drip torches, one (1) power saw, and one (1) backpack pump, one (1) tool for each crew

Lodgepole  
SPECIAL PROVISIONS

member.

c. The crew 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.

d. All ignition and mop-up personnel will be directly supervised by a BLM representative.

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. In addition, all listed personnel shall be qualified according to the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System Guide, PMS-310-1 and provide documentation of these qualifications. On the day of ignition all listed personnel shall be fluent in speaking and understanding English, clothing shall consist of long pants and long sleeved shirts, and be of approved aramid fabric (Nomex™ or equivalent), as well as being free of diesel fuel oil. All personnel shall wear lug sole boots with minimum eight (8) inch tall uppers that provide ankle support, approved hardhats and leather gloves. Personnel who do not meet these requirements or do not have proper clothing and personal protective equipment (PPE) will not be allowed to participate. 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 cutting unit shown on Exhibit A for seventy-two (72) hours, as directed by the Authorized Officer within a five (5) day period commencing at 8:00 a.m. the day following the completion of ignition in that unit, or until released from such service by the Government, whichever occurs first.

In event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer, take action to control and mop up the escaped fire until released from such service by the Government. If it becomes necessary to use furnished personnel and equipment for the suppression of a fire

Lodgepole  
SPECIAL PROVISIONS

which escapes from the prescribed fire area for a period beyond the remainder of the day in which the fire escapes, then the Government shall, at its option: (1) reimburse the Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for the Western Area and at equipment rates shown in the current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule until the Purchaser is released from such service by the Government; or (2) 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 (i.e., trail, road, stream, rock formation, etc.), the Government may permit the Purchaser to remove personnel for that day; provided that all mop up work on the escaped fire 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.

SD-1a LOP AND SCATTER Lop and scatter all slash as directed by the Authorized Officer , concurrently with normal felling operations. All tops and side branches must be free of the central stem so that such slash is reduced to the point that it is within eighteen (18) inches of the ground at all points.

SD-1b HAND PILE AND BURN Hand pile all slash as directed by the Authorized Officer in accordance with the following specifications:

1. Piling shall be accomplished by hand. Finished piles shall be tight and free of earth.
2. Pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds three (3) feet in length.
3. A six (6) foot by six (6) foot sheet of four (4) mil polyethylene black plastic shall be placed in each pile in a manner such that approximately one-third ( $\frac{1}{3}$ ) of the pile lies above it to hold it in place and so that a two (2) foot by two (2) foot dry ignition point is maintained for one (1) year or until burned. The ignition point will consist of fine fuel material such as needles, small limbs, and branches less than one-half ( $\frac{1}{2}$ ) inch in diameter and free of dirt. Piles shall be constructed by aligning individual pieces in the same

Lodgepole  
SPECIAL PROVISIONS

direction and placing the heavier slash on top. Piles shall have a stable base to prevent toppling. The long axis of individual pieces shall be oriented up and down the slope. Protruding pieces shall be trimmed to allow covering in a manner that permits the pile to shed water. Height shall be no less than four (4) feet and no greater than six (6) feet; width shall not exceed six (6) feet; piles shall be circular and not windrowed. No pile shall be located within sixty (60) feet of fish-bearing, perennial streams or within thirty five (35) feet from non-fish-bearing, intermittent streams. Piles shall not be located on down logs, stumps, talus slopes, roadways, or drainage ditches. No pile shall be located within ten (10) feet of reserve trees, any other pile, or unit boundary. No pile shall be located within twenty five (25) feet of designated wildlife trees. No portion of the pile will be under the crown of any living conifer tree.

4. Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:
  - a. Units shall be piled and covered during the same season that they are logged. Piling shall be completed in each unit or portion thereof, within eight (8) weeks after being notified of BLM site treatment determination.

SD-1c EXCAVATOR PILE AND BURN. Pile all slash in units or portions of units as designated by the Authorized officer in accordance with the following specifications:

1. Piling shall be accomplished with a track-mounted excavator with track shoes producing less than ten (10) pounds per square inch ground pressure. The excavator shall be equipped with a hydraulic thumb or rotating, controllable grapple head. The machine shall have a minimum reach of twenty five (25) feet. Finished piles shall be tight and free of earth. No portion of the excavator pile will be within 25 feet of the dripline of any living conifer tree.
2. Pile all slash, brush and downed hardwoods which are greater than two (2) inch and less than sixteen (16) inches in diameter on the large end and exceed two (2) feet in length. Existing reproduction of commercial coniferous species shall be protected where feasible.
3. Unmerchantable logs greater than sixteen (16) inches on the small end shall



Lodgepole  
SPECIAL PROVISIONS

be left in place, or positioned so that they will not be burned.

4. Prior to the commencement of piling work, all equipment shall meet the approval of the Authorized Officer.
5. Excavators are limited to designated skid roads approved by the Authorized Officer.
6. Additional trails needed shall be approved by the Authorized Officer, and the excavator shall be limited to one pass on these trails. The excavator shall pile by walking over the slash and working back to the designated trails. Existing reproduction of commercial coniferous species shall be protected where feasible.
7. A ten (10) foot by ten (10) foot cover of four (4) mil black plastic or equivalent material shall cap each excavator pile to maintain a dry ignition point. The cover shall be firmly fixed to each pile to hold it in place. Covering shall be done at time of piling.
8. Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows: Units shall be piled and covered during the same season that they are logged. Piling shall be completed in each unit or portion thereof, within eight (8) weeks after being notified of BLM site treatment determination

SD-1f LANDING PILES In all units as shown in the Exhibit A, pile all slash located within fifty (50) feet on each side of each landing. Slash shall be piled by a grapple loader. Finished piles shall be tight and free of earth.

1. A ten (10) foot by ten (10) foot cover of four (4) mil black plastic shall cap each pile to maintain a dry ignition point that contains fine fuels (i.e. kindling). The cover shall be firmly fixed to each pile to hold it in place. Landings shall be piled and covered during the same season that they are logged. No portion of the landing pile will be within 50 feet of the dripline of any living conifer tree.
2. SD-5 Perform logging residue reduction and site preparation work on approximately four hundred (400) acres of harvest area as directed by the Authorized Officer.
  - (a) The required work shall consist of any treatment or combination of treatments listed in the table below, as determined by the Authorized Officer

Lodgepole  
SPECIAL PROVISIONS

and specified in writing by the Contracting Officer. The number of acres of each treatment shall be determined by the Authorized Officer.

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

Treatment/Level	Cost Per Acre	Number of Acres	Total Cost Per Treatment Type
Hand Pile/Cover Slash	\$545.00	150	\$81,750.00
Hand Pile Burn	\$75.00	150	\$11,250.00
Excavator Pile/Cover	\$490.00	200	\$98,000.00
Excavator Pile Burn	\$65.00	200	\$13,000.00
Lop and Scatter	\$48.00	50	\$2,400.00
Total Appraised Cost			\$206,400.00

- (c) The total Purchase Price set forth in Section 2 shall be adjusted by the amount that the total cost of the site preparation treatments designated pursuant to Section 41(G)(2)(a) differs from: two hundred six thousand four hundred dollars (\$206,400.00) as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 41(G)(2)(a).

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.

Time is of the essence in complying with this provision. In the event the Purchaser fails to provide the 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.

**Seasonal Restriction Matrix**

1 of 2

**Lodgepole Timber Sale**

ORM05-15-2020.0012

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
		1	15	1	15	1	15	1	15	1	15	1	15
Sale Area	Activity	Restriction for											
	Ground Based yarding and landing operations*	Wet Season <sup>1</sup>											
In All units	Rock/Log Hauling*	Wet Season <sup>1,2</sup>											
	construction, Road Reconstruction, Road Renovation, Road/skid trail barricading, waterbar construction and soil ripping*	Wet Season <sup>1</sup>											
	Seeding, mulching	Seeding Season											
Sale Area	Activity	Restriction for											
Haul Routes	Road Rocking*	Wet Season <sup>1,2</sup>											
	Road Grading*	Wet Season <sup>1,2</sup>											
	Timber Haul*	Wet Season <sup>1,2</sup>											
	Rock Haul*	Wet Season <sup>1,2</sup>											

Restricted Times are Shaded

Possible Waived Times are Hatched

<sup>1</sup>Wet season restrictions may be shortened or extended depending on weather conditions (see L-19 in special provisions)

<sup>2</sup>Hauling restriction may be shortened or extended (see L-19 in special provisions)

\*Additional restrictions will apply if a spotted owl nest site is found within 0.25 miles for most harvest related activities or 0.5 miles for blasting, if a gray wolf den is found within one mile of a unit, or if a fisher den site is found within 50 feet of proposed treatment areas (see E-3 in special provisions). State fire restrictions may apply.

Restricted Times are Shaded

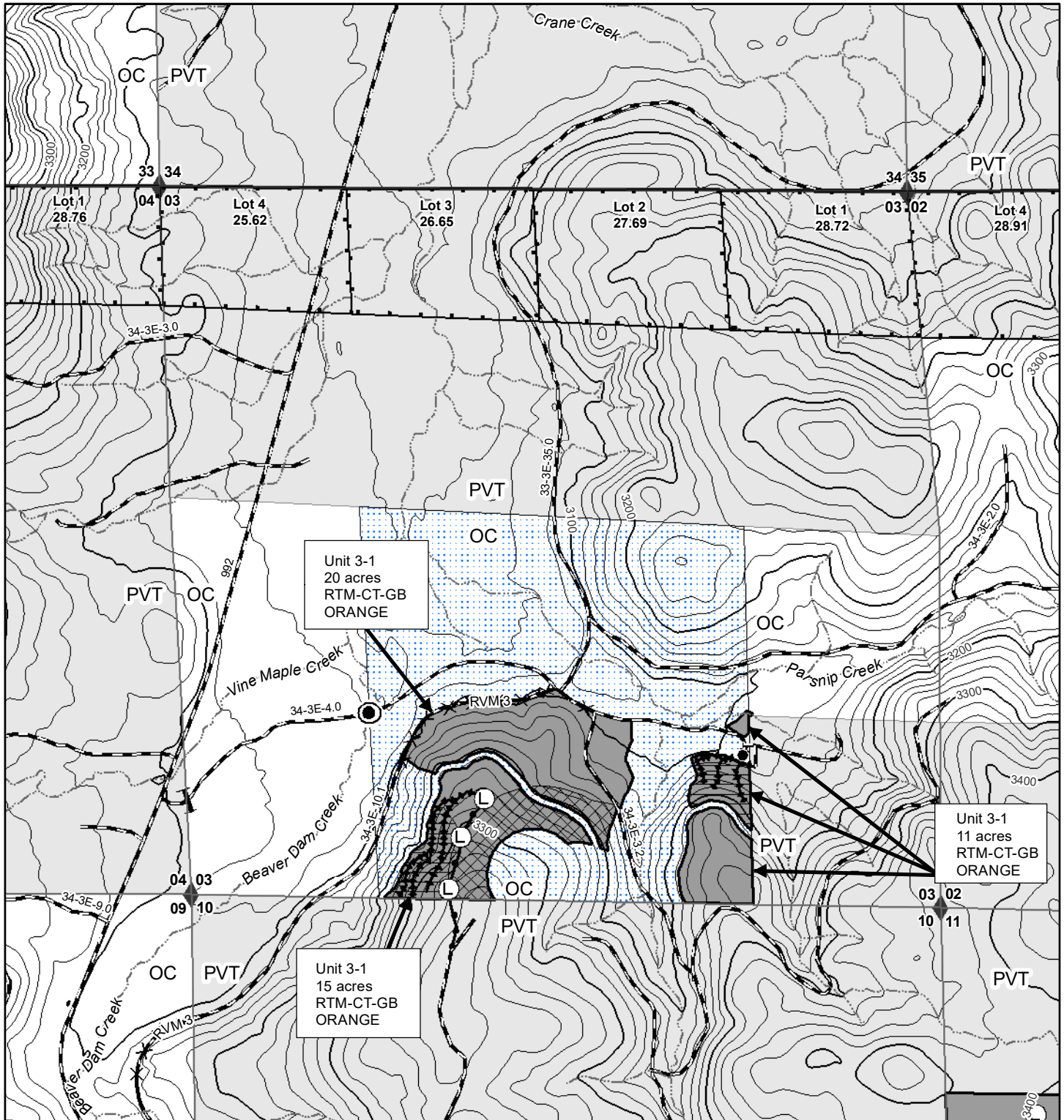
Possible Waived Times are Hatched

Sale Area	Activity	Restriction for	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
			1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15
Unit 3-1 within 660 foot buffer of Bald Eagle Nest	Hand Timber falling and bucking*	Bald Eagle Nest 660 foot buffer												
	Ground Based yarding and landing operations*	Wet Season <sup>1</sup>												
		Bald Eagle Nest 660 foot buffer												
		Wet Season <sup>12</sup>												
		Bald Eagle Nest 660 foot buffer												
		construction, Road												
		Renovation, Road/skid trail	Wet Season <sup>1</sup>											
		barricading, waterbar	Bald Eagle Nest 660 foot buffer											
		Seeding, mulching	Seeding Season											
		Fuels chainsaw site prep.	Bald Eagle Nest 660 foot buffer											
	Blasting*	Bald Eagle Nest 660 foot buffer												
Haul Routes														

<sup>1</sup>Wet season restrictions may be shortened or extended depending on weather conditions (see L-19 in special provisions)

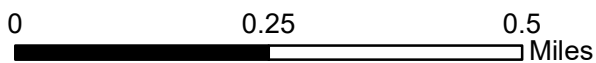
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\*Additional restrictions will apply if a spotted owl nest site is found within 0.25 miles for most harvest related activities or 0.5 miles for blasting, if a gray wolf den is found within one mile of a unit, or if a fisher den site is found within 50 feet of proposed treatment areas (see E-3 in special provisions). State fire restrictions may apply.



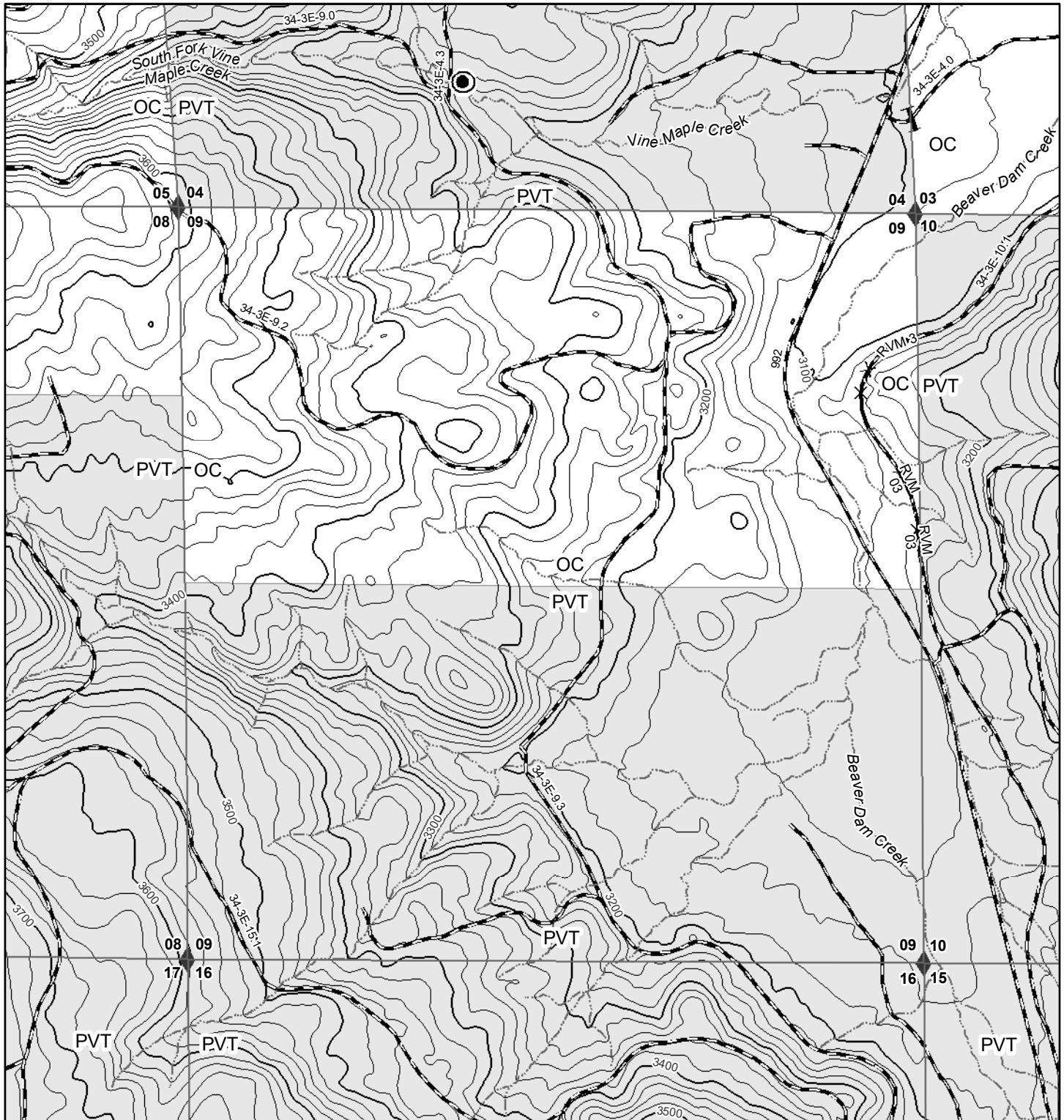
**Medford District BLM**  
**September 2020**

1 inch = 1,000 feet  
 Contours = 20 feet



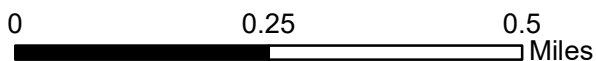
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**Medford District BLM**  
**September 2020**

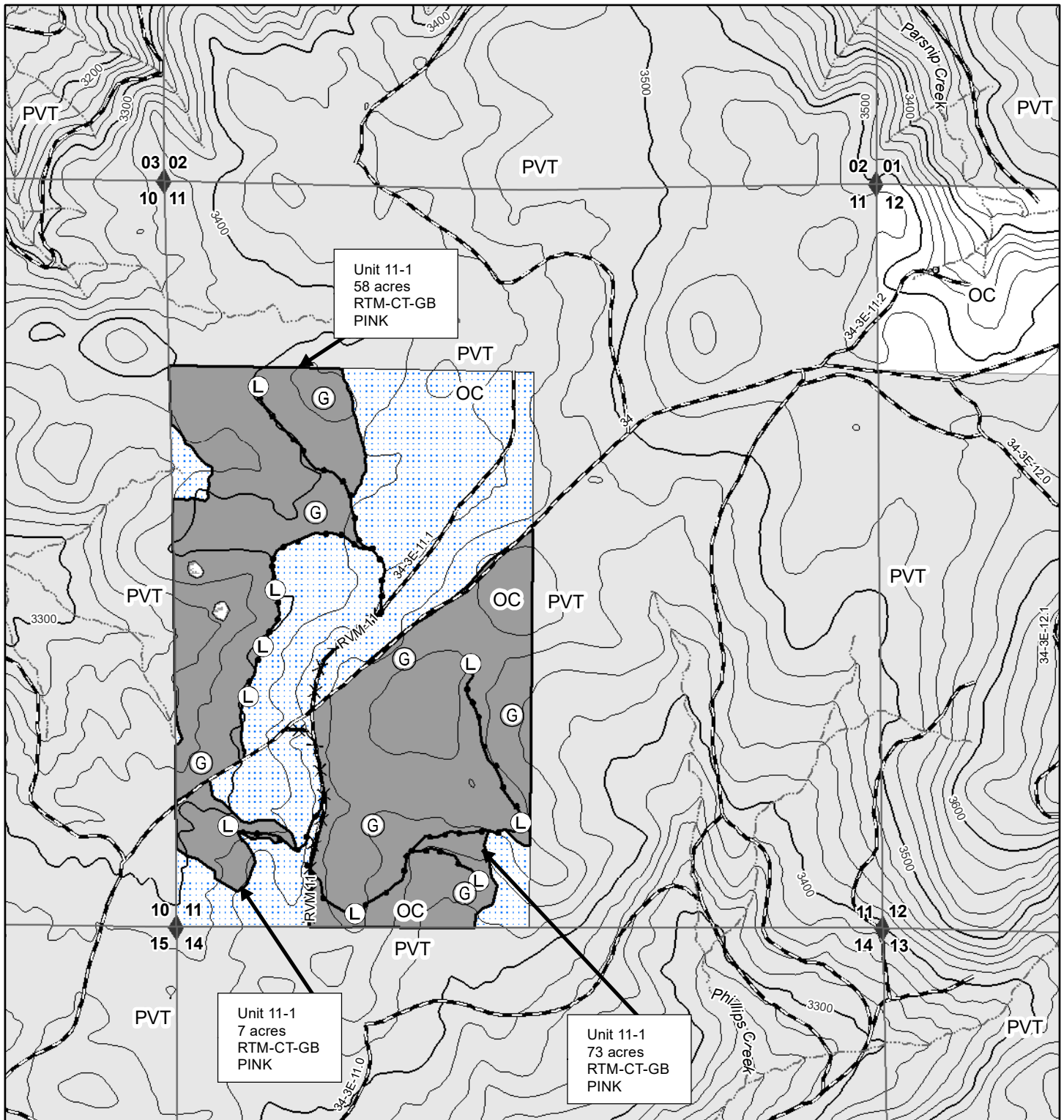
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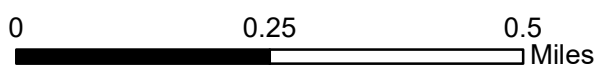






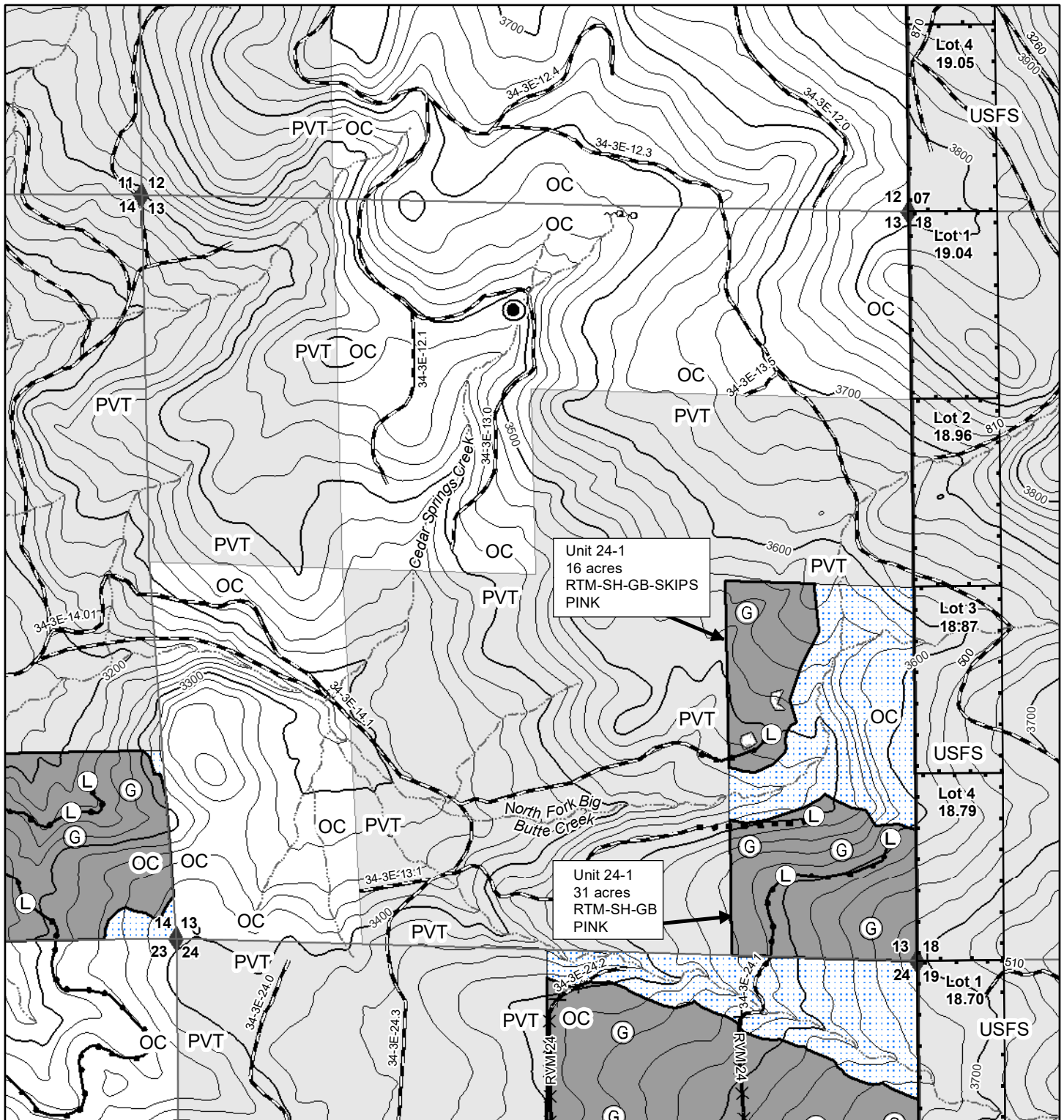
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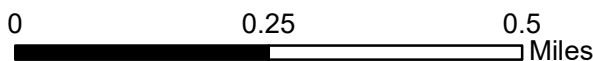
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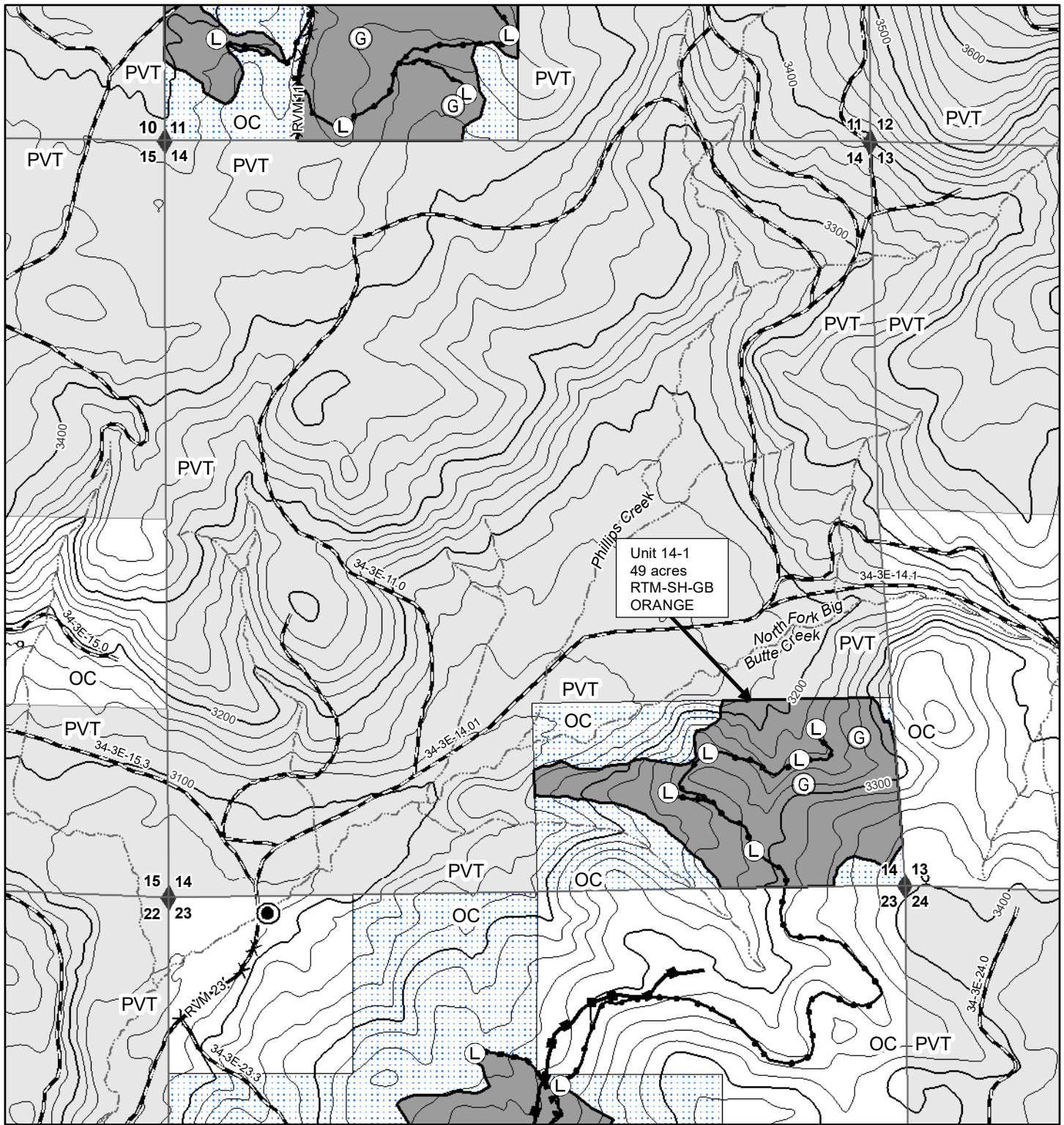
**Medford District BLM**  
**September 2020**

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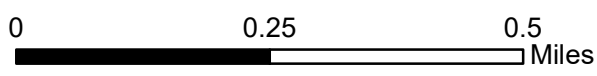
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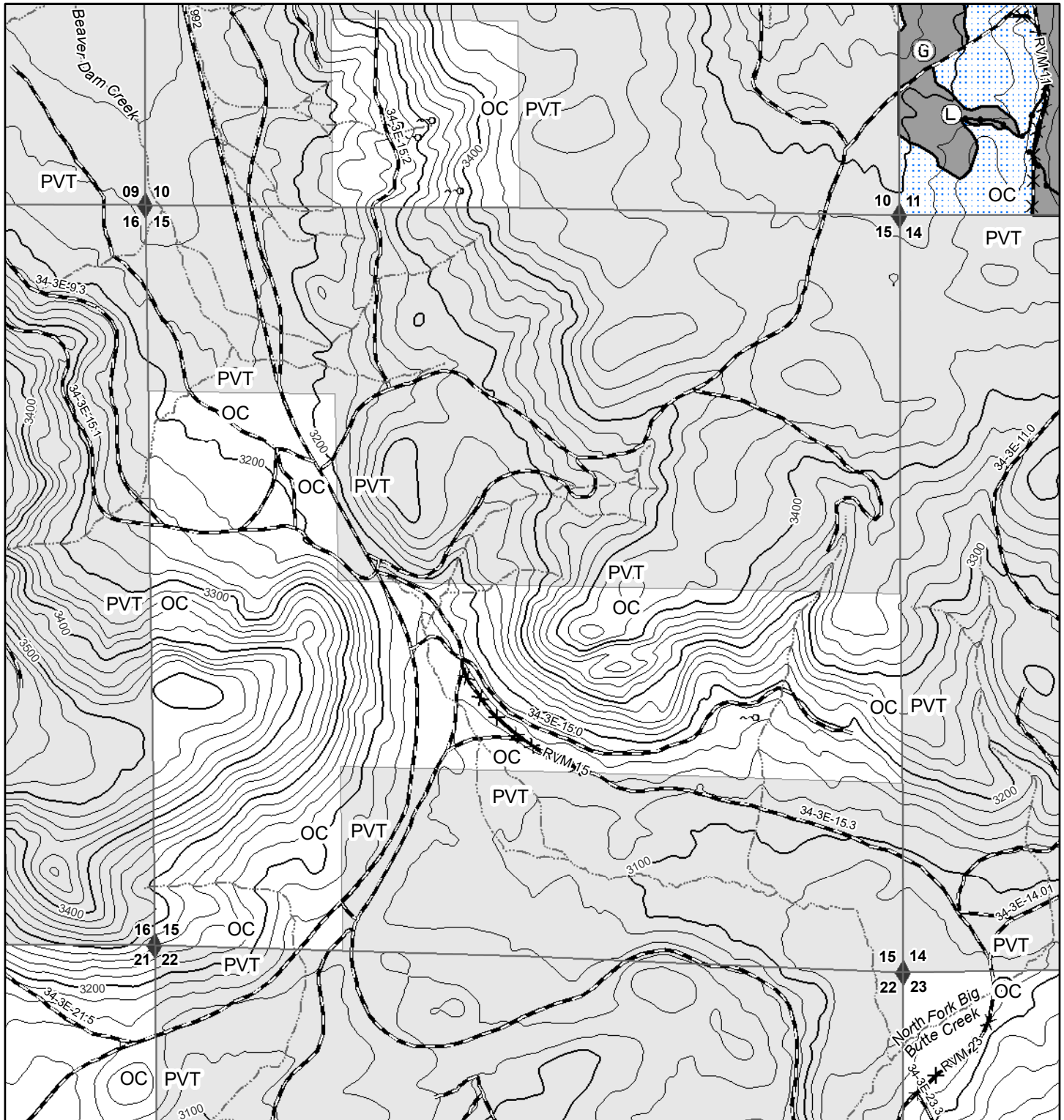
**Medford District BLM**  
**September 2020**

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 Contours = 20 feet



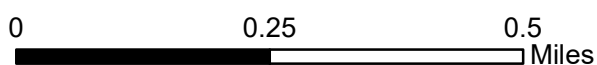
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**September 2020**

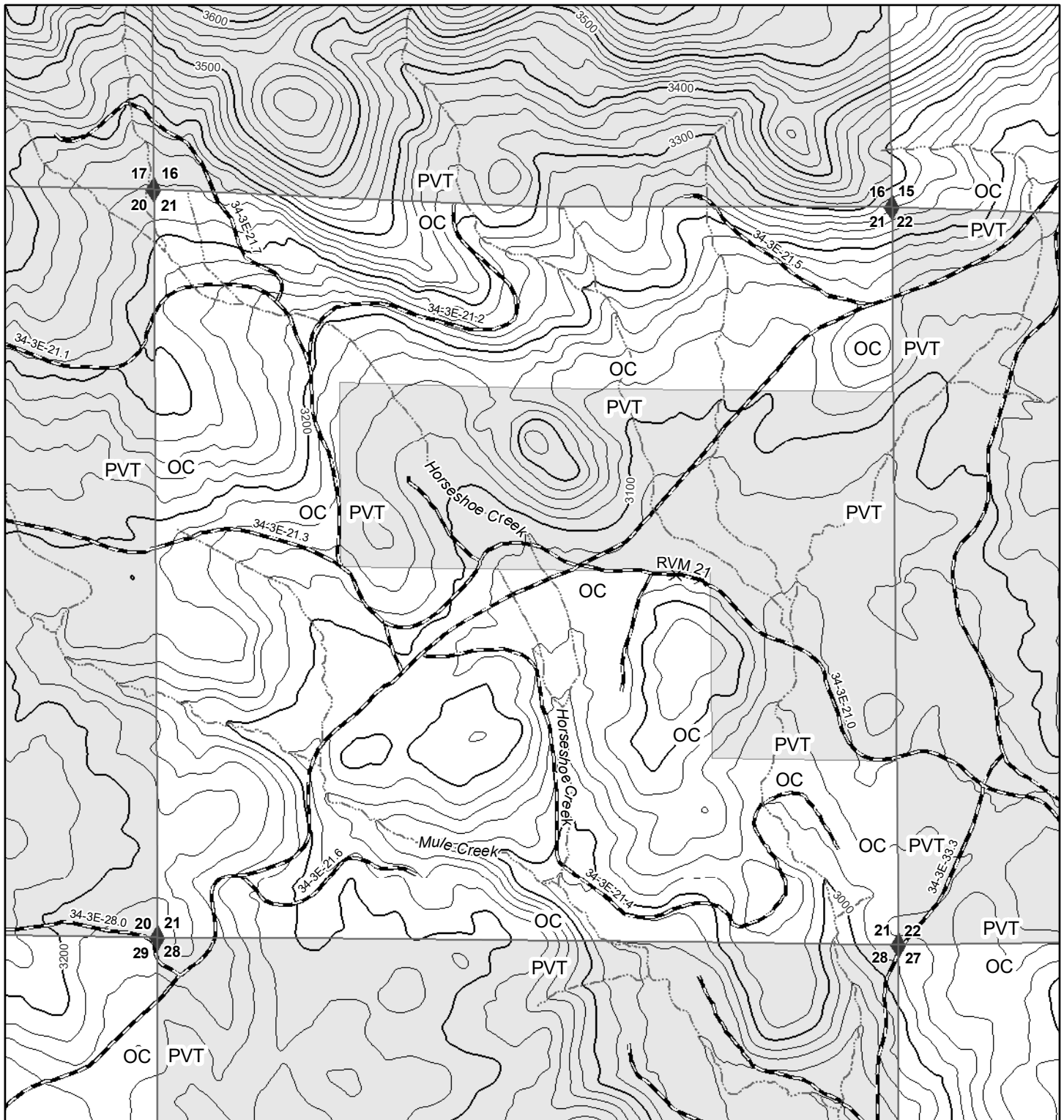
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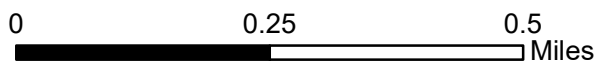






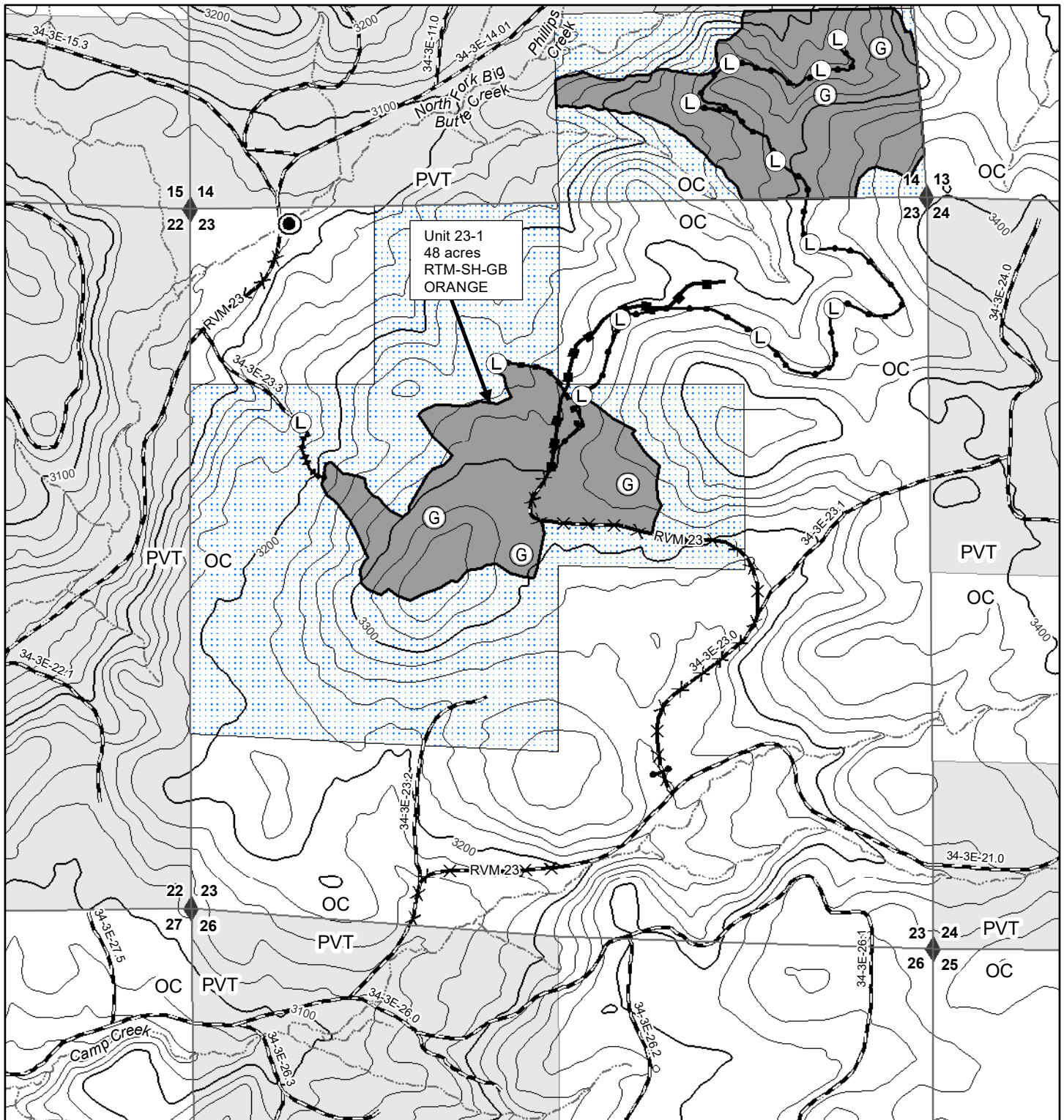
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**September 2020**

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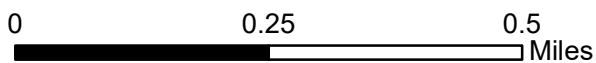
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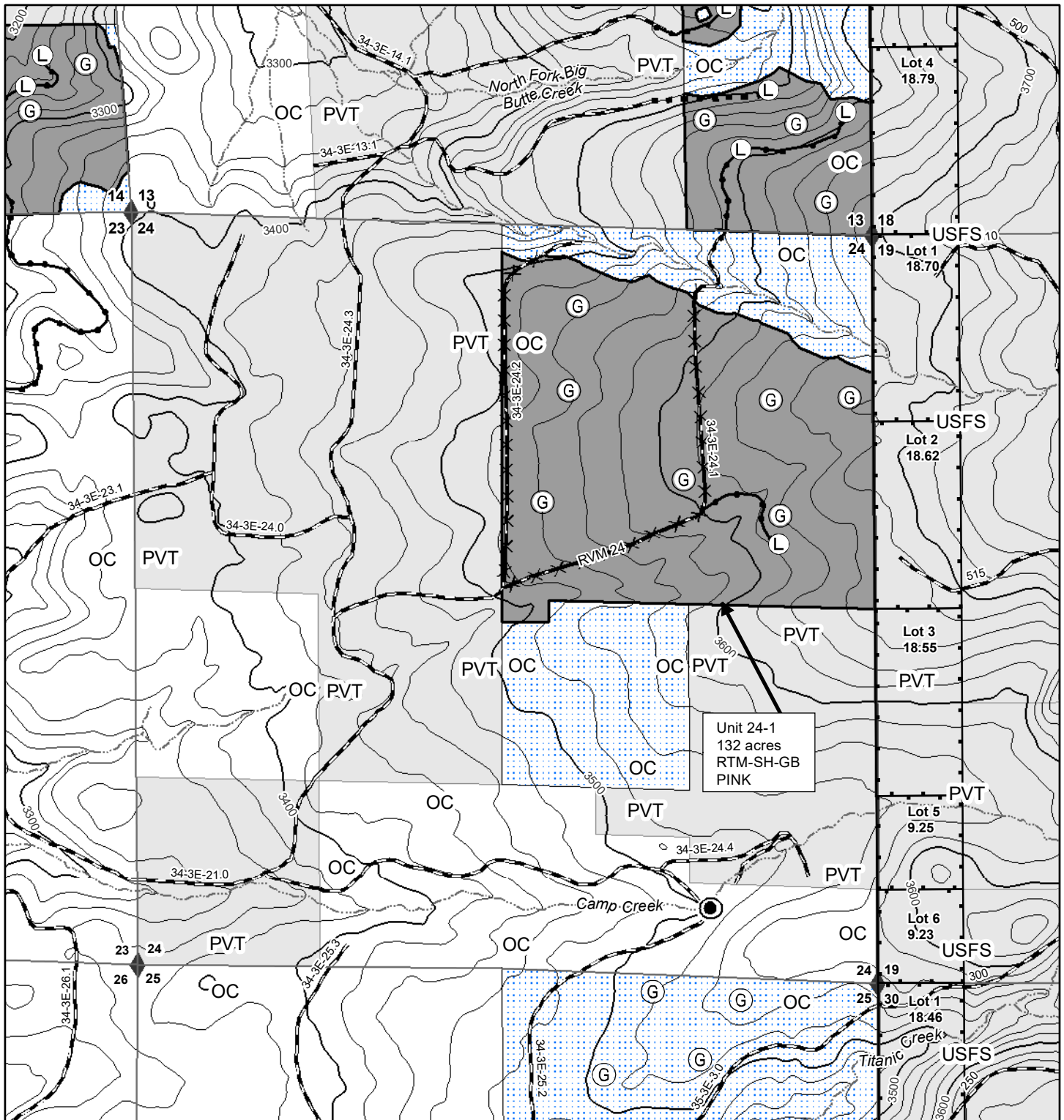
Medford District BLM  
September 2020

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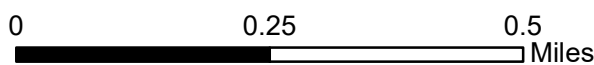




Unit 24-1  
 132 acres  
 RTM-SH-GB  
 PINK

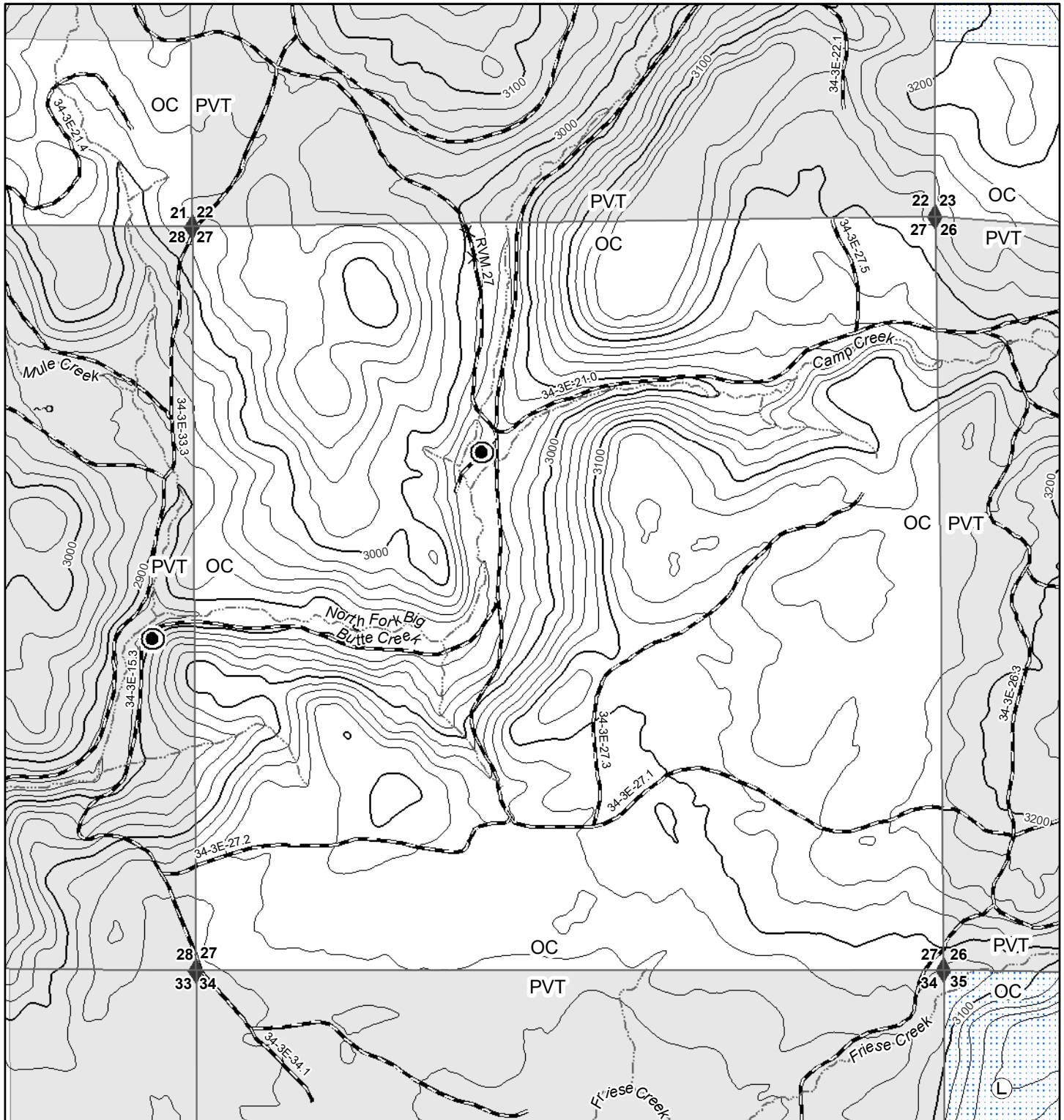
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**September 2020**

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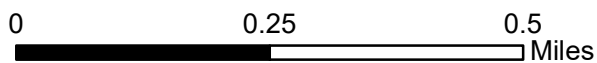
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**Medford District BLM**  
**September 2020**

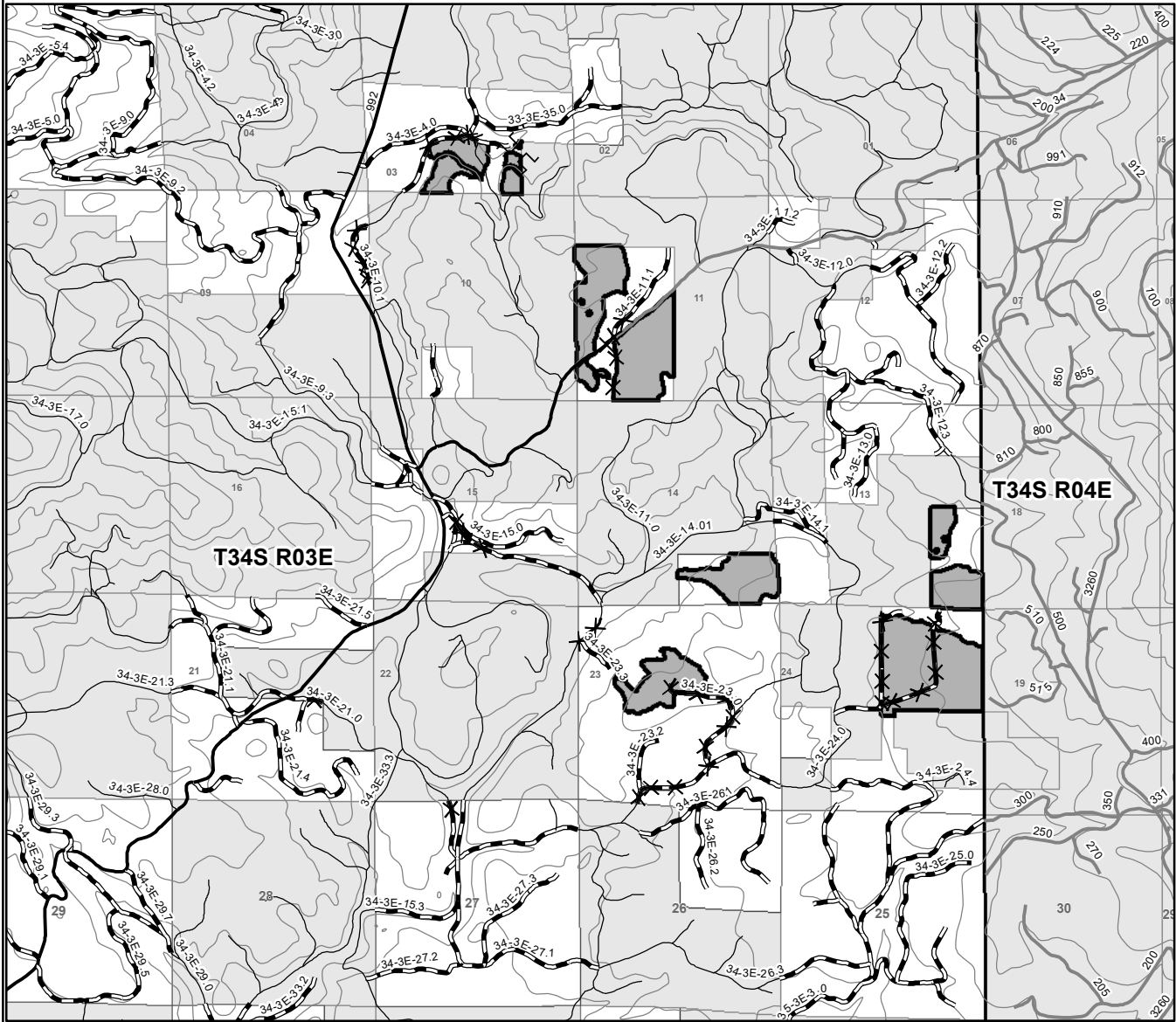
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Contours = 20 feet



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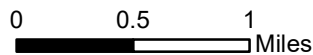




**Medford District BLM  
 September 2020**

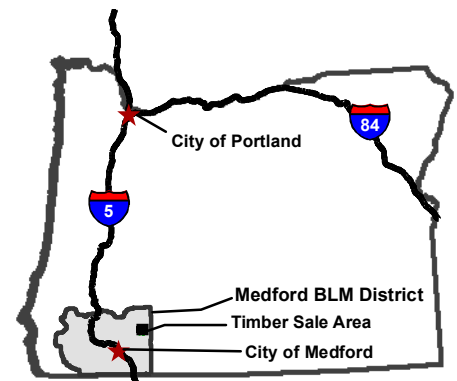
1 in = 1 miles

Contours = 100 feet







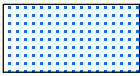


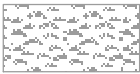


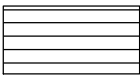






- Roadside Vegetation Management
- Project Units
- BLM
- Other

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# Legend

●	Stream Crossing		Existing Road		Boundary of Cutting Area		BLM
Ⓛ	Landings		Permanent Road Construction		Contract Area (Timber Reserve)		Non-BLM
ⓐ	Group Selection		Temporary Road Construction		Internal Skips		Government Lot (see map labels)
~o	SpringSeep		Pre-Designated Skid Trail		Special Yarding Areas		Gate
⊙	Water Source		Stream		Bald Eagle Restricted Area		Barrier
◆	Found Corner		Roadside Vegetation Maintenance (see map labels)				
			Road to be fully decommissioned				

**RTM-CT-GB-SKIPS**  
**PAINT COLOR: ORANGE**

RESERVE TREATMENT MARK  
 COMMERCIAL THIN  
 GROUND BASED UNIT - SKIPS  
 ORANGE  
 3-1

**RTM-CT-GB-SKIPS**  
**PAINT COLOR: PINK**

RESERVE TREATMENT MARK  
 COMMERCIAL THIN  
 GROUND BASED UNIT - SKIPS  
 PINK  
 11-1

**RTM-SH-GB-SKIPS**  
**PAINT COLOR: ORANGE**

RESERVE TREATMENT MARK  
 SELECTION HARVEST  
 GROUND BASED UNIT - SKIPS  
 PAINT COLOR: ORANGE  
 14-1; 23-1

**RTM-SH-GB-SKIPS**  
**PAINT COLOR: PINK**

RESERVE TREATMENT MARK  
 SELECTION HARVEST  
 GROUND BASED UNIT - SKIPS  
 PAINT COLOR: PINK  
 24-1

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2020.0012  
T. 34S. R. 03E, SEC 03, 11, 13, 14, 21, 23, 24 WILL. MER.  
LODGEPOLE TIMBERSALE

TIMBER SALE CONTRACT MAP  
CONTRACT NO. ORM05-TS-2020.0012  
EXHIBIT A  
PAGE 13 OF 13

Township Range	Section	Unit Number	Project Unit Acres	Reserve Acres	Contract Acres
34-3E	3	3-1	46	123	169
34-3E	11	11-1	138	94	232
34-3E	13	24-1	47	34	81
34-3E	14	14-1	49	31	80
34-3E	23	23-1	48	183	231
34-3E	24	24-1	132	70	202
			460	535	995



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

**Timber Appraisal**

---

<b>Sale Name:</b> Lodgepole TS	<b>Sale Date:</b> Thursday, September 24, 2020
<b>BLM District:</b> Medford DO	<b>Unit of Measure:</b> 16' MBF
<b>Contract #:</b> ORM05-TS-2020.0012	<b>Contract Term:</b> 36 months
<b>Sale Type:</b> Advertised	<b>Contract Mechanism:</b> 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:** Parks, Corey J - 8/24/2020

**Approved By:** Parks, Corey J - 8/24/2020

## Legal Description of Contract Area

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Jackson	34S	3E	3	W1/2SE1/4, E1/2SW1/4.	Willamette
O&C	Jackson	34S	3E	11	S1/2NW1/4, SW1/4.	Willamette
O&C	Jackson	34S	3E	13	E1/2SE1/4.	Willamette
O&C	Jackson	34S	3E	14	S1/2SE1/4.	Willamette
O&C	Jackson	34S	3E	23	NE1/4, NW1/4, N1/2SW1/4, SE1/4SW1/4, NE1/4SE1/4, W1/2SE1/4.	Willamette
O&C	Jackson	34S	3E	24	NE1/4, NW1/4SE1/4.	Willamette
O&C	Jackson	34S	3E	9	E1/2NE1/4.	Willamette
O&C	Jackson	34S	3E	15	NE1/4SW1/4, NW1/4SE1/4.	Willamette
O&C	Jackson	34S	3E	21	NW1/4SE1/4.	Willamette
O&C	Jackson	34S	3E	27	NE1/4NW1/4.	Willamette

## Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	6,913.0	7,471.0	7,677.0	82,302	1,474	16,290
White Fir	3,568.0	3,872.0	3,951.0	40,472	943	7,975
Incense-cedar	586.0	641.0	644.0	11,105	4	3,751
Ponderosa Pine	129.0	140.0	150.0	1,206	268	251
Sugar Pine	23.0	24.0	26.0	232	23	53
<b>Totals</b>	<b>11,219.0</b>	<b>12,148.0</b>	<b>12,448.0</b>	<b>135,317</b>	<b>2,712</b>	<b>28,320</b>

## Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
0.0	460.0	18.0	478.0	23.5

**Logging Costs**

Stump to Truck	\$1,213,202.16
Transportation	\$606,185.20
Road Construction	\$709,131.04
Maintenance/Rockwear	\$139,426.53
Road Use	\$0.00
Other Allowances	\$263,392.10
<b>Total:</b>	<b>\$2,931,337.03</b>
<b>Total Logging Cost per MBF:</b>	<b>\$261.28</b>

**Utilization Centers**

<u>Location</u>	<u>Distance</u>	<u>% of Net Volume</u>
White City, OR	41.0 miles	100 %

**Profit & Risk**

Profit	10 %
Risk	1 %
<b>Total Profit &amp; Risk</b>	<b>11 %</b>

**Tract Features**

<b>Quadratic Mean DBH</b>	17.9 in
<b>Average GM Log</b>	90 bf
<b>Average Volume per Acre</b>	23.5 mbf
<b>Recovery</b>	90 %
<b><u>Net MBF volume:</u></b>	
<b>Green</b>	11,219.0 mbf
<b>Salvage</b>	0 mbf
<b>Export</b>	0 mbf
<b><u>Ground Base Logging:</u></b>	
<b>Percent of Sale Volume</b>	100 %
<b>Average Yarding Slope</b>	15 %
<b>Average Yarding Distance</b>	480 ft
<b><u>Cable Logging:</u></b>	
<b>Percent of Sale Volume</b>	0 %
<b>Average Yarding Slope</b>	0 %
<b>Average Yarding Distance</b>	0 ft
<b><u>Aerial Logging:</u></b>	
<b>Percent of Sale Volume</b>	0 %
<b>Average Yarding Slope</b>	0 %
<b>Average Yarding Distance</b>	0 ft

**Cruise**

**Cruise Completed** June 2020  
**Cruised By** Parks, Darner, Worman, Siemer  
**Cruise Method**  
 3P cruise DF, WF, PP, IC. 100% cruise SP. Form  
 Class: DF=80, WF=84, PP=79, SP=80, IC=66.

## Stumpage Computation

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF	Appraised Value
Douglas Fir	16,290	6,913.0	\$582.41	\$64.07	\$261.28	\$0.27	\$257.30	\$1,778,714.90
White Fir	7,975	3,568.0	\$399.49	\$43.94	\$261.28	\$0.00	\$94.30	\$336,462.40
Incense-cedar	3,751	586.0	\$504.91	\$55.54	\$261.28	\$0.00	\$188.10	\$110,226.60
Ponderosa Pine	251	129.0	\$348.84	\$38.37	\$261.28	\$0.00	\$49.20	\$6,346.80
Sugar Pine	53	23.0	\$371.74	\$40.89	\$261.28	\$0.00	\$69.60	\$1,600.80
<b>Totals</b>	<b>28,320</b>	<b>11,219.0</b>						<b>\$2,233,351.50</b>

## 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			5.0 %	67.0 %	25.0 %	3.0 %	

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir			2.0 %	67.0 %	28.0 %	3.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar							100.0 %

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine							100.0 %

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine							100.0 %



### Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull
Douglas Fir	0	14

**Lodgepole TS****Unit Summary****ORM05-TS-2020.0012****Unit: 3-1****Net Volume/Acre: 18.9 MBF**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	466.0	504.0	518.0	1,856
White Fir	309.0	336.0	342.0	881
Incense-cedar	92.0	100.0	100.0	768
Ponderosa Pine	1.0	1.0	1.0	4
Sugar Pine	0.3	0.4	0.4	2
<b>Totals:</b>	<b>868.3</b>	<b>941.4</b>	<b>961.4</b>	<b>3,511</b>

Regeneration Harvest	0.0
Partial Cut	46.0
Right of Way	0.0
<b>Total Acres:</b>	<b>46.0</b>

**Unit: 11-1****Net Volume/Acre: 20.6 MBF**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	1,454.0	1,571.0	1,614.0	3,907
White Fir	1,264.0	1,372.0	1,400.0	3,074
Incense-cedar	97.0	106.0	106.0	628
Ponderosa Pine	26.0	29.0	31.0	42
Sugar Pine	7.0	7.0	8.0	18
<b>Totals:</b>	<b>2,848.0</b>	<b>3,085.0</b>	<b>3,159.0</b>	<b>7,669</b>

Regeneration Harvest	0.0
Partial Cut	138.0
Right of Way	0.0
<b>Total Acres:</b>	<b>138.0</b>

**Unit: 14-1****Net Volume/Acre: 25.4 MBF**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	834.0	901.0	926.0	2,223
White Fir	294.0	319.0	325.0	625
Incense-cedar	112.0	123.0	123.0	717
Ponderosa Pine	4.0	5.0	5.0	10
Sugar Pine	2.0	2.0	2.0	5
<b>Totals:</b>	<b>1,246.0</b>	<b>1,350.0</b>	<b>1,381.0</b>	<b>3,580</b>

Regeneration Harvest	0.0
Partial Cut	49.0
Right of Way	0.0
<b>Total Acres:</b>	<b>49.0</b>

**Unit: 23-1**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	535.0	578.0	594.0	1,346
White Fir	449.0	487.0	497.0	1,200
Incense-cedar	35.0	38.0	38.0	169
Ponderosa Pine	3.0	3.0	3.0	18
Sugar Pine	2.0	2.0	2.0	4
<b>Totals:</b>	<b>1,024.0</b>	<b>1,108.0</b>	<b>1,134.0</b>	<b>2,737</b>

**Net Volume/Acre: 21.3 MBF**

Regeneration Harvest	0.0
Partial Cut	48.0
Right of Way	0.0
<b>Total Acres:</b>	<b>48.0</b>

**Unit: 24-1**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	2,905.0	3,138.0	3,227.0	5,310
White Fir	1,005.0	1,091.0	1,113.0	1,649
Incense-cedar	197.0	217.0	217.0	1,134
Ponderosa Pine	62.0	67.0	72.0	98
Sugar Pine	6.7	7.6	8.6	18
<b>Totals:</b>	<b>4,175.7</b>	<b>4,520.6</b>	<b>4,637.6</b>	<b>8,209</b>

**Net Volume/Acre: 23.3 MBF**

Regeneration Harvest	0.0
Partial Cut	179.0
Right of Way	0.0
<b>Total Acres:</b>	<b>179.0</b>

**Unit: ROW 3**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	16.0	18.0	18.0	43
White Fir	15.0	16.0	16.0	23
Incense-cedar	7.0	8.0	8.0	50
<b>Totals:</b>	<b>38.0</b>	<b>42.0</b>	<b>42.0</b>	<b>116</b>

**Net Volume/Acre: 38.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: ROW 11**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	180.0	195.0	200.0	376
White Fir	100.0	109.0	111.0	243
Incense-cedar	13.0	14.0	14.0	57
Ponderosa Pine	5.0	5.0	6.0	12
Sugar Pine	1.0	1.0	1.0	2
<b>Totals:</b>	<b>299.0</b>	<b>324.0</b>	<b>332.0</b>	<b>690</b>

**Net Volume/Acre: 59.8 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	5.0
<b>Total Acres:</b>	<b>5.0</b>

**Unit: ROW 14**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	222.0	240.0	246.0	471
White Fir	58.0	62.0	64.0	102
Incense-cedar	17.0	18.0	20.0	96
Ponderosa Pine	3.0	3.0	3.0	4
Sugar Pine	1.0	1.0	1.0	2
<b>Totals:</b>	<b>301.0</b>	<b>324.0</b>	<b>334.0</b>	<b>675</b>

**Net Volume/Acre: 75.3 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	4.0
<b>Total Acres:</b>	<b>4.0</b>

**Unit: ROW 24**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	152.0	165.0	169.0	252
White Fir	39.0	43.0	44.0	66
Incense-cedar	5.0	5.0	5.0	21
Sugar Pine	3.0	3.0	3.0	2
Ponderosa Pine	1.0	1.0	1.0	2
<b>Totals:</b>	<b>200.0</b>	<b>217.0</b>	<b>222.0</b>	<b>343</b>

**Net Volume/Acre: 100.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	2.0
<b>Total Acres:</b>	<b>2.0</b>

**Unit: RVM 3**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	83.0	89.0	90.0	206
Ponderosa Pine	17.0	18.7	20.7	33
White Fir	12.0	12.7	14.1	40
Incense-cedar	2.7	3.4	4.3	31
<b>Totals:</b>	<b>114.7</b>	<b>123.8</b>	<b>129.1</b>	<b>310</b>

**Net Volume/Acre: 114.7 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: RVM 11**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	14.0	15.0	16.0	38
Incense-cedar	3.0	3.0	3.0	19
White Fir	1.0	1.0	1.0	5
<b>Totals:</b>	<b>18.0</b>	<b>19.0</b>	<b>20.0</b>	<b>62</b>

**Net Volume/Acre: 18.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: RVM 15**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	15.0	16.0	17.0	64
Ponderosa Pine	5.0	5.0	5.0	20
Incense-cedar	3.0	3.0	3.0	41
White Fir	2.0	2.0	2.0	16
<b>Totals:</b>	<b>25.0</b>	<b>26.0</b>	<b>27.0</b>	<b>141</b>

**Net Volume/Acre: 25.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: RVM 21**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	9.0	10.0	10.0	37
White Fir	4.0	4.8	5.0	11
Ponderosa Pine	0.7	1.0	1.0	3
Incense-cedar	0.6	0.7	0.7	6
<b>Totals:</b>	<b>14.3</b>	<b>16.5</b>	<b>16.7</b>	<b>57</b>

**Net Volume/Acre: 14.3 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: RVM 23**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	16.0	18.0	19.0	49
White Fir	13.0	13.5	13.9	25
Incense-cedar	0.7	0.9	1.0	6
Ponderosa Pine	0.3	0.3	0.3	2
<b>Totals:</b>	<b>30.0</b>	<b>32.7</b>	<b>34.2</b>	<b>82</b>

**Net Volume/Acre: 30.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

**Unit: RVM 24**

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	12.0	13.0	13.0	112
White Fir	3.0	3.0	3.0	15
Ponderosa Pine	1.0	1.0	1.0	3
Incense-cedar	1.0	1.0	1.0	8
<b>Totals:</b>	<b>17.0</b>	<b>18.0</b>	<b>18.0</b>	<b>138</b>

**Net Volume/Acre: 17.0 MBF**

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
<b>Total Acres:</b>	<b>1.0</b>

Total Stump To Truck	Net Volume	\$/MBF
\$1,213,202.16	11,219.0	\$108.14

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

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Shovel	GM MBF	168.0	\$163.51	\$27,469.68	SYA Unit 3-1
Wheel Skidder	GM MBF	4,132.0	\$117.04	\$483,609.28	Hand Falling 24"+
Harvester/Skidder	GM MBF	7,848.0	\$87.40	\$685,915.20	mechanized harvest
<b>Subtotal</b>				<b>\$1,196,994.16</b>	

### Additional Costs

Item	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Culvert	Each	1.0	\$620.00	\$620.00	Unit 3-1 riparian
Oversize 36"+ trees	Each	22.0	\$150.00	\$3,300.00	ROW oversize
Additional Cat Time	Hour	12.0	\$125.00	\$1,500.00	Unit 3-1
Clean rock	yard	20.0	\$57.00	\$1,140.00	Unit 3-1 riparian
<b>Subtotal</b>				<b>\$6,560.00</b>	

### Additional Moves

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Loader	Hour	20.0	\$134.00	\$2,680.00	5 additional moves @ 4 hrs / move
Stroke Delimber	Hour	20.0	\$134.00	\$2,680.00	5 additional moves @ 4 hrs / move
Feller Buncher	Hour	20.0	\$134.00	\$2,680.00	5 additional moves @ 4 hrs / move
Wheel Skidder	Hour	12.0	\$134.00	\$1,608.00	3 additional moves @ 4 hrs / move
<b>Subtotal</b>				<b>\$9,648.00</b>	

**Comments:**

Shovel = SYA - Special yarding area in Unit 3-1 = 8 acres. Must stay on pre-designated skids and pull line (L-12 stip)

Additional Cat Time = stream crossing fill material / culvert / pull back fill (L-12 Unit 3-1)

Oversize 36"+ = 22 trees marked "C/L" with blue paint in ROW's. Must be felled, bucked, placed in stand as CWD.

Culvert = 36" x 20' in stream crossing Unit 3-1. \$31.00 / LF

Clean rock = 3" minus clean rock for culvert installation



Total	Net Volume	\$/MBF
\$606,185.20	11,219.0	\$54.03

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
White City, OR	41.0	All species	GM MBF	12,148.0	\$49.90	\$606,185.20	100 %

**Engineering Allowances**

Total	Net Volume	\$/MBF
\$848,557.57	11,219.0	\$75.64

Cost Item	Total Cost
Road Construction:	\$709,131.04
Road Maintenance/Rockwear:	\$139,426.53
Road Use Fees:	\$0.00

Total	Net Volume	\$/MBF
\$263,392.10	11,219.0	\$23.48

### Environmental Protection

Cost item	Total Cost
Log barricade	\$2,625.00
Water bar skids	\$18,750.00
Woody Debris Placement	\$6,860.00
Landing Clean up	\$6,075.00
Equipment Washing - Skidder/Prep Cat	\$1,500.00
Equipment Washing - Loaders/Excavator	\$3,330.00
Equipment Washing - Processor/Feller Buncher	\$2,220.00
Seed & Mulch	\$4,030.00
<b>Subtotal</b>	<b>\$45,390.00</b>

### Logging

Cost item	Total Cost
Skid location	\$1,927.10
Skid construction	\$5,625.00
Landing Construction(Cat/loader work)	\$4,050.00
<b>Subtotal</b>	<b>\$11,602.10</b>

### Slash Disposal & Site Prep

Cost item	Total Cost
Lop and Scatter	\$2,400.00
Excavator Pile Burn	\$13,000.00
Hand Pile Burn	\$11,250.00
Excavator Pile and Cover	\$98,000.00
Hand Pile and Cover	\$81,750.00
<b>Subtotal</b>	<b>\$206,400.00</b>

**Comments:**

Equipment Washing = 3 seasons to log / 3 washes per piece (E-7 stip)

Equipment Washing Loader = 2 log loaders, 1 machine pile

Skid location = 70 hrs @ \$27.53 / hr

Skid construction = 75 hrs @ \$75 / hr

Landing Construction = 1 hr per landing @ \$135 / hr. Est. 30 new landings

Water bar = 250 hrs @ \$75 / hr

Landing clean up = 1 hr per landing @ \$135 / hr. Est 45 landings

Woody Debris Placement = first 100' where main skids meet system roads (L-12 stip) 70 hrs @ \$98 / hr

Seed & Mulch (E-1 and L-12) 4 acres @ \$806 / ac. Includes pre-designated skid in riparian reserve unit 3-1

Log barricade = 35 @ \$75 each

**Information for Timber Sale Notice, Prospectus, Sec. 41 & 42**  
**Lodgepole TS Timber Sale**  
**ORM05-TS-2020.0012**

Approx # of trees	Est Volume MBF 32'	Species	Est Volume MBF 16'	Appraised \$/MBF	Appraised Price
16,290	5,677.0	Douglas Fir	6,913.0	\$257.30	\$1,778,714.90
7,975	2,922.0	White Fir	3,568.0	\$94.30	\$336,462.40
3,751	458.0	Incense-cedar	586.0	\$188.10	\$110,226.60
251	100.0	Ponderosa Pine	129.0	\$49.20	\$6,346.80
53	19.0	Sugar Pine	23.0	\$69.60	\$1,600.80
<b>28,320</b>	<b>9,176.0</b>		<b>11,219.0</b>		<b>\$2,233,351.50</b>

<b>CRUISED BY:</b>	Parks, Darner, Worman, Siemer
<b>CRUISE COMPLETED:</b>	June 2020
<b>COMBINED SAMPLING ERROR:</b>	5.10 %

<b>CRUISE DESIGN/METHOD Description:</b>
3P cruise DF, WF, PP, IC. 100% cruise SP. Form Class: DF=80, WF=84, PP=79, SP=80, IC=66.

## TRACT FEATURES

### ALL SPECIES

<b>QM DBH</b>	17.9	INCHES
<b>GM LOG</b>	90	BD FT
<b>Total Gross Volume</b>	12,448	MBF
<b>Recovery</b>	90	%
<b>Salvage</b>	0	MBF
<b>Export</b>	0	MBF

Dominant Species: **Douglas Fir**

<b>QM DBH</b>	18.2	INCHES
<b>GM Log</b>	91	BD FT
<b>Recovery</b>	90	%
<b>Salvage</b>	0	MBF

<b>Admin Scale Allowance</b>		\$0.75	\$/MBF
	<b>TOTAL ADMIN. SCALE Allowance</b>	\$8,414.25	

<b>EXPORT VOLUME (LE-1)</b>	Port Orford Cedar	0	MBF
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<b>Reserve Tree Paint Color</b>	<b>Reserve Tree Count</b>
	0

<b>Harvest Tree Paint Color</b>	<b>Harvest Tree Count</b>
	0

<b>PRIVATE TIMBER:</b>	Purchase at Independantly Appraised Price
<b>COMPANY NAME:</b>	Juniper Properties
<b>LOCATION/ROAD #:</b>	T34S-3E-10 and 13

<b>SPECIES</b>	<b>MBF VOLUME</b>	<b>\$/MBF</b>	<b>Appraised Value</b>
White Fir	4.30	\$235.38	\$1,012.13
Douglas Fir	1.40	\$358.30	\$501.62
Incense-cedar	0.90	\$311.77	\$280.59
Sugar Pine	0.50	\$158.76	\$79.38
<b>Total:</b>	<b>7.10</b>		<b>\$1,873.72</b>



UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT

Sale: Lodgepole T.S.  
 Sale Date: 09-17-2020  
 Prep. By : Brown  
 Tract No: ORM05-20.0012

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization:           \$0.00/11219 MBF = \$0.00/MBF

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Road Maintenance Obligation:

(2.1) BLM Maintenance . . . . .	\$25,391.07
(2.2) BLM Rockwear . . . . .	\$11,211.39
(5.1) Purchaser Maintenance Rockwear . . . . .	<u>\$4,242.17</u>
Total Rockwear Payable to BLM . . . . .	\$15,453.56
(3.1) 3rd Party Maintenance . . . . .	\$0.00
(3.2) 3rd Party Rockwear . . . . .	\$6,072.43
(4.1) Other Maintenance Payments . . . . .	\$1,689.98
Total Maintenance Fee Obligation (2.1-5.1)	<u>\$48,607.04</u>

Purchaser Maintenance Allowances:

(5.2A) Move In . . . . .	\$6,184.08
(5.2B) Culverts, Catch Basins, Downspouts . . . . .	\$1,771.03
(5.2C) Grading, Ditching . . . . .	\$5,811.96
(5.2D) Slide Removal and Slump Repair . . . . .	\$0.00
(5.2E) Dust Palliative (Water) . . . . .	\$46,335.51
(5.2F) Surface Repair (Aggregate) . . . . .	\$17,280.00
(5.2G) Other . . . . .	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	<u>\$77,382.59</u>

(2.1-5.2G) Cost (\$46,917.06 + \$77,382.59) = \$124,299.65  
 Cost/MBF \$124,299.65 / 11219 MBF = \$11.08/MBF   \$11.08/MBF

(5.2H) Decommissioning . . . . .           \$13,436.90

(5.2H)       Cost/MBF \$13,436.90/11219 MBF =           \$1.20/MBF

(2.1-5.2H) Cost (\$46,917.06 + \$77,382.59 + \$13,436.90) = \$137,736.55

Total Cost/MBF (Excluding Road Use) 139,426.53/11219 MBF =           \$12.43/MBF

**1) Road Use Fees - Amortization**

Details

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

Subtotal by agreement number

(1.1) Subtotal \$0.00

**2) BLM Maintenance - Timber Haul**

MAINTENANCE (2.1)						ROCKWEAR (2.2)			
Road Number and Segment	A Surf N Type	Mi	x Fee x	Vol MBF =	Maint	Fee x	MBF =	Rkwear	
34-3E-15.03A1	A AGG	0.32	0.76	185	\$44.99	0.73	185	\$43.22	
34-3E-15.03A2	N AGG	0.42	0.99	170	\$70.69	0.00	170	\$0.00	
34-3E-15.03A3	N AGG	0.18	0.99	170	\$30.29	0.00	170	\$0.00	
34-3E-15.03A4	N AGG	0.30	0.99	170	\$50.49	0.73	170	\$37.23	
34-3E-21.00 A A	AGG	0.16	0.76	6847	\$832.60	0.73	6847	\$799.73	
34-3E-21.00 B N	AGG	0.86	0.99	6847	\$5,829.54	0.00	6847	\$0.00	
34-3E-21.00C1C2N	AGG	0.93	0.99	6847	\$6,304.03	0.73	6847	\$4,648.43	
34-3E-21.00 D N	AGG	0.34	0.99	6847	\$2,304.70	0.00	6847	\$0.00	
34-3E-21.00 E1N	AGG	0.44	0.99	6847	\$2,982.55	0.73	6847	\$2,199.26	
34-3E-21.00 E2N	AGG	0.45	0.99	4393	\$1,957.08	0.73	4393	\$1,443.10	
34-3E-21.00 F N	AGG	0.17	0.99	4393	\$739.34	0.00	4393	\$0.00	
34-3E-24.00 A1N	AGG	0.32	0.99	4393	\$1,391.70	0.00	4393	\$0.00	
34-3E-24.00 A2N	AGG	0.14	0.99	620	\$85.93	0.00	620	\$0.00	
34-3E-24.01 A1N	AGG	0.24	0.99	3773	\$896.46	0.73	3773	\$661.03	
34-3E-24.01 A2N	AGG	0.21	0.99	2788	\$579.63	0.73	2788	\$427.40	
34-3E-24.01 A3N	AGG	0.49	0.99	1596	\$774.22	0.73	1596	\$570.89	
34-3E-24.02 N	AGG	0.53	0.99	985	\$516.83	0.73	985	\$381.10	

(2.1) Subtotal \$25,391.07

(2.2) Subtotal \$11,211.39

**3) Third Party Maintenance and Rockwear**

MAINTENANCE (3.1)						ROCKWEAR (3.2)		
Agrmnt Number	Surface Type	Road Number	Mi	x Fee x MBF =	Maint	Fee x	MBF =	Rkwear
M-2000C	AGG	34-3E-15.03	A3	0.18		0.73	170	\$22.34
M-2000D	ADD	34-3E-14.01	D	0.13		0.00	405	\$0.00
M-2000D	NAT	34-3E-03.03		0.06		0.00	20	\$0.00
M-2000D	NAT	34-3E-10.01	A	0.13		0.00	574	\$0.00
M-2000D	NAT	34-3E-10.01	C	0.24		0.00	459	\$0.00
M-2000D	AGG	34-3E-10.02		1.16		0.00	130	\$0.00
M-2000D	AGG	34-3E-10.03	A	0.70		0.00	318	\$0.00
M-2000D	NAT	34-3E-10.03	B	0.22		0.00	318	\$0.00
M-2000D	NAT	34-3E-03.01		0.06		0.00	71	\$0.00
M-2000D	AGG	34-3E-13.04	A	0.36		0.00	405	\$0.00
M-2000D	AGG	34-3E-24.03	A-B	0.54		0.00	620	\$0.00
M-2000D	AGG	34-3E-21.00	F	0.17		0.00	4393	\$0.00
M-2000D	AGG	34-3E-24.00	A1	0.32		0.00	4393	\$0.00
M-2000D	AGG	34-3E-24.00	A2	0.14		0.00	620	\$0.00
M-2000D	AGG	34-3E-13.03		0.40		0.00	215	\$0.00
M-2000E	AGG	34-3E-15.03	A2	0.42		0.73	170	\$52.12
M-2000F	AGG	34-3E-21.00	B	0.86		0.73	6847	\$4,298.55
M-2000F	AGG	34-3E-21.00	D	0.34		0.73	6847	\$1,699.43

Subtotal of maintenance fees by agreement number:

Subtotal of rockwear fees by agreement number:

M-2000C	\$22.34
M-2000D	\$0.00



M-2000E  
M-2000F

\$52.12  
\$5,997.98

(3.1) Subtotal \$0.00  
(3.2) Subtotal

\$6,072.44

4) Other Maintenance Payments - USFS or Others Perform Maintenance

Agency	Road Number	Miles (Log)	Vol (mbf)	Fee	Cost
FS	FS 34 A	1.05	3295	0.37	\$1,280.11
FS	FS 34 B	0.35	3165	0.37	\$409.87

(4.1) Subtotal \$1,689.98

5) Purchaser Maintenance - Rock Wear

TIMBER HAUL (5.1)

Road No and Segment	A	RkWear Mi	Vol MBF	Total RkWear
34-3E-03.01	N	0.06	71	\$0.00
34-3E-03.02	N	0.15	200	\$0.00
34-3E-03.03	N	0.06	20	\$0.00
34-3E-10.01	A N	0.13	574	\$0.00
34-3E-10.01	B N	0.37	574	\$0.00
34-3E-10.01	C N	0.24	459	\$0.00
34-3E-10.01	D N	0.46	459	\$0.00
34-3E-10.01	E1AN	0.06	271	\$0.00
34-3E-10.01	E1BN	0.16	71	\$0.00
34-3E-10.02	N	1.16	130	\$0.00
34-3E-10.03	A N	0.70	318	\$0.00
34-3E-10.03	B N	0.22	318	\$0.00
34-3E-10.04	(P)N	0.22	318	\$0.00
34-3E-11.00	A1A	0.12	1852	\$162.24
34-3E-11.00	A2A	0.18	1678	\$220.49
34-3E-11.01	A A	0.18	1313	\$172.53
34-3E-11.04	(P)AA	0.09	1304	\$85.67
34-3E-11.04	(P)BA	0.32	590	\$137.82
34-3E-11.05	(P)A	0.35	704	\$179.87
34-3E-11.06	(P)A	0.19	144	\$0.00
34-3E-11.07	(P)AA	0.22	1415	\$227.25
34-3E-11.07	(P)BA	0.41	950	\$284.34
34-3E-11.08	(P)A	0.12	179	\$0.00
34-3E-13.03	N	0.40	215	\$0.00
34-3E-13.04	A N	0.36	405	\$0.00
34-3E-13.04	(P)N	0.10	405	\$29.57
34-3E-14.01	D N	0.13	405	\$0.00
34-3E-14.02	(P)N	0.06	190	\$0.00
34-3E-23.00	A N	0.78	2440	\$1,389.34
34-3E-23.00	B1 N	0.05	1673	\$61.06
34-3E-23.00	B2 N	1.05	1443	\$1,106.06
34-3E-23.00	B3 N	0.33	670	\$161.40
34-3E-23.03	N	0.21	160	\$24.53
34-3E-24.01	(P)N	0.31	655	\$0.00
34-3E-24.03	A-BN	0.54	620	\$0.00
34-3E-24.05	(P)N	0.17	660	\$0.00
Temp Road 13-3BN		0.23	215	\$0.00
Temp Road 23-2N		0.16	230	\$0.00

(5.1) Subtotal \$4,242.17

**Purchaser Operational Maintenance**

**Move In**

Equipment	No Move	Cost/ Units x in x	Dist 50 Mi x	Sub- Factor	= total
Motor Grader:	1	6	\$414.00	0.63	\$1,564.92
Back Hoe:	1	12	\$308.00	0.63	\$2,328.48
Loader:			\$414.00	0.63	\$0.00
Water Truck:	1	12	\$96.00	0.63	\$725.76
Dump Truck:			\$91.00	0.63	\$0.00
Excavator:			\$414.00	0.63	\$0.00
Roller:	1	6	\$414.00	0.63	\$1,564.92

(5.2A) Total \$6,184.08

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

	Miles	x Cost/Mi	= Subtotal
4.62	\$383.34	\$1,771.03	

(5.2B) Total \$1,771.03

**Grading (Includes Ditches and Shoulders)**

Miles	x Cost/Mi	x Freq	= Subtotal
Blade w/ Ditch:	3.57	\$708.54	1 \$2,529.49
Blade w/o Ditch:	7.56	\$434.19	1 \$3,282.48

(5.2C) Total \$5,811.96

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

Type Equipment	No Slides /Slumps	Hours x Each x	Equip Cost	= Subtotal
Grader:	0	0	\$142.72	\$0.00
Loader:	0	0	\$102.93	\$0.00
Backhoe:	0	0	\$87.60	\$0.00

(5.2D) Total \$0.00

**Dust Palliative (Water)**

Spreading Hours

No Miles	/	Freq MPH	=	Truck Hours	x	Days	x	/Day	=	Hours
6.47		5		1.3		135		1		176
Load & Haul =				2.0		135		1		270
Return trip =				1.0		135		1		135
Total Hours =				581						

Truck Cost: \$79.82/Hr. x 580.5 Hours = \$46,335.51

(5.2E) Total \$46,335.51

**Surface Repair (Aggregate)**

Quarry / Source Name: 1.5" Minus Cobleigh  
 Production Cost: 600.0 CY x \$15.00/CY = \$9,000.00  
 Haul to Stockpile:  
 Grades > 15% 600.0 CY x ((\$1.78/CY x 0.00 Mi) + \$0.59) = \$0.00  
 Grades <= 15% 600.0 CY x ((\$0.89/CY x 0.00 Mi) + \$0.59) = \$0.00  
 State / Co Roads 600.0 CY x ((\$0.39/CY x 0.00 Mi) + \$0.59) = \$0.00  
 Load from Stockpile: 600.0 CY x \$1.06/CY = \$636.00  
 Haul from Stockpile:  
 Grades > 15% 600.0 CY x ((\$1.78/CY x 0.00 Mi) = \$0.00  
 Grades <= 15% 600.0 CY x ((\$0.89/CY x 9.00 Mi) = \$4,806.00  
 State / Co Roads 600.0 CY x ((\$0.39/CY x 7.00 Mi) = \$1,638.00  
 Process with Grader: 600.0 CY x \$0.90/CY = \$540.00  
 Compaction: 600.0 CY x \$1.10/CY = \$660.00  
 SubTotal \$17,280.00

(5.2F) Total \$17,280.00

**Other**

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

(5.2G) Total \$0.00

**Decommissioning**

**Ripping**

Road Number	Ripping Cost	x	(NumSta or CuYds)	= Total
Temp Road 13-3B	\$30.70	x	12.14	= \$372.70
Temp Road 23-2	\$30.70	x	8.45	= \$259.42

(Ripping) Total \$632.11

**Pipe Removal**

Road Number	Qty Ditch Pipes	Cyd < 15' Fill	Cyd > 15' Fill	Qty Hauling	= Total
34-3E-10.04(P)	(2x\$107.81)	(0x\$2.66)	(0x\$4.45)	(2x\$76.44)	= \$368.50
(Pipe Removal) Total					\$368.50

**Other Costs**

Road	Cubic Yds	Qty	Qty
------	-----------	-----	-----

Number	Pullback Material		Waterbars		Earthen Barriers	=	Total
34-3E-03.02	(0x\$1.80)	+	(6x\$55.93)	+	(1x\$167.80)	=	\$503.38
34-3E-03.03	(0x\$1.80)	+	(2x\$55.93)	+	(1x\$167.80)	=	\$279.66
34-3E-10.04(P)	(0x\$1.80)	+	(10x\$55.93)	+	(1x\$167.80)	=	\$727.10
34-3E-11.06(P)	(0x\$1.80)	+	(9x\$55.93)	+	(1x\$167.80)	=	\$671.17
34-3E-11.08(P)	(0x\$1.80)	+	(5x\$55.93)	+	(1x\$167.80)	=	\$447.45
34-3E-14.02(P)	(0x\$1.80)	+	(2x\$55.93)	+	(1x\$167.80)	=	\$279.66
34-3E-23.03	(0x\$1.80)	+	(10x\$55.93)	+	(1x\$167.80)	=	\$727.10
34-3E-24.01B(P)	(0x\$1.80)	+	(15x\$55.93)	+	(1x\$167.80)	=	\$1,006.75
34-3E-24.05(P)	(0x\$1.80)	+	(6x\$55.93)	+	(1x\$167.80)	=	\$503.38
Temp Road 13-3B	(0x\$1.80)	+	(11x\$55.93)	+	(1x\$167.80)	=	\$783.03
Temp Road 23-2	(0x\$1.80)	+	(7x\$55.93)	+	(1x\$167.80)	=	\$559.31

(Other Cost) Total \$6,487.99

### Time & Equipment

34-3E-03.02	Seeding and Mulching: 0.35 AC @ \$900.00/AC	=	\$315.00
34-3E-10.01	A-D Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-10.01	A-D Dump Truck 10 cy : 2 hr @ \$75.47/hr	=	\$150.94
34-3E-10.04(P)	Seeding and Mulching: 0.6 AC @ \$900.00/AC	=	\$540.00
34-3E-11.06(P)	Seeding and Mulching: 0.5 AC @ \$900.00/AC	=	\$450.00
34-3E-11.08(P)	Seeding and Mulching: 0.3 AC @ \$900.00/AC	=	\$270.00
34-3E-14.02(P)	Seeding and Mulching: 0.15 AC @ \$900.00/AC	=	\$135.00
34-3E-23.03	Seeding and Mulching: 0.25 AC @ \$900.00/AC	=	\$225.00
34-3E-24.01B(P)	Seeding and Mulching: 0.75 AC @ \$900.00/AC	=	\$675.00
34-3E-24.05(P)	Seeding and Mulching: 0.4 AC @ \$900.00/AC	=	\$360.00
Temp Road 13-3B	Seeding and Mulching: 0.4 AC @ \$900.00/AC	=	\$360.00
Temp Road 23-2	Seeding and Mulching: 0.3 AC @ \$900.00/AC	=	\$270.00
34-3E-03.02	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-10.04(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-11.06(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-11.08(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-14.02(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-23.03	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-24.01B(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
34-3E-24.05(P)	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
Temp Road 13-3B	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76
Temp Road 23-2	Excavator -Small (1.5 CY): 2 hr @ \$99.88/hr	=	\$199.76

(5.2H) Decommissioning Total

\$13,436.90

**EXHIBIT C-1**  
**SHEET 1 OF 1**

**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**MEDFORD DISTRICT**  
**LODGEPOLE TIMBER SALE**  
**TRACT NO. ORM05-TS-2020.0012**

Exhibit No.	Description
C-1	TITLE SHEET
C-2	ROAD LOCATION MAPS
C-3	ROADSIDE VEGETATION MAINTENANCE MAPS
C-4	ESTIMATE OF QUANTITIES
C-5	SPECIFICATION SHEET
C-6	TYPICAL ROAD DATA
C-7	ROAD SURFACING & CURVE WIDENING SECTIONS
C-8	TYPICAL TURNOUT SECTION
C-9	ROAD JUNCTION SURFACING APRON SECTION
C-10	CULVERT LIST
C-11	CULVERT INSTALLATION DETAILS
C-12	CULVERT BAND DETAILS
C-13	ARMORED WATER DIP CONSTRUCTION DETAILS
C-14	DRAINAGE & EROSION CONTROL DETAILS
C-15	ROADSIDE BRUSHING DETAILS
C-16	ROADSIDE VEGETATION MAINTENANCE DETAILS
C-17	TYPICAL ROAD CAMOUFLAGE
C-18	TYPICAL DECOMMISSIONING DETAILS
C-19	34-3E-10.04 PLAN & PROFILE
C-20	34-3E-11.04 PLAN & PROFILE
C-21	35-3E-11.05 PLAN & PROFILE
C-22	35-3E-11.06 PLAN & PROFILE
C-23	34-3E-11.07 PLAN & PROFILE
C-24	34-3E-11.08 PLAN & PROFILE
C-25	34-3E-13.04 B PLAN & PROFILE
C-26	34-3E-14.02 PLAN & PROFILE
C-27	34-3E-23.00 B PLAN & PROFILE
C-28	34-3E-24.01 B PLAN & PROFILE
C-29	34-3E-24.05 PLAN & PROFILE
C-30	RENOVATION & CONSTRUCTION WORK LIST
C-31	ROAD SPECIFICATIONS
C-32	SPECIAL PROVISIONS

REV. NO. DESCRIPTION DATE APPROV.  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT - MEDFORD, OREGON

**LODGEPOLE T.S.**  
**TITLE SHEET**

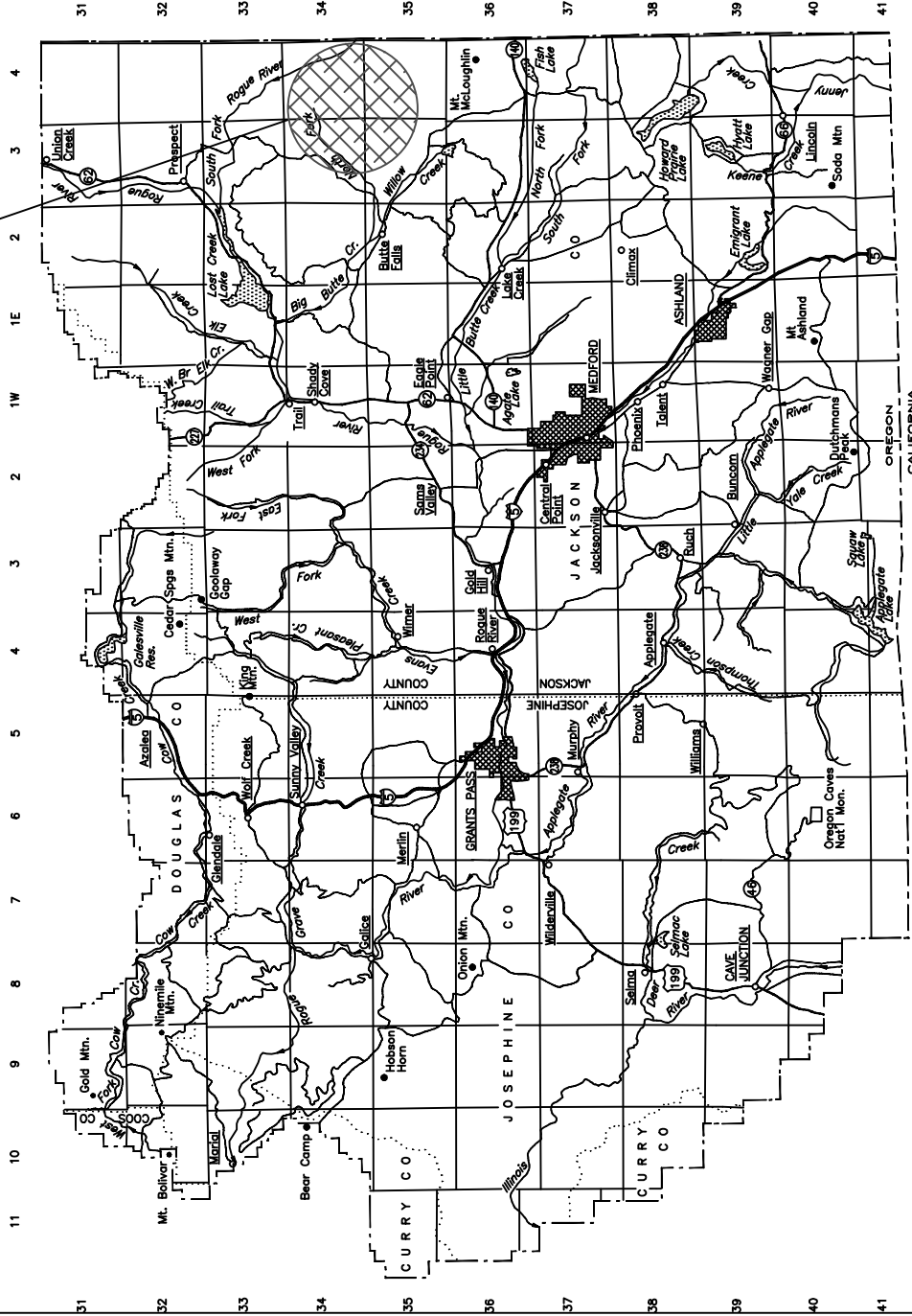
DESIGNED *Jeff Brown*  
REVIEWED *Rich Schaff*

APPROVED *[Signature]*  
DRAWN JAB  
DATE JULY 2020  
SCALE AS SHOWN  
SHEET 1 OF 1

Digitally signed by JARED NICHOL  
Date: 2020.07.30 00:09:42 -0700

DRAWING NO. ORM05-TS-2020.0012-C1

**PROJECT LOCATION**








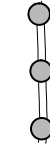

**ALWAYS**  
**THINK**  
**SAFETY**

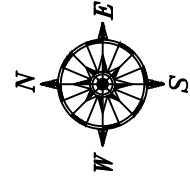
# EXHIBIT C-2

## SHEET 1 OF 3

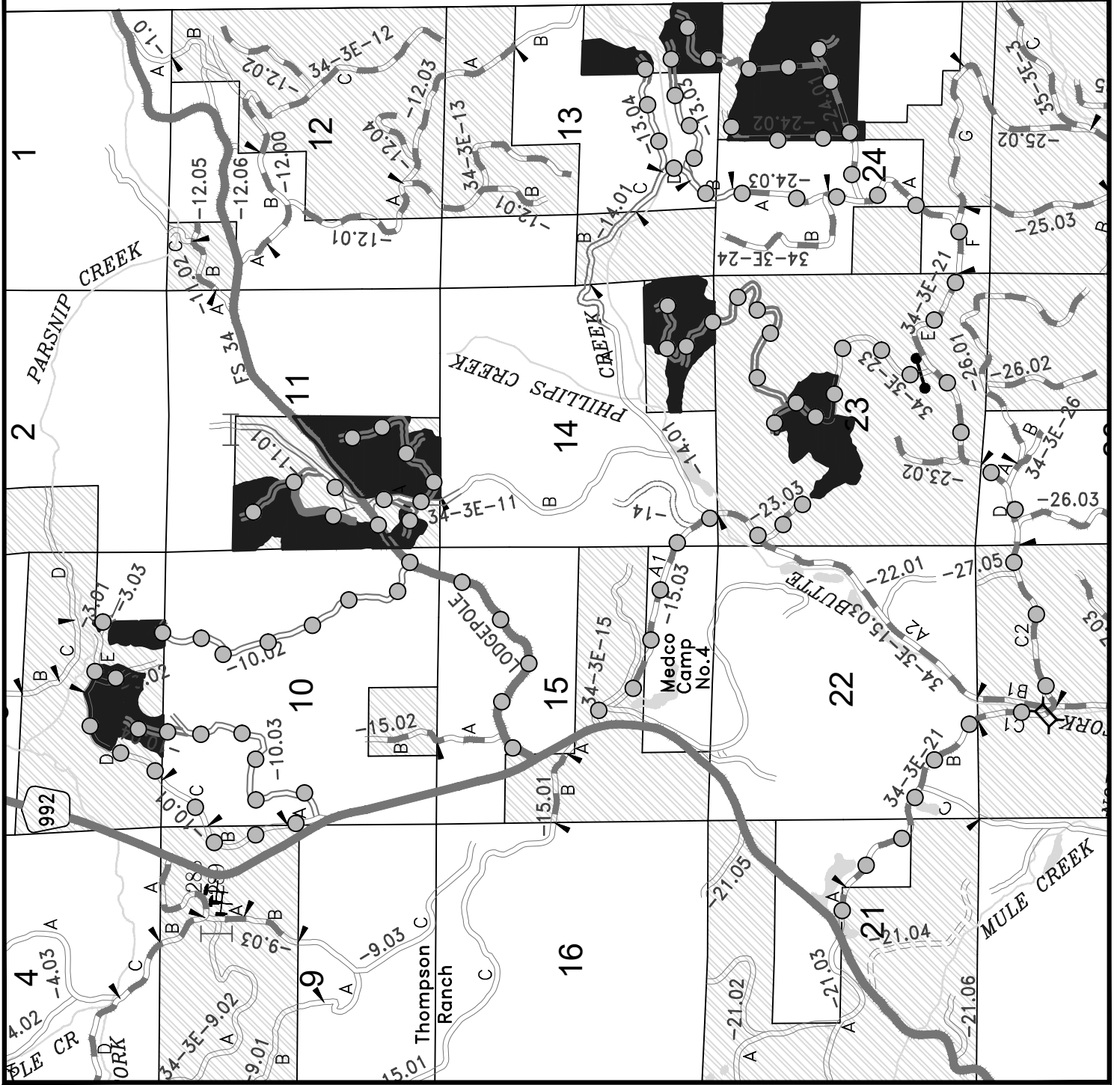
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### SALE AREA MAP

-  BLM OWNERSHIP
-  T.S. UNITS
-  BST ROAD
-  ROCKED ROAD
-  NATURAL SURFACE ROAD
-  PRIMITIVE ROUTE
-  LOGEPOLE HAUL ROUTES



ALWAYS  
**THINK**  
SAFETY















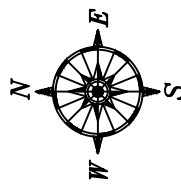
# EXHIBIT C-2

## SHEET 2 OF 3

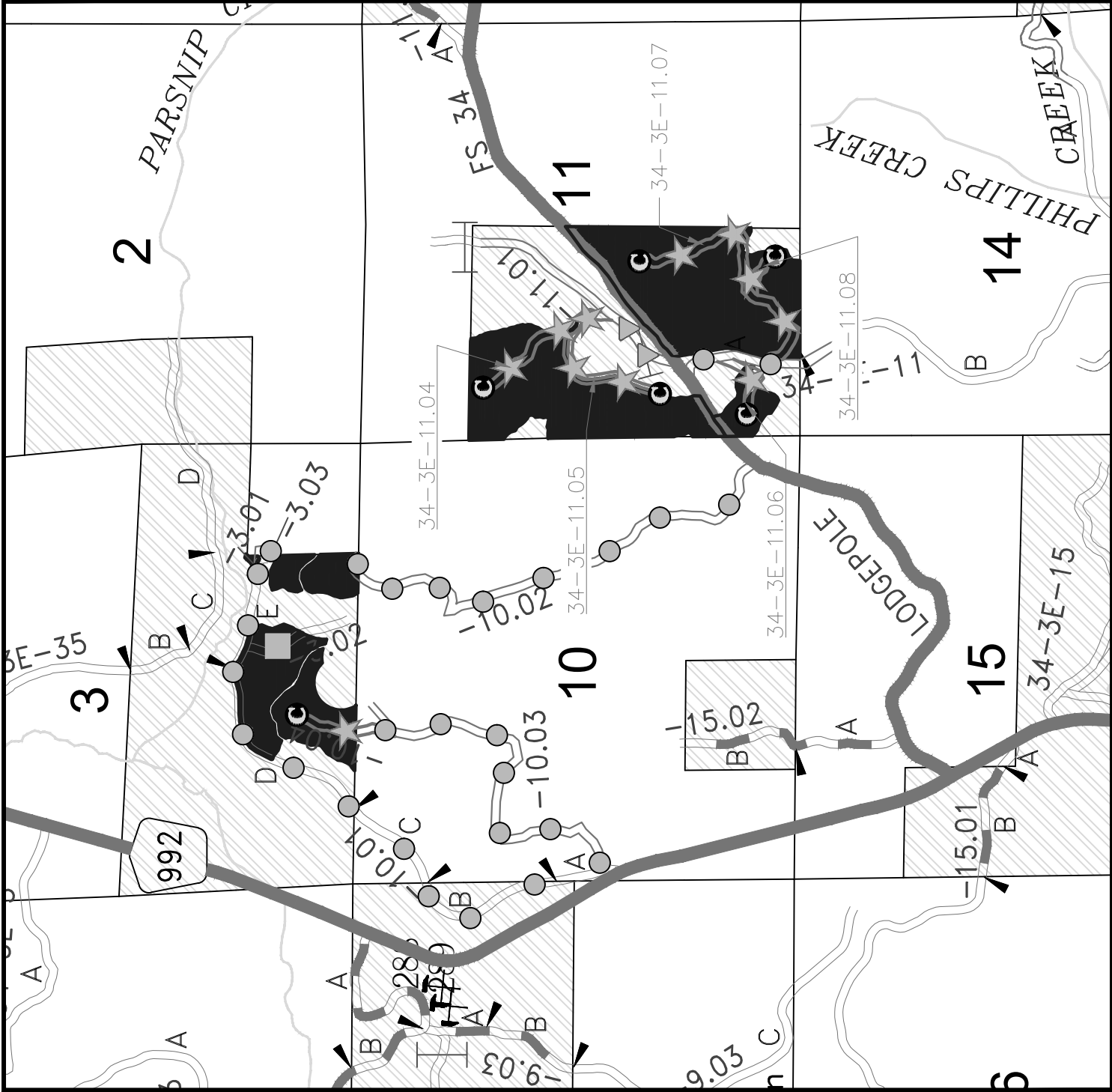
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROAD RENOVATION MAP

-  BLM OWNERSHIP
-  T.S. UNITS
-  BST ROAD
-  ROCKED ROAD
-  NATURAL SURFACE ROAD
-  PRIMITIVE ROUTE
-  ROAD TO BE RENOVATED
-  ROAD TO BE RENOVATED and SURFACED
-  ROAD TO BE IMPROVED
-  TEMPORARY ROAD CONSTRUCTION
-  PERMANENT ROAD CONSTRUCTION
-  CONSTRUCT LANDING



ALWAYS  
**THINK**  
SAFETY















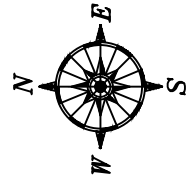
# EXHIBIT C-2

## SHEET 3 OF 3

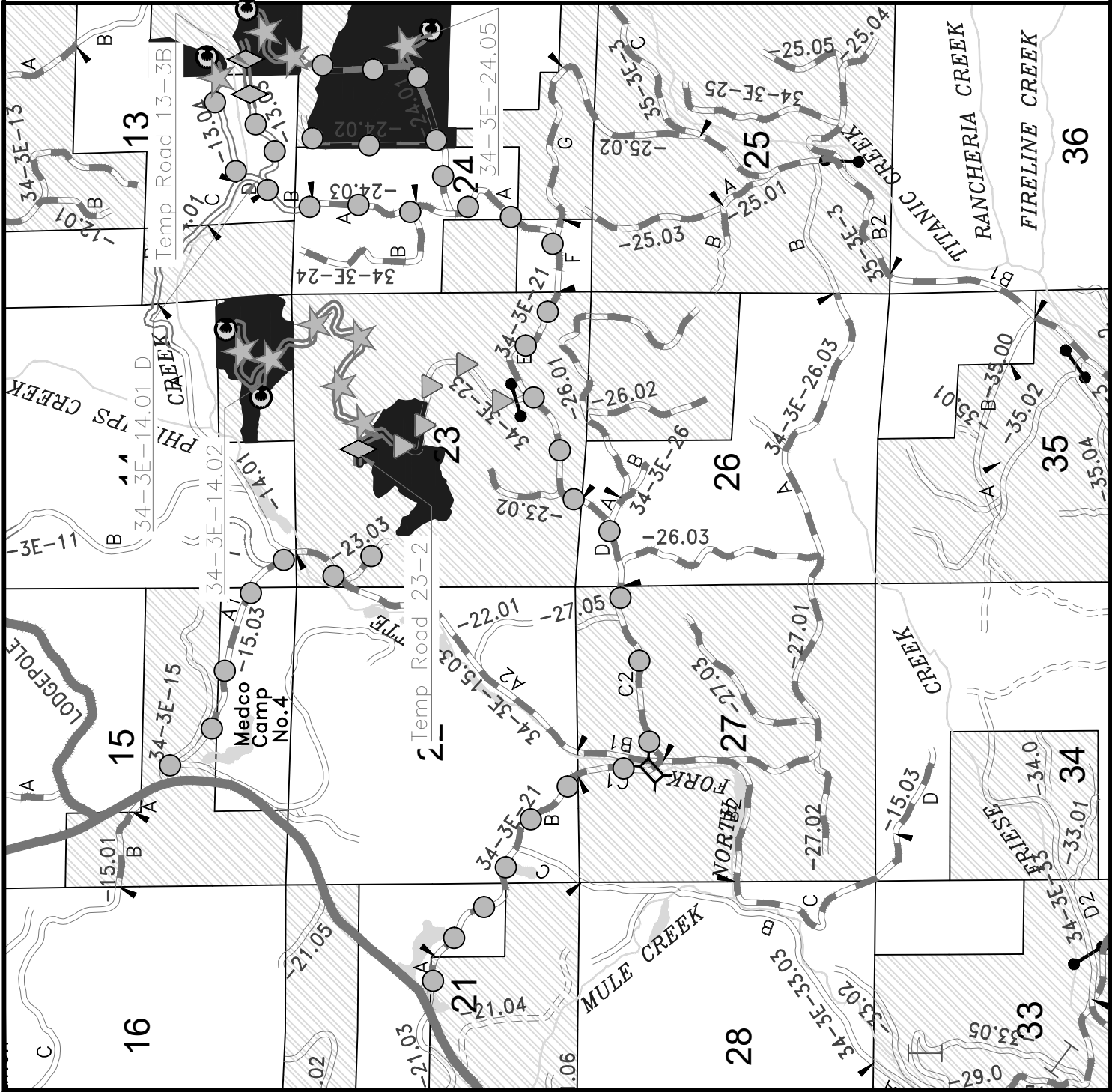
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

# ROAD RENOVATION MAP

-  BLM OWNERSHIP
-  T.S. UNITS
-  BST ROAD
-  ROCKED ROAD
-  NATURAL SURFACE ROAD
-  PRIMITIVE ROUTE
-  ROAD TO BE RENOVATED
-  ROAD TO BE RENOVATED and SURFACED
-  ROAD TO BE IMPROVED
-  TEMPORARY ROAD CONSTRUCTION
-  PERMANENT ROAD CONSTRUCTION
-  CONSTRUCT LANDING



ALWAYS  
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SAFETY












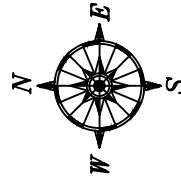
# EXHIBIT C-3

## SHEET 1 OF 3

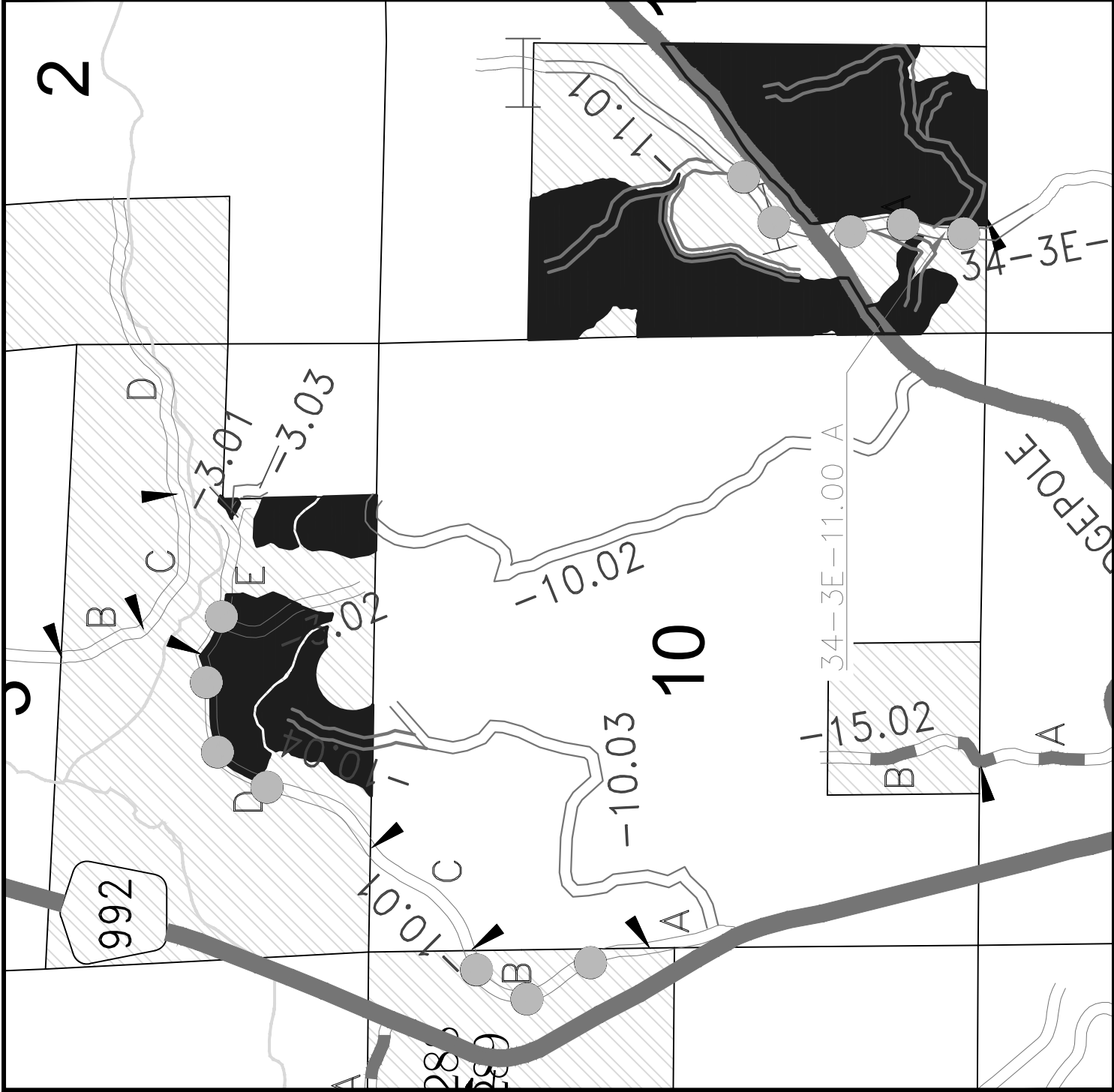
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROADSIDE VEGETATION MAINTENANCE MAP

- BLM OWNERSHIP 
- T.S. UNITS 
- BST ROAD 
- ROCKED ROAD 
- NATURAL SURFACE ROAD 
- PRIMITIVE ROUTE 
- ROADSIDE VEGETATION MAINTENANCE (See Road Renovation Worklist Exhibit C-30 for beginning and ending mileposts) 



ALWAYS  
**THINK**  
SAFETY










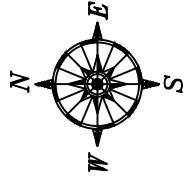
# EXHIBIT C-3

## SHEET 2 OF 3

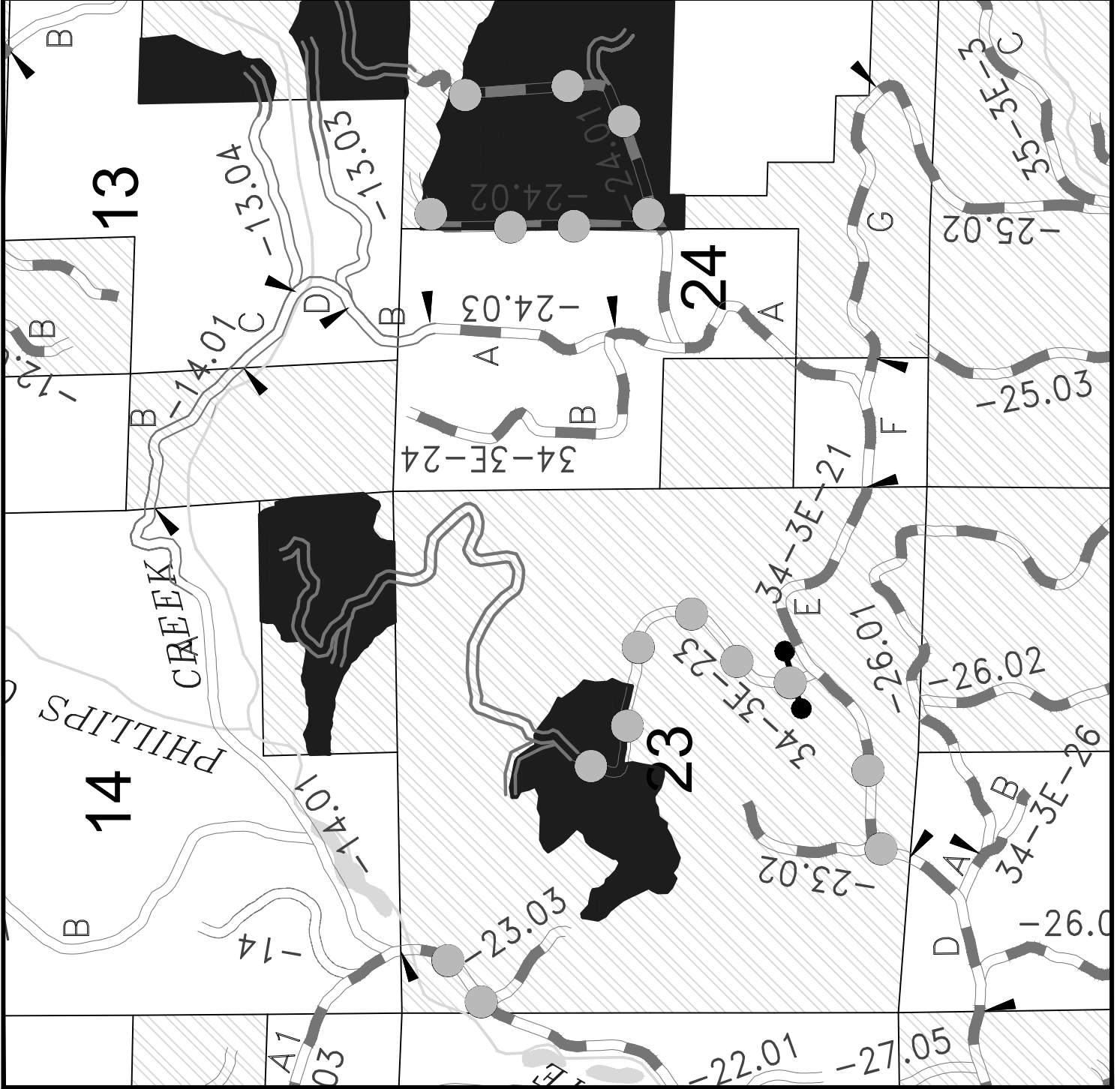
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROADSIDE VEGETATION MAINTENANCE MAP

-  BLM OWNERSHIP
-  T.S. UNITS
-  BST ROAD
-  ROCKED ROAD
-  NATURAL SURFACE ROAD
-  PRIMITIVE ROUTE
-  ROADSIDE VEGETATION MAINTENANCE (See Road Renovation Worklist Exhibit C-30 for beginning and ending mileposts).



ALWAYS  
**THINK**  
SAFETY

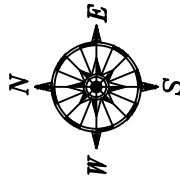


# EXHIBIT C-3 SHEET 3 OF 3

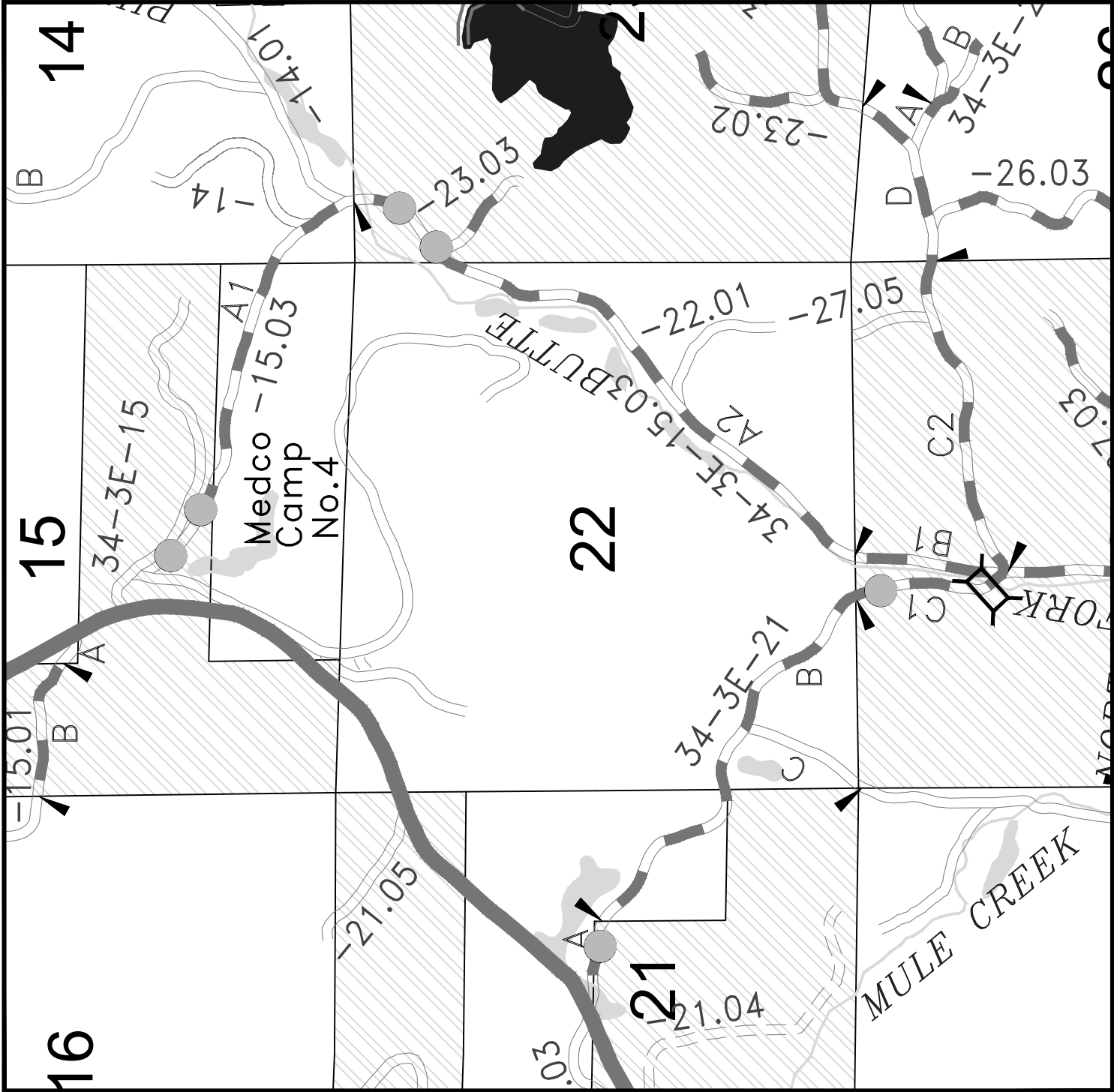
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

## ROADSIDE VEGETATION MAINTENANCE MAP

- BLM OWNERSHIP
- T.S. UNITS
- BST ROAD
- ROCKED ROAD
- NATURAL SURFACE ROAD
- PRIMITIVE ROUTE
- ROADSIDE VEGETATION MAINTENANCE (See Road Renovation Worklist Exhibit C-30 for beginning and ending mileposts).




ALWAYS  
**THINK**  
SAFETY





ROAD NUMBER	FROM	TO	LENGTH**	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE				ROAD RENOVATION		ROAD IMPROVEMENT	NEW CONSTRUCTION - PERMANENT	NEW CONSTRUCTION - TEMPORARY	CONSTRUCT ARMORED WATER DIPS****	AGGREGATE**			SOIL STABILIZATION	ROADSIDE VEGETATION MAINTENANCE	ROADSIDE BRUSHING - SCATTER	ROADSIDE BRUSHING - CHIP	REMOVE BARRICADE	CONSTRUCT BARRICADE	CONSTRUCT WATER BARS	FULL DECOMMISSION										
					ROCK	COMMON	18" L.F.	24" L.F.	30" L.F.	36" L.F.	42" L.F.	48" L.F.					400	500	400									500	400	500	400	500	400	500	400	500	400
SPECIFICATION NO.	MP/STA	MP/STA	MILE/STA	ACRE	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	MILE	STA	STA	EA	C.Y.	C.Y.	EA	ACRE	MILE	MILE	MILE	EA	EA	EA	EA	EA	EA	EA							
34-3E-23.00 (O)	0.78	1.17	0.39	200	300	300	400	400	400	400	400	500	300	300	300	500	900	1200	1400	1800	2100	2100	2100	500	1700	1700	1700	1700	1700	0.39							
34-3E-23.03	0.00	0.21	0.21									0.21							0.95					1	1	1	1	1	1	9							
34-3E-24.00 A	0.00	0.60	0.60									0.60										0.60															
34-3E-24.01 A	0.00	0.94	0.94	0.85								0.94							0.45			0.94	0.59														
34-3E-24.01 B (NEW)	0+00	16+17	16+17	1.50	358							0.53	16+17						0.75			0.53			1	1	1	1	14								
34-3E-24.02	0.00	0.53	0.53	0.80								0.54							0.40			0.54															
34-3E-24.03 A-B	0.00	0.54	0.54									0.54							0.40																		
34-3E-24.05	0+00	8+82	8+82	0.80	516		34	42				0.54	8+82						0.40																		
FS 34	0.00	1.40	1.40																0.40					1	1	1	1	1	7								
Temp Road 13-3B	0+00	12+14	12+14	0.85										12+14					0.45							1	1	1	10								
Temp Road 23-2	0+00	8+45	8+45	0.60										8+45					0.30							1	1	1	7								
PAGE 1 TOTALS			13.95	22.20	3947	186	84				10.28	0.15	18+583			4	16851	221	7	11.20	2.78	9.30	0.98	4	6	32											
PAGE 2 TOTALS			5.47	5.40	874	34	42			2.82			24+99	20+59			1	3.70	1.12	3.70	1.12	2.08	0.74	1	5	47	0.39										
PROJECT TOTALS			19.42	27.60	4821	220	126			13.10	0.15	21+082	20+59			4	16851	221	8	14.90	3.90	11.38	1.72	5	11	79	0.39										



**\* FOR INFORMATIONAL USE ONLY,  
QUANTITIES SHOWN ARE NOT PAY ITEMS.**

\*\* Indicate gradation.  
ITEM 900      ITEM 1200

SIZE	GRADE	SIZE	GRADE
4 inch (A)	1 1/2inch	1 inch	C.C-1
3 inch (B)	1 inch	3/4inch	D.F
2 inch (C)	3/4inch		E.E-1
1 1/2 inch (D)			

\*\*\* Total length includes permanent and temporary roads to be constructed.  
\*\*\*\*Armored water dip aggregate quantities are accounted for in the aggregate column under 4" minus grade A as the entire road is being surfaced with this gradation.

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

**ESTIMATE OF QUANTITIES\***

DRAWN: JAB

DATE: JULY 2020

DRAWING NO. ORM05-TS-2020.0012-C4

SCALE: NONE

SHEET: 2 OF 2

ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH OR MILE OR STATION	TYPICAL SECTION TYPE	ALIGNMENT MAXIMUM DEGREE OF CURVE	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH			SURFACING (4)				REMARKS	
						SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND TOE CUT	EXISTING ROAD(S) L	EXISTING ROAD(S) R	BASE COURSE		SURFACE COURSE			
													MINIMUM WIDTH	COMP. DEPTH	TYPE (2)	GRADING		MINIMUM WIDTH
34-3E-03.01	0.00	0.06	0.06	3		15	0											
34-3E-03.02	0.00	0.15	0.15	3		15	0			10	10							Road improvement - Outslope
34-3E-03.03	0.00	0.06	0.06	3		15	0											
34-3E-10.01 A	0.00	0.13	0.13	4		15	0											Roadside Vegetation Maintenance
34-3E-10.01 B-D	0.13	1.42	1.29	3		15	0			6	6							
34-3E-10.02	0.00	1.16	1.16	6		15	3											
34-3E-10.03 A	0.00	0.70	0.70	4		15	0											
34-3E-10.03 B	0.70	0.92	0.22	3		15	0											
34-3E-10.04	0+00	1+40	1+40	3		16	0			10	10							New Construction - Outslope Left
	1+40	11+82	10+42	5		16	3			10	10							New Construction - Crowned
34-3E-11.00 A	0.00	0.30	0.30	4		15	0			6	6							Roadside Vegetation Maintenance
34-3E-11.01 A	0.00	0.18	0.18	3		15	0			6	6							Surfacing and Roadside Vegetation Maintenance
34-3E-11.04	0+00	21+44	21+44	4		16	0			10	10							New Construction and Surfacing - Outslope Left
34-3E-11.05	0+00	18+70	18+70	4		16	0			10	10							New Construction and Surfacing - Outslope Right
34-3E-11.06	0+00	10+13	10+13	3		16	0			10	10							New Construction and Surfacing - Outslope Right
34-3E-11.07	0+00	33+50	33+50	4		16	0			10	10							New Construction and Surfacing - Outslope Right
34-3E-11.08	0+00	6+10	6+10	3		16	0			10	10							New Construction - Outslope Right
34-3E-13.03	0.00	0.34	0.34	4		15	0											New Construction and Surfacing - Outslope Right
34-3E-13.04 A	0.00	0.36	0.36	4		15	0											New Construction - Outslope Right

**NOTES**

- EXTRA SUBGRADE WIDTHS TO BE SHOWN ON SHEET FOR ALL CUTS AND FILLS. MINIMUM CUTS SHALL BE 4 FT. AND FILLS SHALL BE 6 FT. WITHIN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS:  
WHEN THE DEGREE OF CURVE EQUALS  
7-21 ADD 4 FT.  
22-38 ADD 2 FT.  
39-44 ADD 4 FT.  
45-64 ADD 4 FT.  
65-96 ADD 5 FT.

MATERIALS	CUT SLOPES	FILL SLOPES
COMMON	1:1	1 1/2:1
SOFT ROCK & SHALE	1/2:1	1 1/2:1
SOLID ROCK	1/2:1	ANGLE OF REPOSE EXCEEDING 60%.

FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES

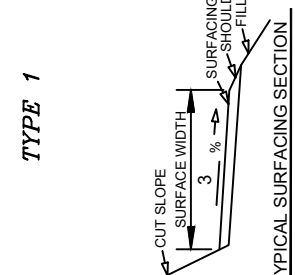
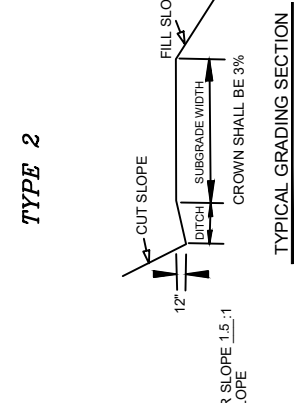
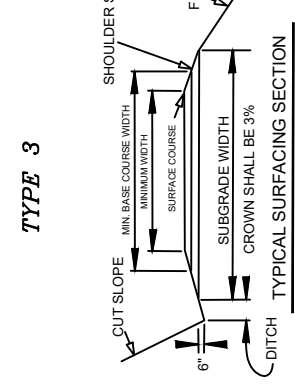
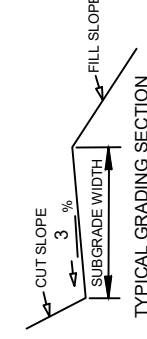
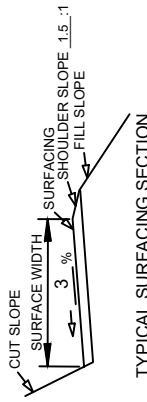
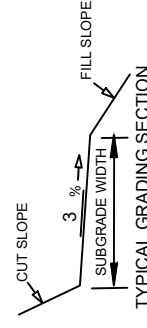
EXCEEDING 60%.

- SURFACING TYPE  
A. PIT RUN ROCK MATERIAL  
B. GRID ROLLED ROCK MATERIAL  
C. CRUSHED ROCK MATERIAL  
D. CRUSHED ROCK MATERIAL  
E. BITUMINOUS SURFACE TREATMENT (BST)  
F. NATURAL

- TURNOUTS  
A. WIDTH 10 FT. IN ADDITION TO SUBGRADE WIDTH, OR AS SHOWN ON THE ROAD PLANS.  
B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.

- SURFACING TURNOUTS: CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH SEE SUBSECTION 200



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

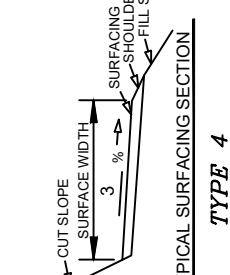
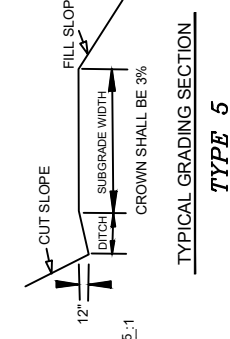
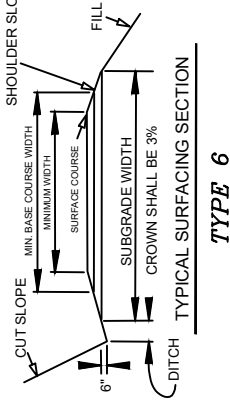
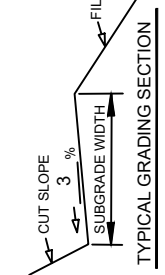
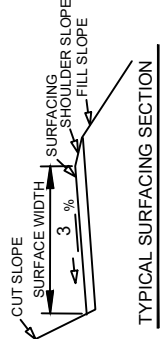
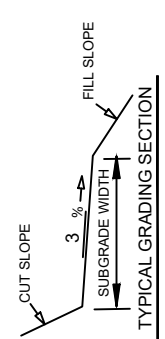
**SPECIFICATION SHEET**

DRAWN: JAB	SCALE: NONE
DATE: JULY 2020	SHEET 1 OF 2
DRAWING NO.	ORM05-TS-2020.0012-C5

ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH OR MILE STATION	TYPICAL SECTION TYPE	ALIGNMENT MAXIMUM DEGREE OF CURVE	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH			SURFACING (4)				REMARKS	
						SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND TOE FILL	EXISTING ROAD(S) L R	BASE COURSE		SURFACE COURSE				
												MINIMUM WIDTH	COMP. DEPTH	TYPE (2)	GRADING	MINIMUM WIDTH		COMP. DEPTH
34-3E-13.04 B	0+00	5+39	5+39	6		15	3			10	10	15'	8"	C	14'	4'	D	New Construction and Surfacing - Crowned
34-3E-14.01 D	0.00	0.13	0.13	4		15	0											New Construction - Outslope Left
34-3E-14.02	0+00	3+00	3+00	3		15	0			10	10							Roadside Vegetation Maintenance
34-3E-15.03	A1-A4	0.00	1.22	6		15	3				6	6						Roadside Vegetation Maintenance
34-3E-21.00 A-F	0.00	3.35	3.35	6		15	3				6	6						Roadside Vegetation Maintenance
34-3E-23.00 A	0.00	0.30	0.30	4		15	0				6	6						Roadside Vegetation Maintenance
	0.30	0.78	0.48	3		15	0				6	6						Roadside Vegetation Maintenance
34-3E-23.00 B	0+00	46+95	46+95	4		16	0			10	10	15'	12"	C				New Construction and Surfacing - Outslope Left
	46+95	75+75	28+80	6		16	3			10	10	15'	12"	C				New Construction and Surfacing - Crowned
34-3E-23.03	0.00	0.21	0.21	4		15	0											
34-3E-24.00 A	0.00	0.60	0.60	4		15	0											
34-3E-24.01 A	0.00	0.94	0.94	4		15	0											Roadside Vegetation Maintenance
34-3E-24.01 B	0+00	16+17	16+17	3		16	0			10	10							New Construction - Outslope Left
34-3E-24.02	0.00	0.53	0.53	4		15	0											Roadside Vegetation Maintenance
34-3E-24.03 A-B	0.00	0.54	0.54	4		15	0											
34-3E-24.05	0+00	8+82	8+82	3		16	0			10	10							New Construction - Outslope Right
Temp Road 13-3B	0+00	12+14	12+14	3		14	0			8	8							New Construction - Outslope Left
Temp Road 23-2	0+00	8+45	8+45	3		14	0			8	8							New Construction - Outslope Left

**NOTES**

- EXTRA SUBGRADE WIDTHS ADD TO EACH FILL SHOULDER 1 FT. FOR FILLS OF 1-4 FT. & 2 FT. FOR FILLS OVER 4 FT. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS:  
 1-4 FT. ADD 1 FT.  
 4-6 FT. ADD 2 FT.  
 6-8 FT. ADD 3 FT.  
 8-10 FT. ADD 4 FT.  
 10-12 FT. ADD 5 FT.
- SUBGRADING TYPE  
 A. BITUMIN ROCK MATERIAL  
 B. GRID ROLLED ROCK MATERIAL  
 C. SCREENED ROCK MATERIAL  
 D. CRUSHED ROCK MATERIAL  
 E. GRANULAR  
 F. BITUMIN SURFACE TREATMENT (BST)
- TURNOUTS  
 A. WIDTH 10 FT. IN ADDITION TO SUBGRADE WIDTH OR AS SHOWN ON THE PLANS.  
 B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.
- SURFACING TURNOUTS: CURVE WIDENING AND ROAD APPROACH APPROX. SHALL BE SURFACED.  
 5. CLEARING WIDTH - SEE SUBSECTION 200



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

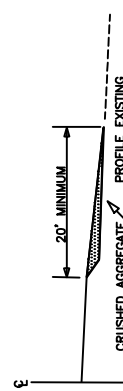
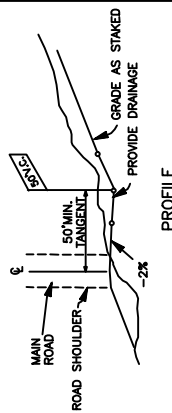
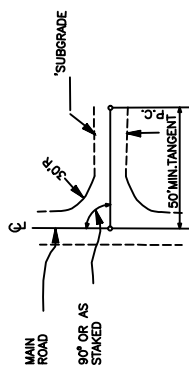
**SPECIFICATION SHEET**

DRAWN: JAB  
DATE: JULY 2020  
DRAWING NO. ORM05-TS-2020.0012-C5

SCALE: NONE  
SHEET 2 OF 2

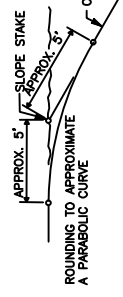
# EXHIBIT C-6 SHEET 1 OF 1 LODGEPOLE T.S.

## TYPICAL ROAD APPROACHES

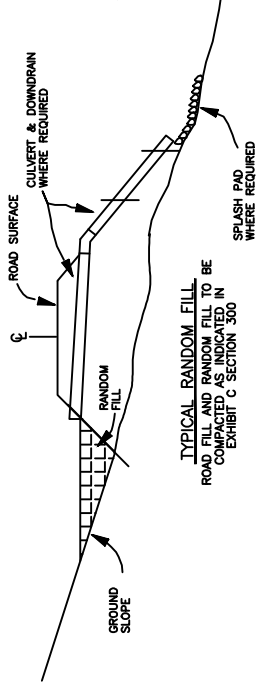


## TYPICAL SURFACING SECTION

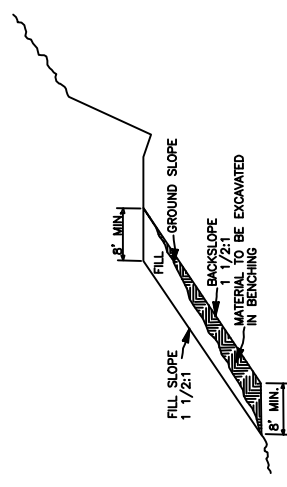
- NOTES:
- THE PROFILE OF EXISTING APPROACH ROADS SHALL BE TAPERED AT THE SHOULDER LINE OF THE MAIN ROADWAY AND SHALL RECEIVE THE SAME WEARING SURFACE.
  - THE CRUSHED AGGREGATE BASE SHALL BE OF THE SAME GRADATION AS USED IN THE ADJACENT ROADWAY.
  - APPROACHES SHALL BE FINISHED WITH THE SAME TREATMENT AS SHOWN FOR THE ADJACENT ROADWAY.



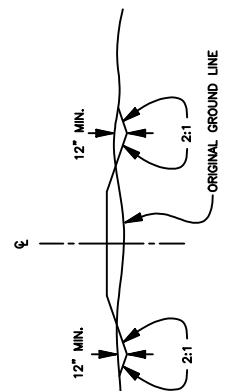
## CUT SLOPE ROUNDING



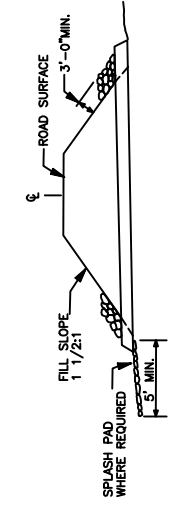
TYPICAL RANDOM FILL TO BE CONSIDERED AS SHOWN IN EXHIBIT C SECTION 300



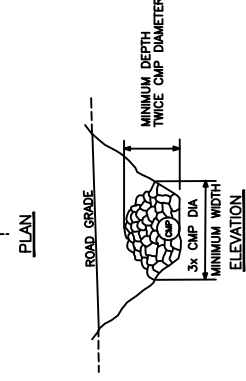
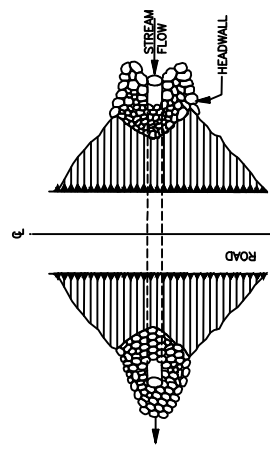
## SPECIAL COMPACTION TYPICAL BENCHING SECTION



## TYPICAL ROAD SECTION FOR TURNPIKE CONSTRUCTION



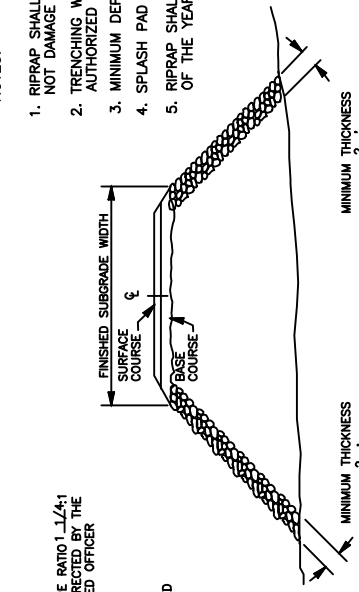
## CROSS SECTION



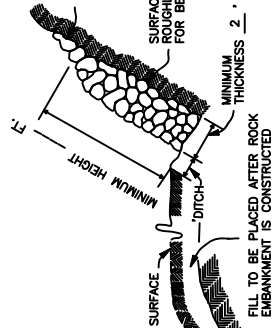
## NOTES:

## RIPRAP AT CULVERTS

- RIPRAP SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT DAMAGE THE CULVERT.
- TRENCHING WILL BE DONE AS REQUIRED BY THE AUTHORIZED OFFICER.
- MINIMUM DEPTH OF SPLASH PADS SHALL BE 1-1/2 FT.
- SPLASH PAD MINIMUM QUANTITY DESIGNATED IN WORK LIST.
- RIPRAP SHALL BE PLACED BEFORE OCTOBER 15TH OF THE YEAR THE CMP IS INSTALLED.



CUT SLOPE RATIO 1 1/4 TO 1 AS DIRECTED BY THE AUTHORIZED OFFICER



## ROCK BLANKETS AND STRUCTURE

## SLOPE PROTECTION ROCK

SEE EXHIBIT C SECTION 1400

\* AS SHOWN IN RENOVATION WORKLIST.

ALWAYS THINK SAFETY

REV. NO.	DESCRIPTION	DATE	APPROVED

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

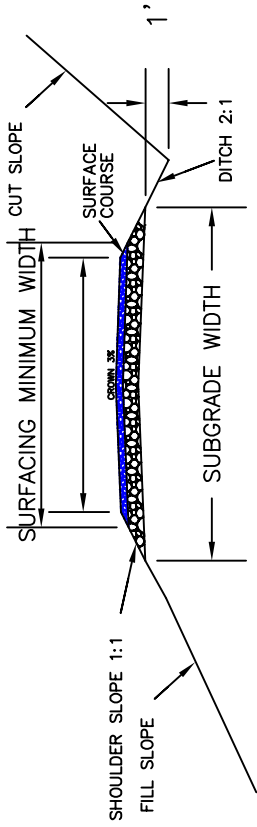
DRAWN	BLM	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1

DRAWING NO. ORM05-15-2020.0012-C6

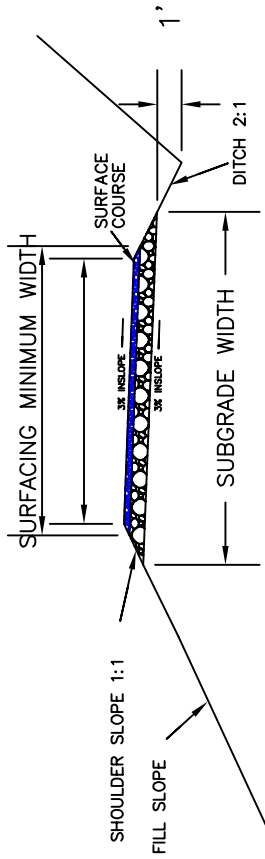
## TYPICAL ROAD DATA



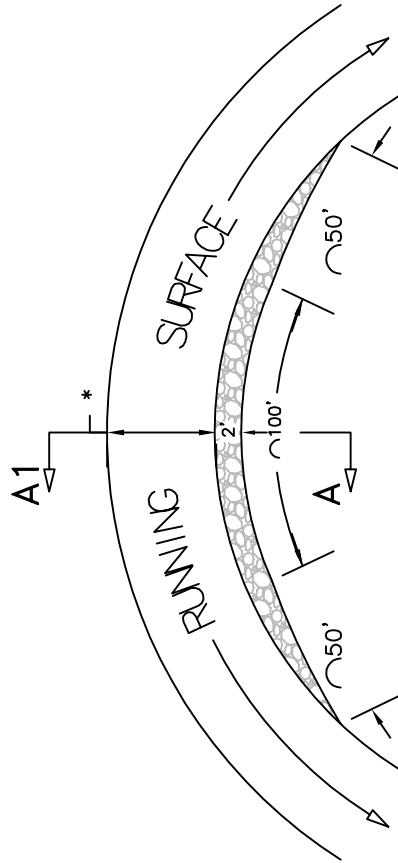
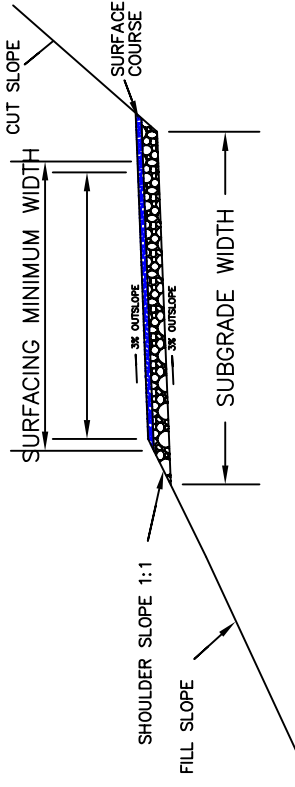
**TYPICAL CROWNED SURFACE**  
EXISTING MIN. BASE COURSE WIDTH



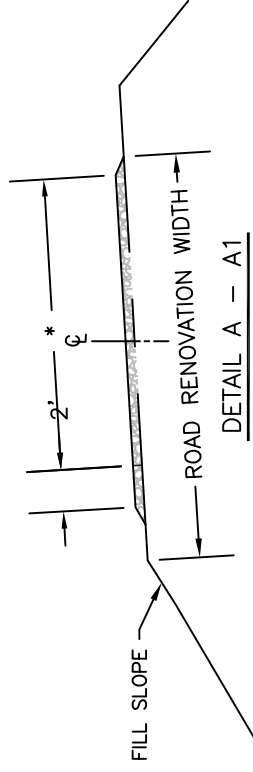
**TYPICAL INSLOPED SURFACE**  
EXISTING MIN. BASE COURSE WIDTH



**TYPICAL OUTSLOPED SURFACE**  
EXISTING MIN. BASE COURSE WIDTH



TYPICAL CURVE WIDENING DETAIL



NOTES:

- SURFACING SHALL BE THE COMPACTED DEPTH AS SPECIFIED IN THE WORKLIST.
- CURVE WIDENING SHALL BE SURFACED TO A LENGTH OF 100' WITH 50' TAPERS.
- APPLY THE WIDENING ON THE INSIDE OF THE CURVES THROUGHOUT THE RADIUS OF THE CORNER TO MATCH THE EXISTING ROAD TEMPLATE.
- MAINTAIN EXISTING CROSS SLOPE AT CURVES

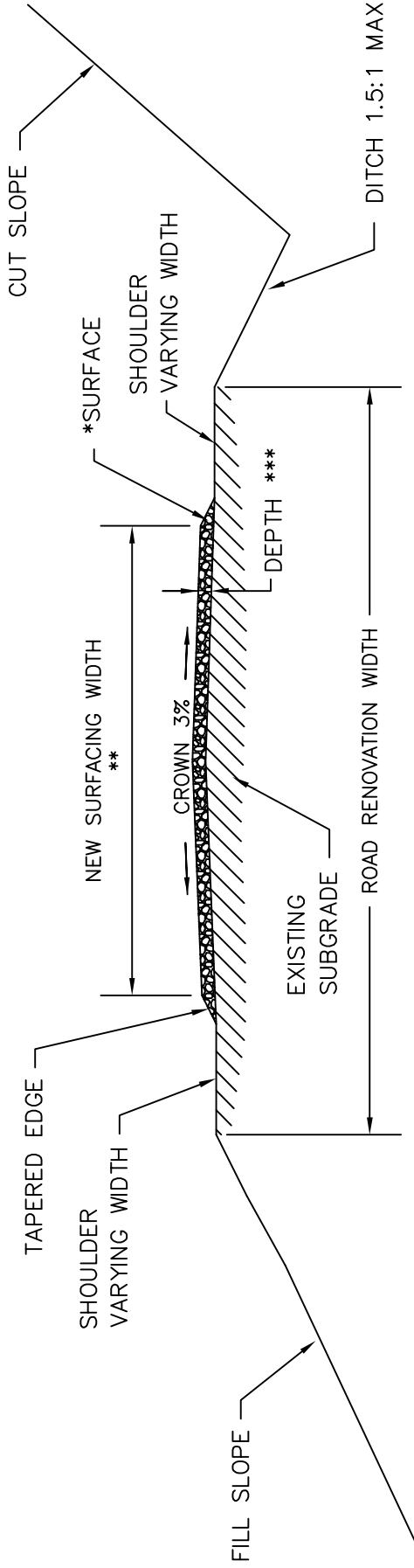
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT — MEDFORD, OREGON

**ROAD SURFACING and  
CURVE WIDENING SECTIONS**

DRAWN: JAB SCALE: AS SHOWN  
DATE: JULY 2020 SHEET 1 OF 1  
DRAWING NO. ORM05-TS-2020.0012-C7

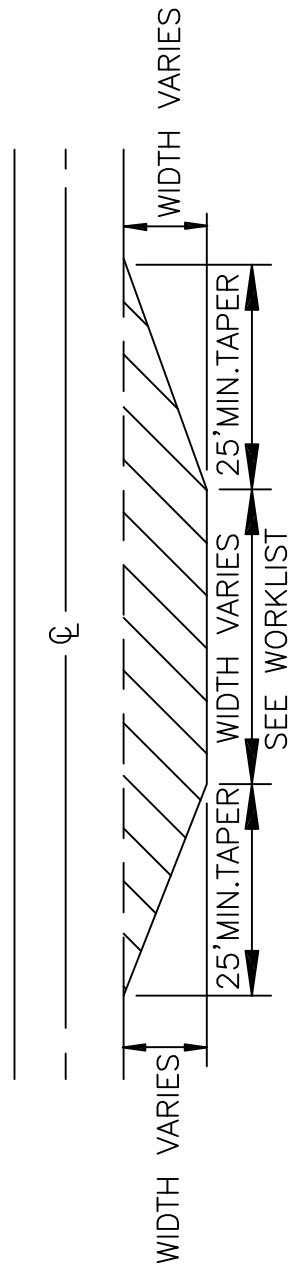
NOTES:

SURFACING WIDTH EDGES SHALL BE TAPERED TO SUBGRADE. TAPERS SHALL BE SMOOTH AND TRANSITION TO SUBGRADE AS TO NOT CAUSE A SUDDEN DROP OR STEEP EDGE.



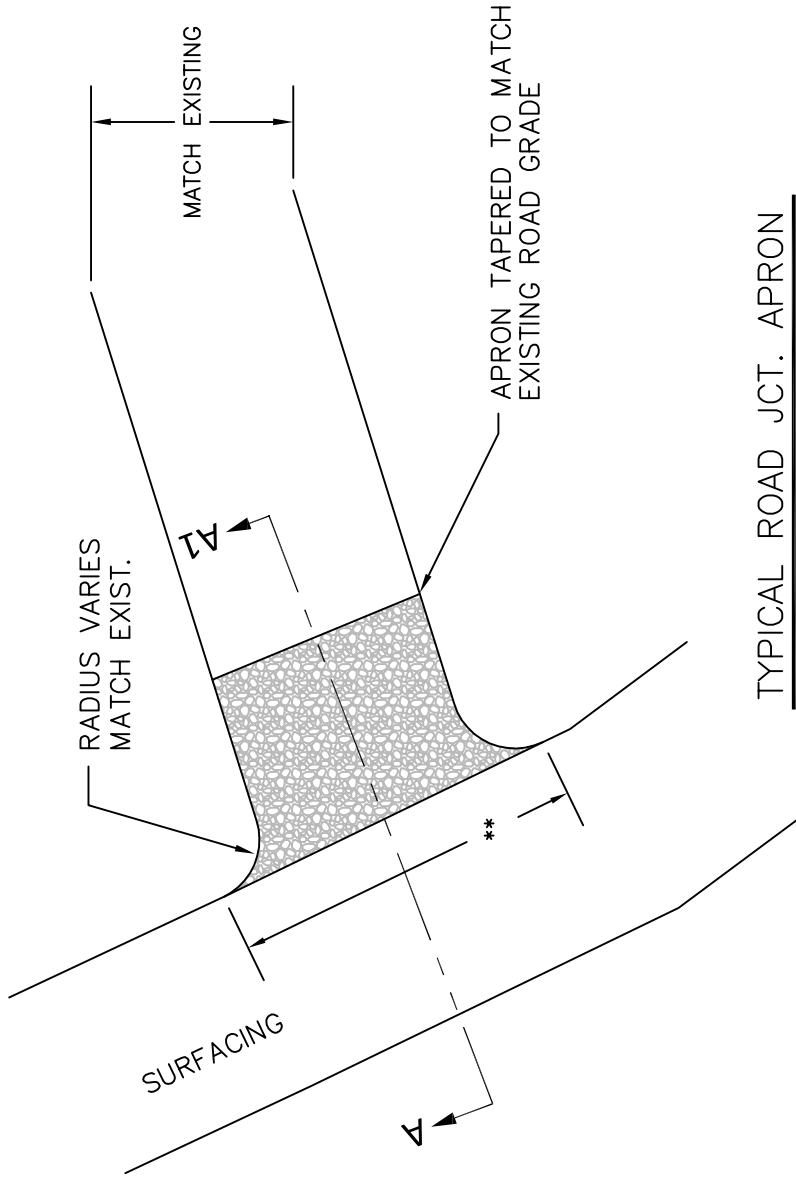
ALWAYS  
**THINK**  
SAFETY

TYPICAL SURFACING SECTION  
DITCHED ROAD

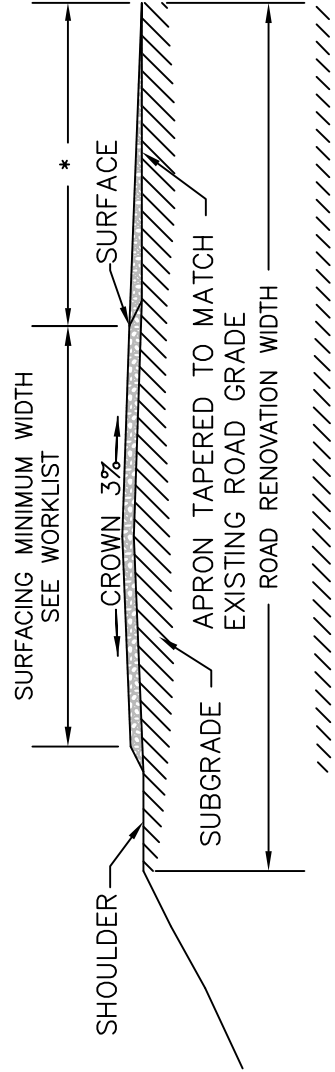


TYPICAL TURNOUT SECTION

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	
<b>TYPICAL TURNOUT SECTION</b>	
DRAWN: JAB	SCALE: AS SHOWN
DATE: JULY 2020	SHEET 1 OF 1
DRAWING NO.	ORM05-TS-2020.0012-C8



TYPICAL ROAD JCT. APRON



TYPICAL SURFACING SECTION A-A1

NOTES:

APRONS SHALL BE PLACED AT THE JUNCTIONS SPECIFIED IN THE WORK LIST.

TAPER DEPTH TO MATCH EXISTING ROAD GRADE.

\*APRON LENGTHS VARY. EACH APRON SHALL BE CONSTRUCTED WITH 10 CUBIC YARDS OF COMPACTED, IN-PLACE AGGREGATE.

\*\*JUNCTION WIDTHS VARY; MATCH EXISTING.

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SAFETY

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

ROAD JUNCTION  
SURFACING APRON SECTION

DRAWN: JAB	SCALE: AS SHOWN
DATE: JULY 2020	SHEET 1 OF 1
DRAWING NO. ORM05-TS-2020.0012-C9	

EXHIBIT C-10  
SHEET 1 OF 1  
LODGEPOLE T.S.

ROAD NO.	DESIGNED					AS BUILT					DOWNSPOUTS					REMARKS
	STATION OR M.P.	SIZE	GAGE	LENGTH	SKEW ANGLE	STATION OR M.P.	SIZE	GAGE	LENGTH	1/2 ROUND	FULL ROUND	RECT. FLUME	SPASH PADS NEEDED YES/NO			
34-3E-10.04	5+25	18"	16	28'	30								YES	Temporary Install		
	9+75	18"	16	34'	30								YES	Temporary Install		
34-3E-11.06	4+33	18"	16	34'	30								YES	Installation Type 3		
34-3E-13.04 B	2+00	18"	16	30'	30								YES	Installation Type 3		
34-3E-23.00 B	50+22	18"	16	32'									YES	Installation Type 3		
	57+71	18"	16	28'									YES	Installation Type 3		
	69+16	24"	14	48'									YES	Installation Type 1		
	73+75	24"	14	36'									YES	Installation Type 3		
34-3E-24.05	0+00	18"	16	34'									NO	Temporary Install		
	4+49	24"	14	42'									YES	Installation Type 1		
PROJECT TOTAL 18" CMP: 220 LF																
PROJECT TOTAL 24" CMP 126 LF																
PROJECT TOTAL SPLASH PADS (No.): 8																

NOTES:

- A. Designed culvert lengths and locations are approximate. Actual lengths and locations will be staked in the field.
- B. Summary of quantities are shown on drawing Exhibit C-4 (Estimate of Quantities).
- C. All culverts and bands shall be aluminized.

ALWAYS  
THINK  
SAFETY

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

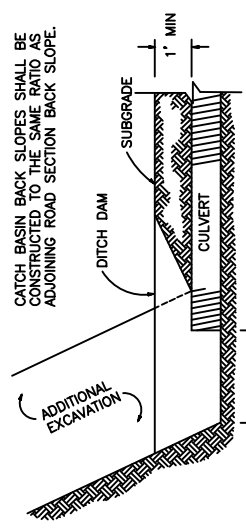
CULVERT LIST

DRAWN: JAB SCALE: AS SHOWN  
DATE: JULY 2020 SHEET 1 OF 1  
DRAWING NO. ORM05-TS-2020.0012-C10

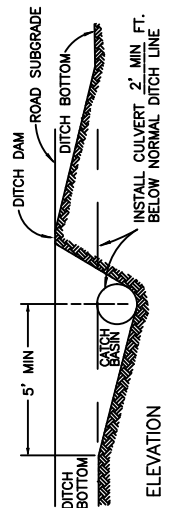
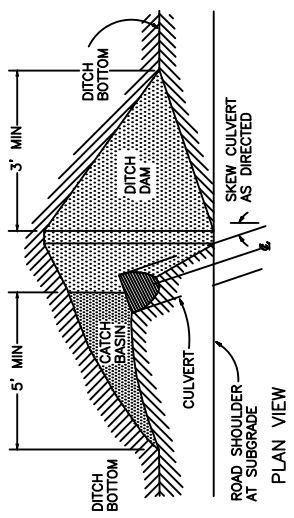
# EXHIBIT C-11

## SHEET 1 OF 1

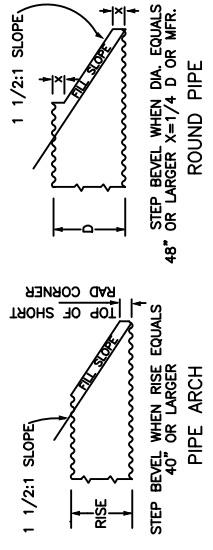
### LODGEPOLE T.S.



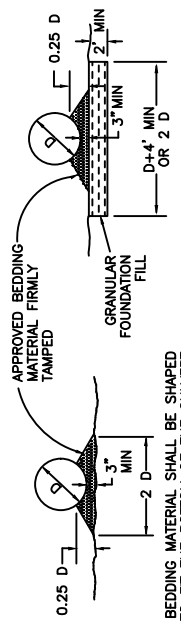
CROSS SECTION AT CATCH BASIN



CATCH BASIN



BEVELED END DETAIL



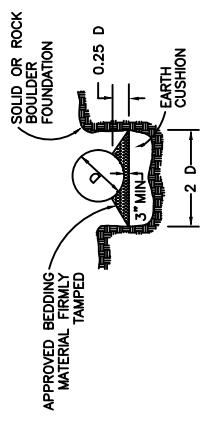
BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT.

BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT.

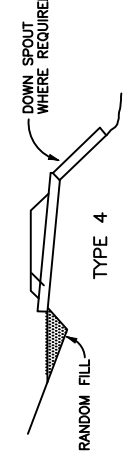
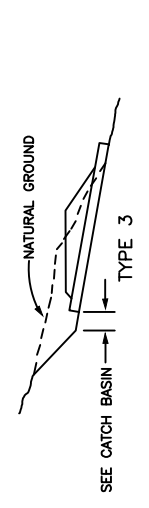
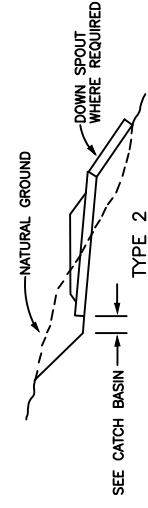
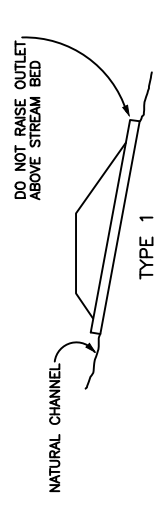
BEDDING OF CULVERTS ON SOFT SPONGY OR UNSTABLE SOIL FOUNDATION

BEDDING OF CULVERTS



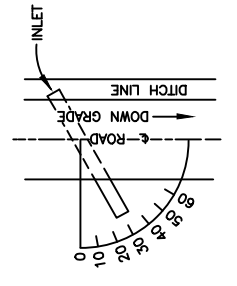
BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT. EARTH CUSHIONING OF SILTY CLAY LOAM OR SAND MAY BE USED IF MATERIAL CAN BE PLACED IN THE DRY CONDITION. IF THE EXCAVATION IS WET, USE GRANULAR FOUNDATION FILL MATERIAL. MAINTAIN 8" MIN. DEPTH BETWEEN HIGH POINTS OF ROCKS AND/OR BOULDERS AND THE BOTTOM OF THE CULVERT.

BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION



CULVERT INSTALLATION TYPES

ALWAYS  
THINK  
SAFETY



THE GRADE OF CROSSEDRAINS SHALL BE AT LEAST 2% GREATER THAN THE GRADE OF THE DITCH.

SKIEW DIAGRAM

REV. NO.	DESCRIPTION	DATE	APPROV.

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

## CULVERT INSTALLATION DETAILS

DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1

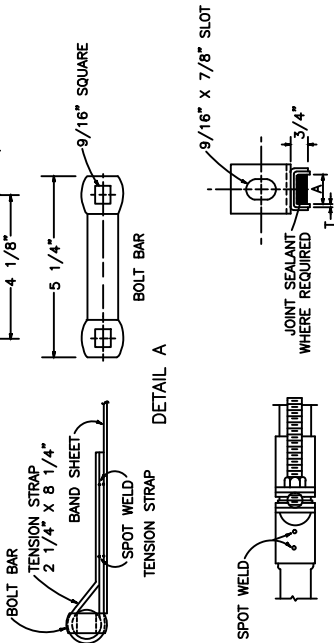
DRAWING NO. ORM05-TS-2020.0012-C11

# EXHIBIT C-12

## SHEET 1 OF 1

### LODGEPOLE T.S.

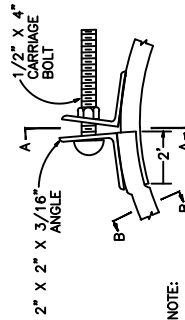
NOTE: DESIGN VARIATIONS IN FASTENERS, (STRAPS, BARS & WELDS) WHICH PROVIDE A TENSILE STRENGTH OF 7500 LBS. ARE PERMISSIBLE.



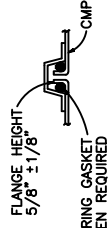
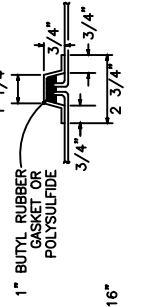
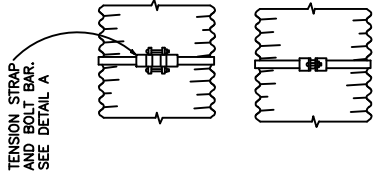
DIMENSIONS IN INCHES

T	A	PIPE WALL THICKNESS
.079	3/4	.108 OR LIGHTER
.108	1	.138 OR HEAVIER

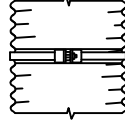
SECTION A-A



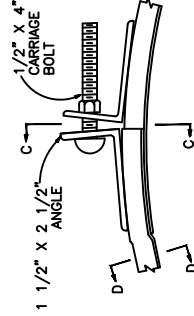
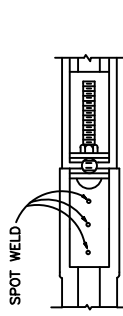
### CHANNEL BAND COUPLER



SHOWN WITH ALTERNATE TYPES OF JOINT SEALERS

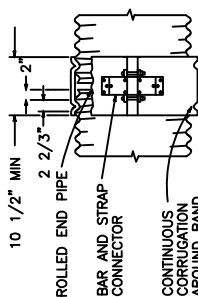


### FLANGED END COUPLER



CULVERT SIZE INCHES	STANDARD COUPLER BANDS					FLAT-DIMPLED							
	WIDTH INCHES	NO. OF BOLTS	WIDTH INCHES	NO. OF BOLTS	WIDTH INCHES	NO. OF DIMPLES	WIDTH INCHES	NO. OF DIMPLES	WIDTH INCHES	NO. OF DIMPLES			
UNDER 18	7	2	7	2	10	1/2	2	2	2	2			
18 TO 54	12	3	12	3	14	3	18	3	10	1/2	2	3	2
OVER 54	24	5	24	5	24	5	24	4	16	1/2	4	5	4

THE HUGGER COUPLER BAND OR AN APPROVED EQUIVALENT COUPLER BAND SHALL BE MADE OF THE SAME MATERIAL AND FINISH AS THE PIPES JOINED. THE COUPLER BANDS SHALL HAVE A MINIMUM WIDTH OF 1 1/2 INCHES AND MAY BE TWO NUMERICAL THICKNESSES LIGHTER THAN THE GAGE OR THICKNESS DESIGNATED FOR THE CONDUIT JOINED. THE BAND SHALL BE DESIGNED TO BE DRAWN TOGETHER WITH TWO 1/2 INCH BOLTS THROUGH USE OF A BAR AND STRAP SUITABLY WELDED TO THE BAND. THE BAND SHALL ENGAGE AND MESH WITH THE SECOND ANNULAR CORRUGATION INWARD FROM THE END OF EACH OF THE CONDUIT SECTIONS JOINED.



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.

STANDARD CONSTRUCTION IS 1 PIECE 12" THRU 48" AND 2 PIECE 54" AND ABOVE

ALWAYS  
**THINK**  
SAFETY

- Ⓐ BANDS WITH ANGLES
- Ⓑ BANDS WITH TENSION TYPE CONNECTIONS

### "HUGGER" COUPLER BANDS

REV. NO.	DESCRIPTION	DATE	APPROV.

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

## CULVERT BAND DETAIL

DRAWN: JAB	SCALE: NONE
DATE: JULY 2020	SHEET 1 OF 1

DRAWING NO. ORM05-TS-2020.0012-C12

# EXHIBIT C-13

## SHEET 1 OF 1

### NOTES

- 1) THE WATER DIP INVERT SHALL BE SMOOTH AND FREE DRAINING.
- 2) THE MINIMUM DIFFERENCE IN ELEVATION BETWEEN THE SAG AND THE CREST OF THE WATER DIP ALONG THE CUTSLOPE HINGE POINT IS 1.0 FEET.
- 3) THE MINIMUM DIFFERENCE IN ELEVATION BETWEEN THE SAG AND THE CREST OF THE WATER DIP ALONG THE FILLSLOPE SHOULDER IS 1.5 FEET.
- 4) SKEW DIP MINIMUM 15-30 DEGREES FROM PERPENDICULAR TO CENTERLINE.
- 5) EXCAVATED SOIL SHALL BE UTILIZED IN CONSTRUCTION OF WATER DIP. SIDECASTING OF VEGETATIVE MATTER IS PERMITTED.
- 6) PIT RUN MATERIAL SHALL BE PLACED ON FILL SLOPE AND SUBGRADE OF EACH ARMORED WATERDIP.
- 7) SEE ROAD RENOVATION WORKLIST FOR WATER DIPS TO BE ARMORED.
- 8) EACH DIP SHALL BE REINFORCED WITH 40 CUBIC YARDS OF 4 INCH MINUS ROCK, ON ROADWAY AND OUTFALL.

### LEGEND



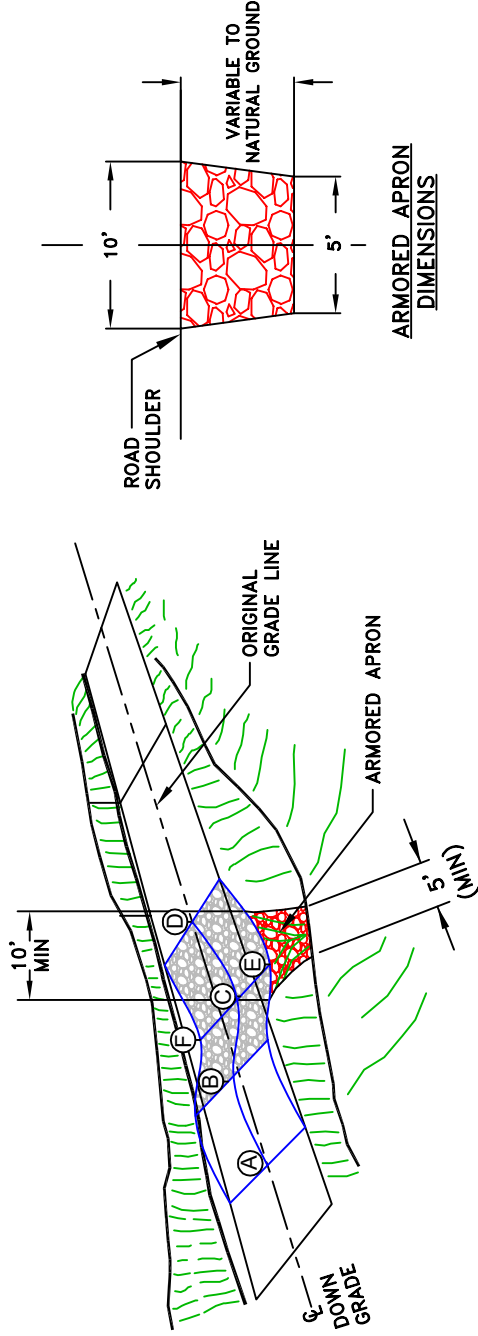
CUT/FILL SLOPES



SUBGRADE ARMOR MATERIAL  
(4 INCH MINUS)

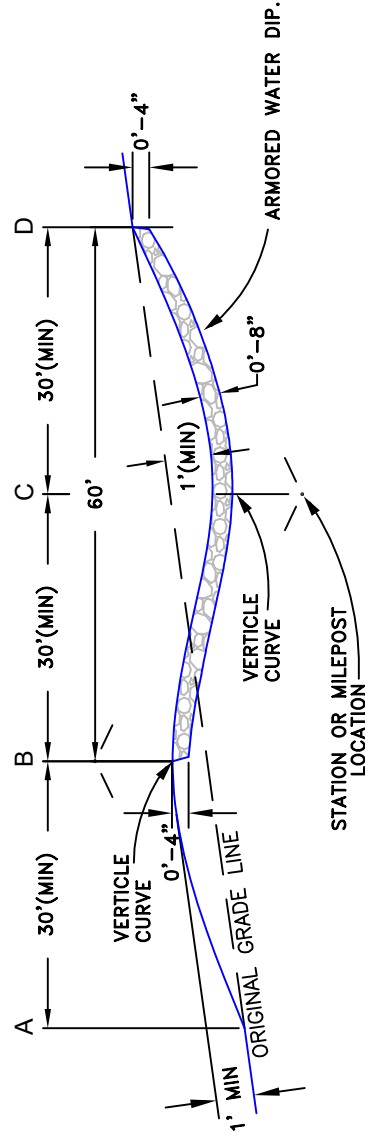


FILL SLOPE ARMOR MATERIAL PIT RUN  
OR OTHER APPROVED MATERIAL.

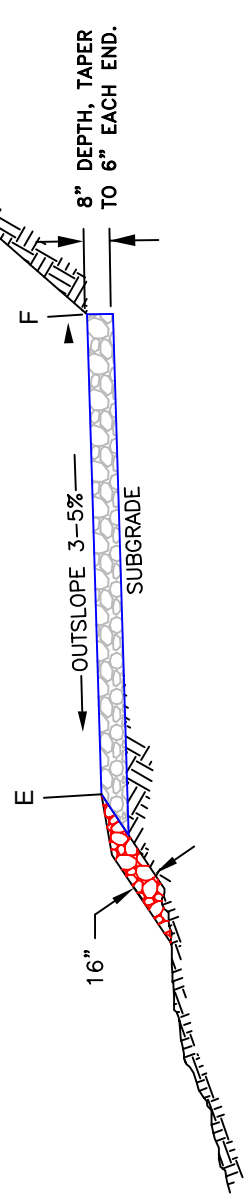


ARMORED APRON DIMENSIONS

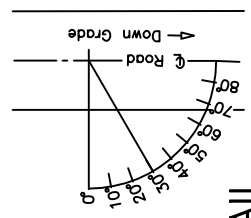
ROAD PROFILE ALONG A-B-C OF DRAIN DIP



ROAD PROFILE ALONG D-E OF DRAIN DIP



SKEW DIAGRAM



DRAWINGS NOT TO SCALE

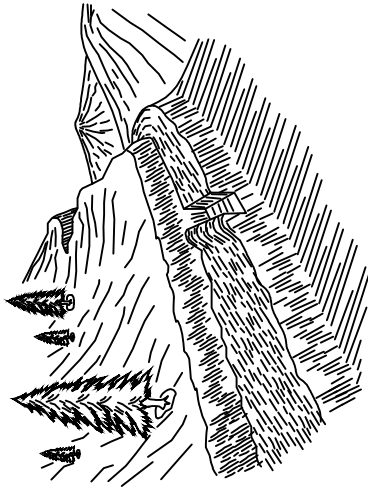
## TYPICAL ARMORED WATER DIP CONSTRUCTION DETAIL

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

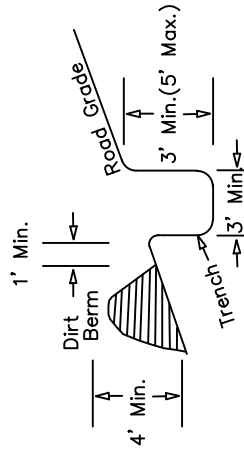
## TYPICAL ARMORED WATER DIP CONSTRUCTION

DRAWN BY JWR SCALE NONE  
DATE JULY 2020 SHEET 1 OF 1  
DRAWING NO. ORM05-TS-2020.0012-C13

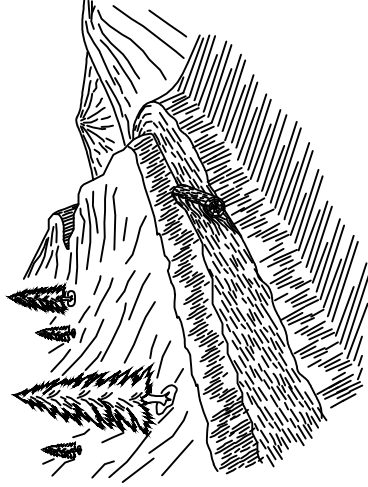
EXHIBIT C-14  
SHEET 1 OF 2  
LODGEPOLE T.S.



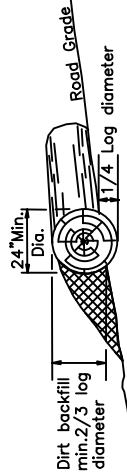
EARTH/TRENCH BARRICADE



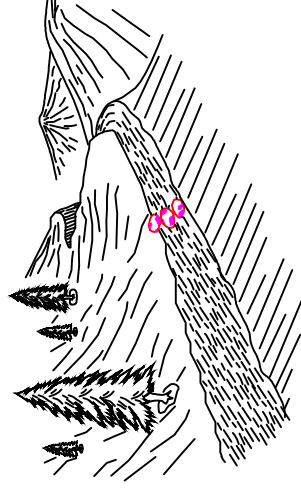
1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.
4. A MINIMUM OF 1' IS OF LEVEL GROUND IS NEEDED BETWEEN TOE OF THE DIRT BERM AND THE EDGE OF THE TRENCH.



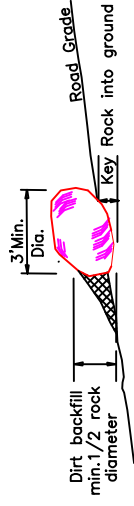
LOG BARRICADE



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

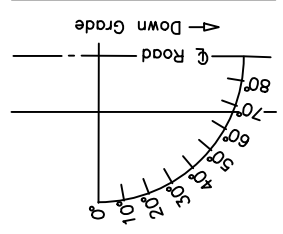


ROCK BARRICADE



1. ROCK BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. THE LENGTH SHALL BE SUFFICIENT TO BLOCK ROAD FROM VEHICLE USE.
4. THE MINIMUM DIAMETER OF ROCK SHALL BE 3 FEET.
5. THE MAXIMUM SPACE BETWEEN ROCKS SHALL BE 36" OR AS APPROVED BY THE AUTHORIZED OFFICER.

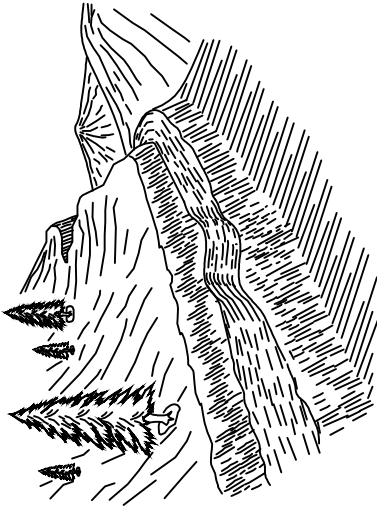
SKEW DIAGRAM



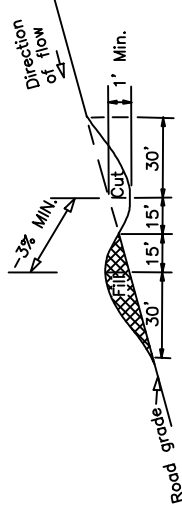
REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
<b>DRAINAGE &amp; EROSION CONTROL DETAILS</b>			
DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 2
DRAWING NO.		ORM05-TS-2020.0012-C14	



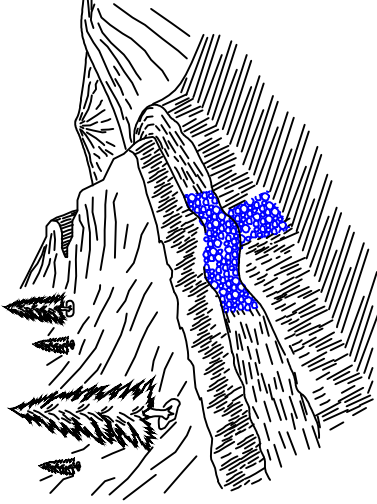
EXHIBIT C-14  
SHEET 2 OF 2  
LODGEPOLE T.S.



WATER DIP

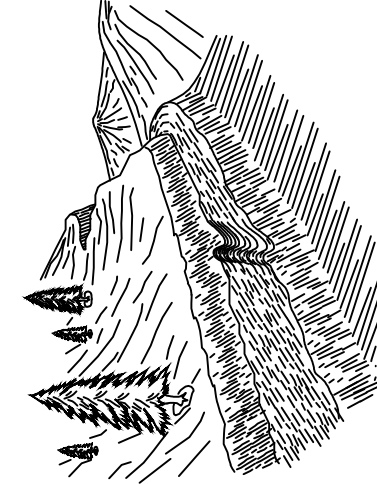


1. WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.

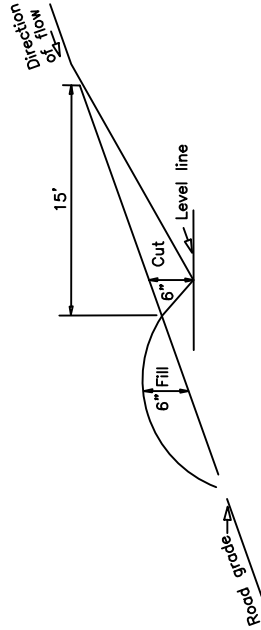


ARMORED WATER DIP

1. SEE EXHIBIT C-13: ARMORED WATER DIP CONSTRUCTION DETAILS

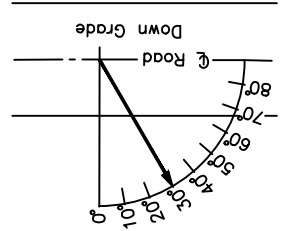


WATER BAR



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

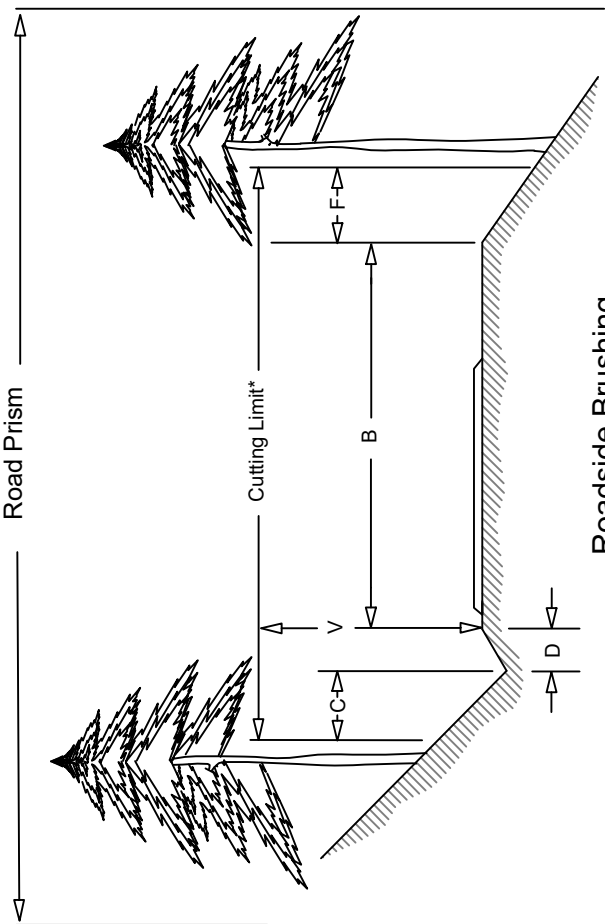
SKEW DIAGRAM



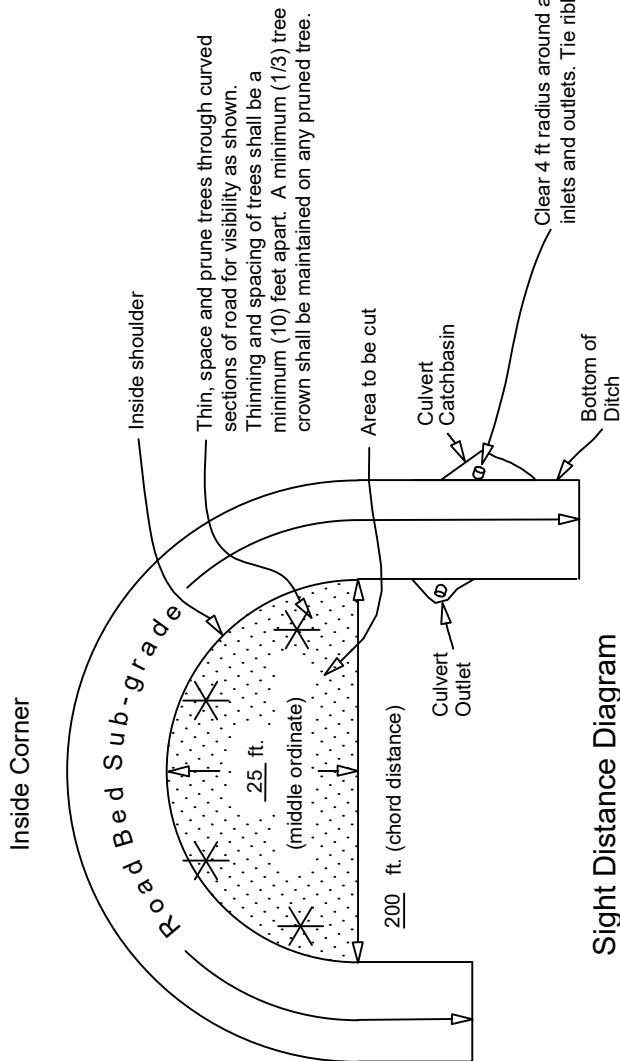
REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
<b>DRAINAGE &amp; EROSION CONTROL DETAILS</b>			
DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	2 OF 2
DRAWING NO. ORM05-TS-2020.0012-C14			

EXHIBIT C 15  
SHEET 1 OF 1

- Cutting Limit = C + D + B + F
- B = Road Bed Subgrade (includes turnouts)  
Cut all vegetation to max. height of 1".
- C = 6 ft - Distance to be brushed on cut slope  
beyond centerline of ditch. Cut all vegetation to max height of 6".
- D = Centerline of ditch to inside shoulder. Cut all vegetation to max. height of 1".
- F = 6 ft - Distance to be brushed on fill slope beyond outside shoulder  
Cut all vegetation to max. height of 6".
- V = 14 ft - Height of vertical cutting limit



Roadside Brushing



Sight Distance Diagram  
Road Side Brushing

ALWAYS  
**THINK**  
SAFETY

REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT -- MEDFORD, OREGON			
<b>ROADSIDE BRUSHING DETAILS</b>			
DRAWN:	JAB	SCALE:	NONE
DATE:	JULY 2020	SHEET:	1 OF 1
DRAWING NO.	ORM05-TS-2020.0012-C15		

All distances shown are horizontal except for V

revised 08/2010

# EXHIBIT C 16

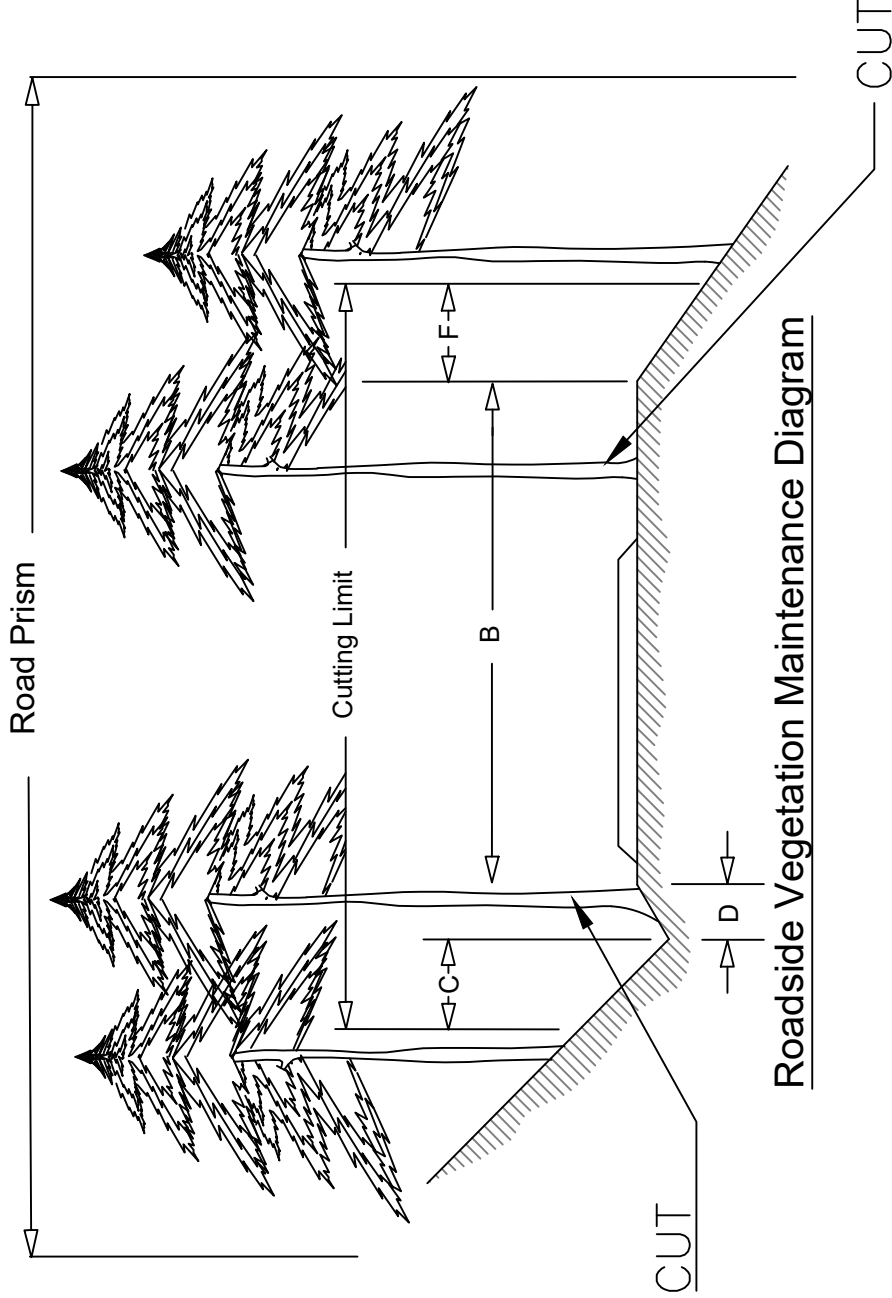
## SHEET 1 OF 1

Cutting Limit = C + D + B + F  
 B = Road Bed Subgrade (includes turnouts)  
 Cut all trees.

C = 6 ft - Distance to remove trees over 6" DBH on cut slope  
 beyond centerline of ditch.

D = Centerline of ditch to inside shoulder.

F = 6 ft - Distance to remove trees over 6" DBH on fill slope beyond outside shoulder



**Roadside Vegetation Maintenance Diagram**

**NOTES:**

Cut all non-merchantable and merchantable trees over 6" at DBH within the cutting limits.

All merchantable roadside cut trees outside of timber sale units will be marked with blue paint. All merchantable roadside trees within timber sales units shall be cut unless painted orange or pink (reserve trees).

All stumps that may impede road maintenance equipment from properly maintaining the road shall be grubbed. Stump holes shall be filled (if needed) with suitable material and compacted.

See Exhibit C-4 (Maps) and Exhibit C-21: Road Renovation Worklist for Roadside Vegetation Maintenance locations.

REV. NO.	DESCRIPTION	DATE	APPROV.

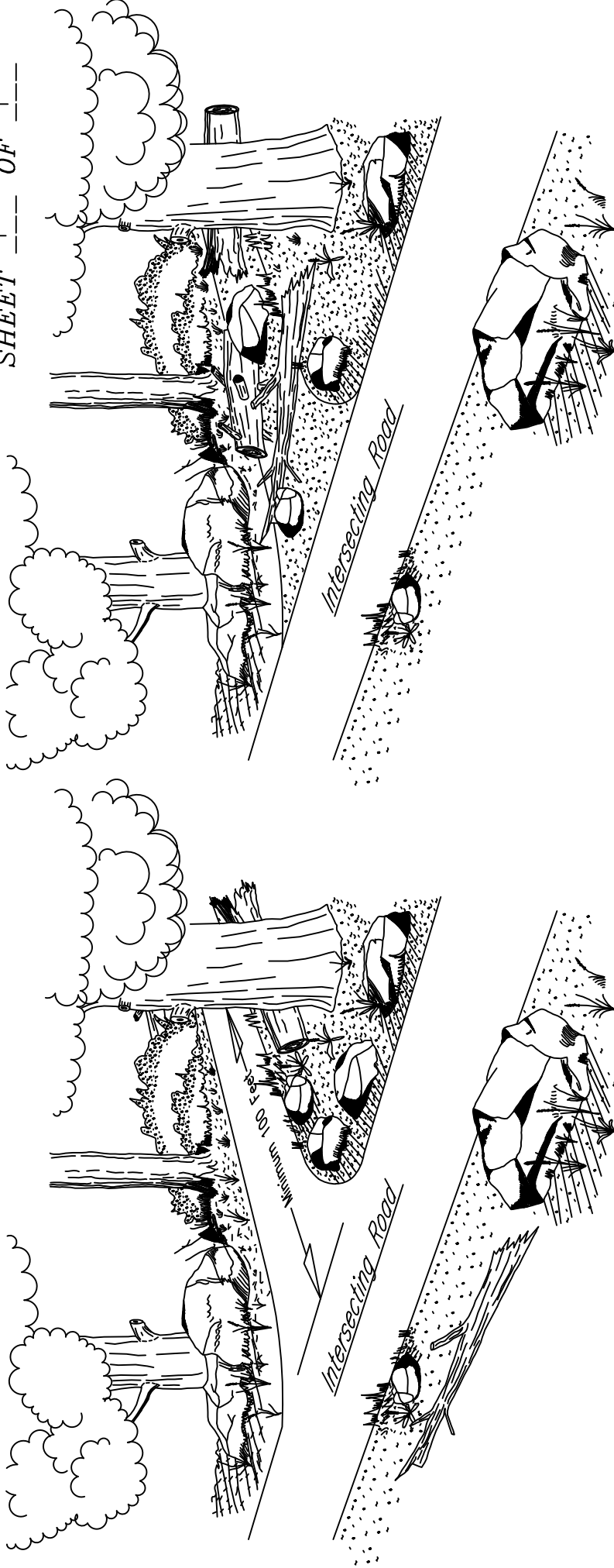
UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 MEDFORD DISTRICT - MEDFORD, OREGON

### ROADSIDE VEGETATION MAINTENANCE DETAILS

DRAWN: JAB	SCALE: NONE
DATE: JULY 2020	SHEET: 1 OF 1
DRAWING NO. ORM05-TS-2020.0012-C16	

*ALWAYS  
 THINK  
 SAFETY*

All distances shown are horizontal except for V



Typical Entrance - Before

Typical Entrance - After

Notes:

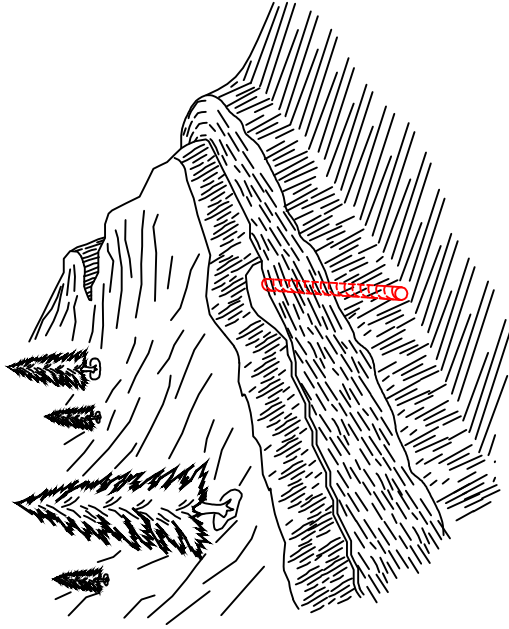
1. The Purchaser shall barricade and Camouflage the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. Camouflaged entrances shall consist of logs, slash, boulders and others debris placed along road entrances for a minimum of 100 feet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

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

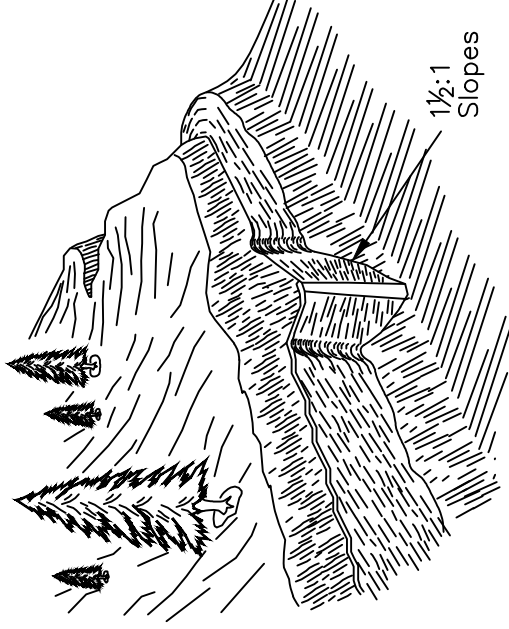
Typical Road  
 Camouflage

DRAWN	JWR	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1
DRAWING NO. ORM05-TS-2020.0012-C17			

EXHIBIT C-18  
 LODGEPOLE T.S.  
 SHEET 1 OF 1



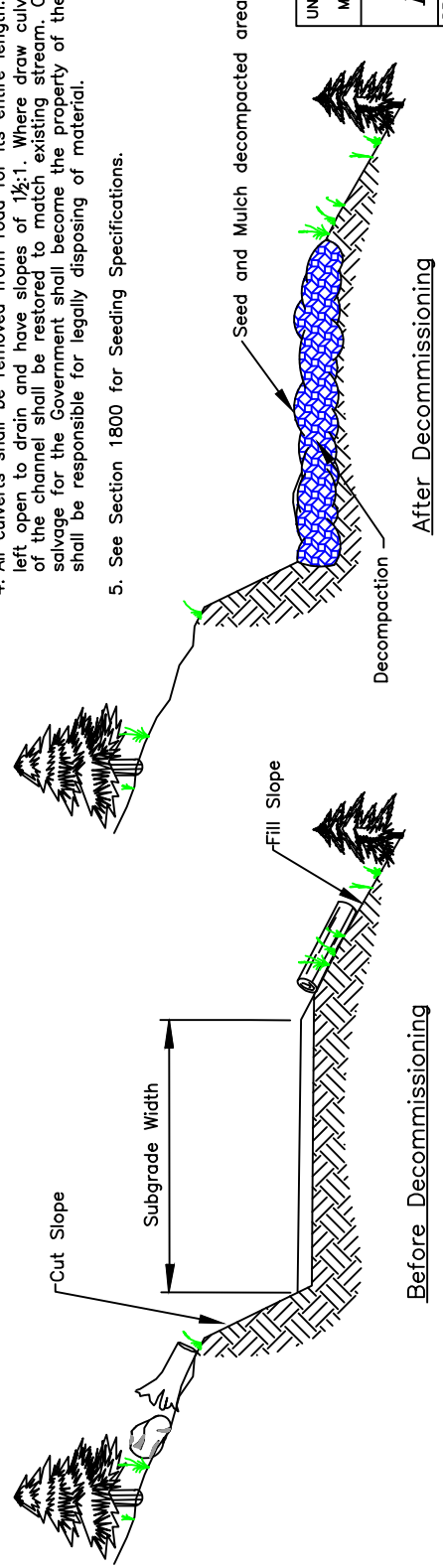
Typical Culvert Removal – Before



Typical Culvert Removal – After

Notes:

1. The Purchaser shall barricade, and decompact the road prism. Barricades shall be constructed as shown for each road.
2. Ditchlines at intersecting roads will be restored as indicated on plan view.
3. Road surface shall be decompact for its entire length using mechanical equipment. Decompact road surface to a depth of 12 to 18 inches or to a point where 10 inch diameter stones are the dominant substrate (whichever is shallower). Where it is determined by the Authorized Officer that decompaction may cause unacceptable damage to the root systems of residual trees along a majority of the road, decompaction may be intermittent, or scarification may be used instead. Decompacted areas shall be seed and mulched after completion.
4. All culverts shall be removed from road for its entire length. Excavated culverts shall be left open to drain and have slopes of 1 1/2:1. Where draw culverts are removed the grade of the channel shall be restored to match existing stream. Culverts not designated as salvage for the Government shall become the property of the Contractor. The Contractor shall be responsible for legally disposing of material.
5. See Section 1800 for Seeding Specifications.



Before Decommissioning

After Decommissioning

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

Typical Full  
 Decommission Detail

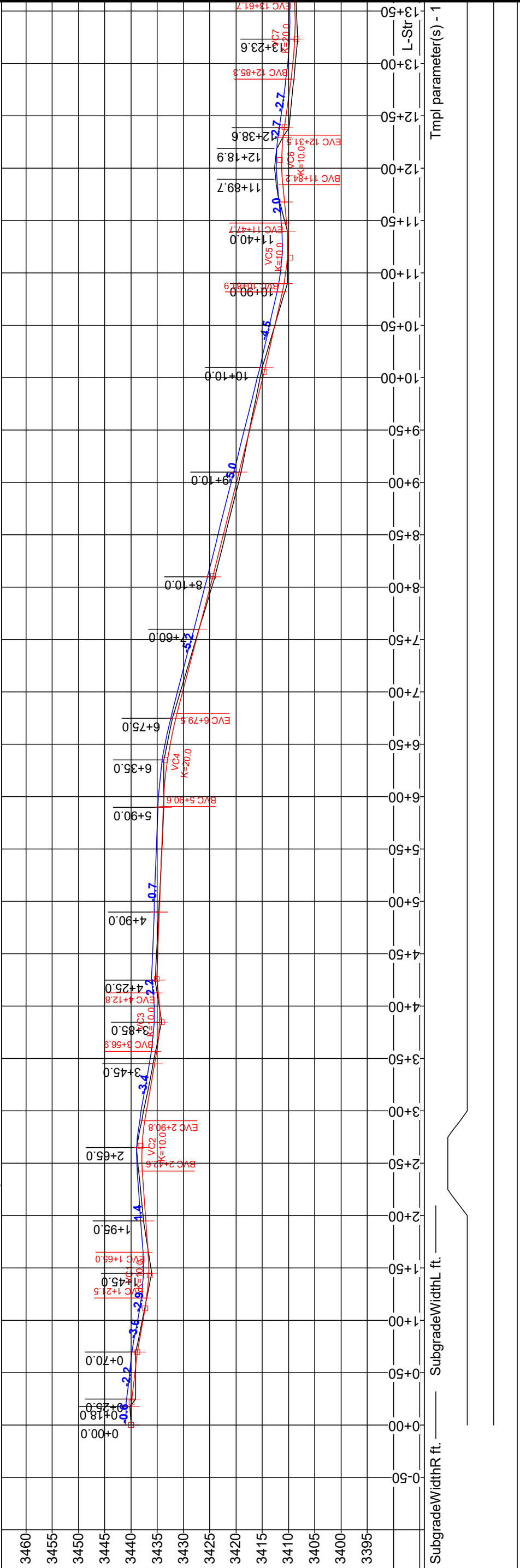
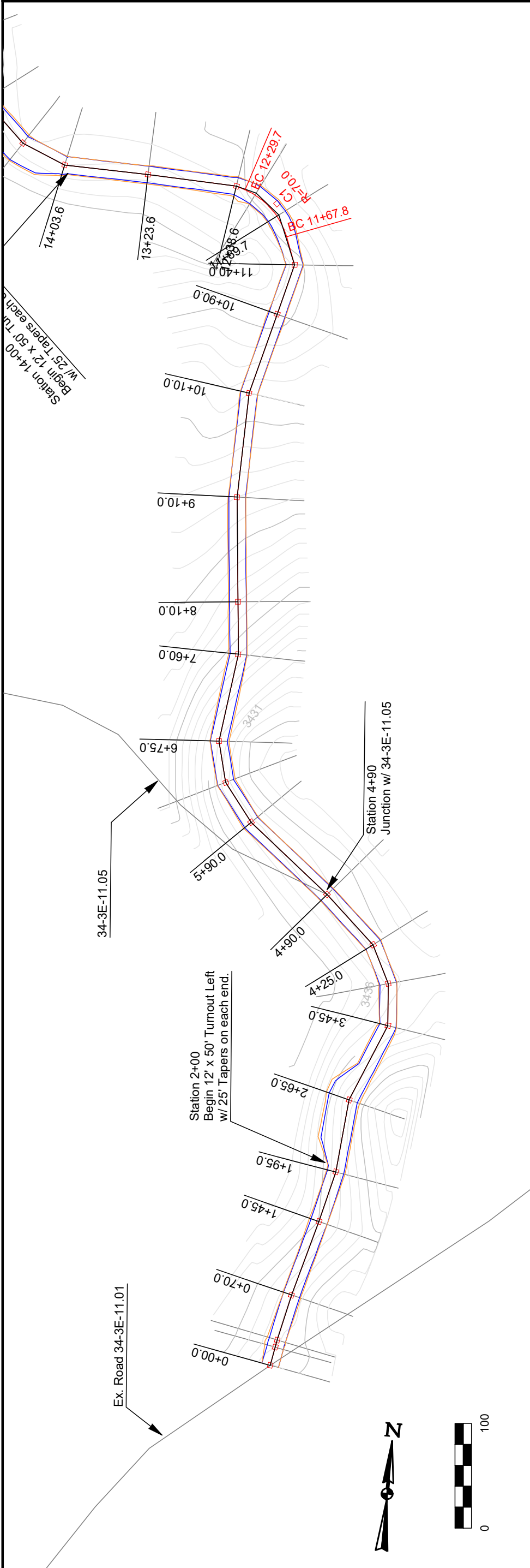
DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1
DRAWING NO.	ORM05-TS20.0012-C18		





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-20  
 34-3E-11.04  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

PROJECT NO: ORM05-TS-2020-0012	DESIGN OFFICE: BUTTE FALLS	DESIGNED BY: J. BROWN	DRAWN BY: J. BROWN	CHKD BY: R. SCHAFF	APPROVED BY: J. BROWN	DATE: 4/21/2020
MARK	DESCRIPTION	DATE	APPV.			

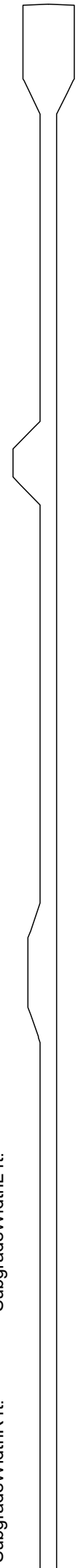
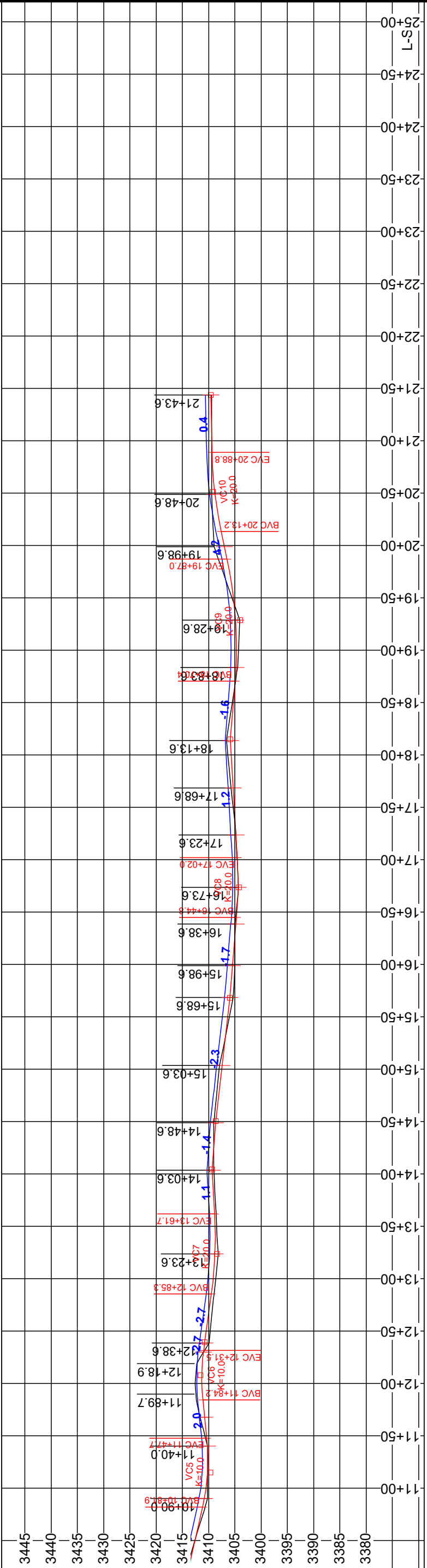
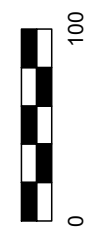
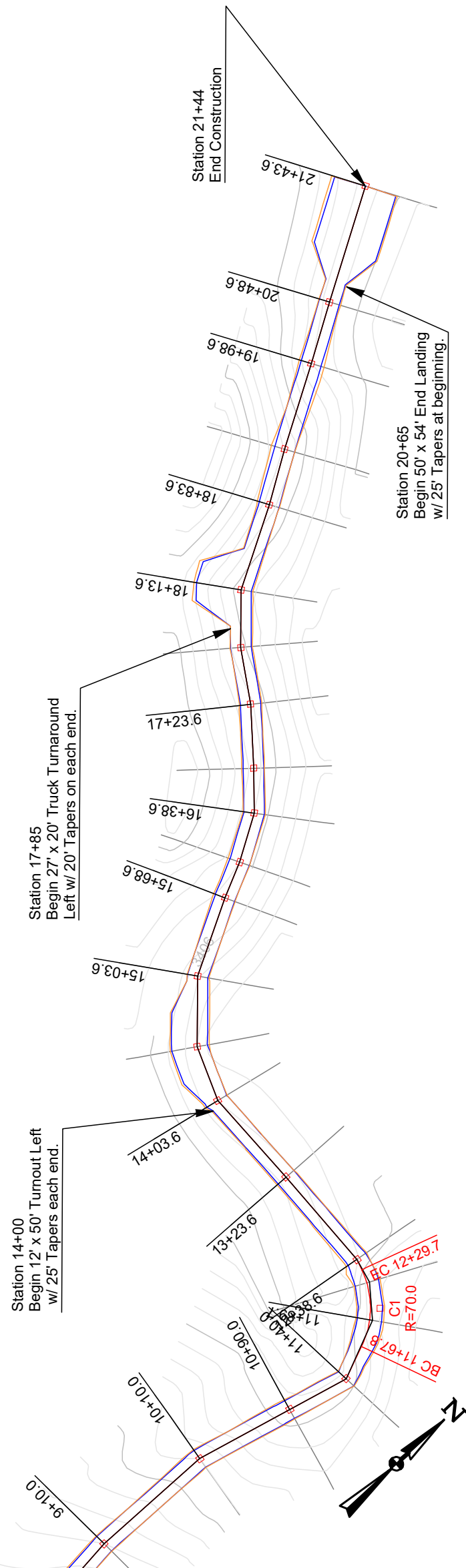




UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-20  
 34-3E-11.04  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

PROJECT NO:	DESIGN OFFICE:	DESIGNED BY:	DRAWN BY:	CHK'D BY:	APPROVED BY:	DATE:	DATE APPV.:
ORM05-TS-2020-0012	BUTTE FALLS	J. BROWN	J. BROWN	R. SCHAFF	J. BROWN	4/21/2020	

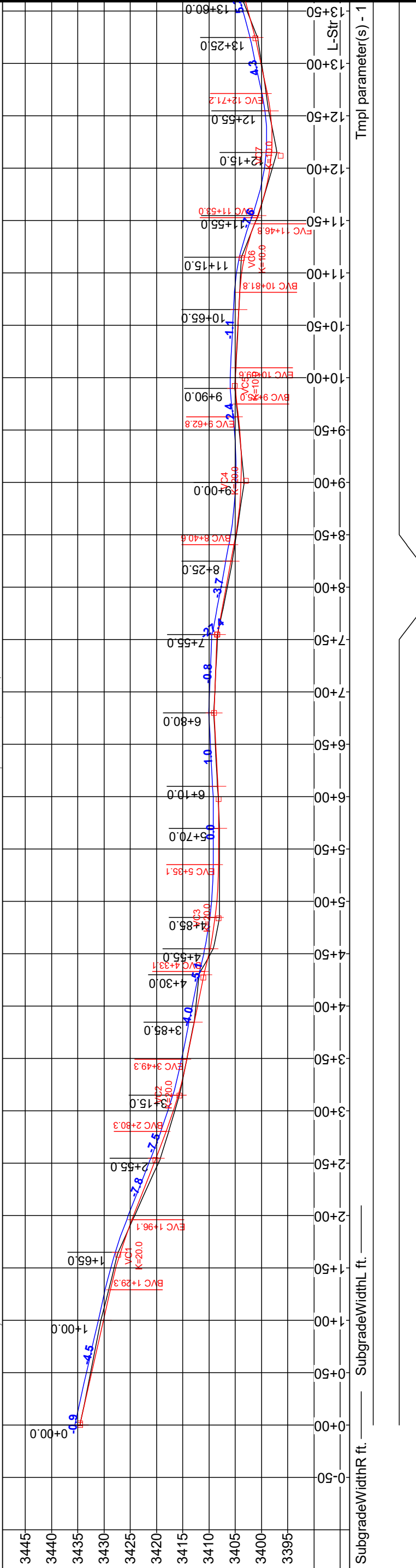
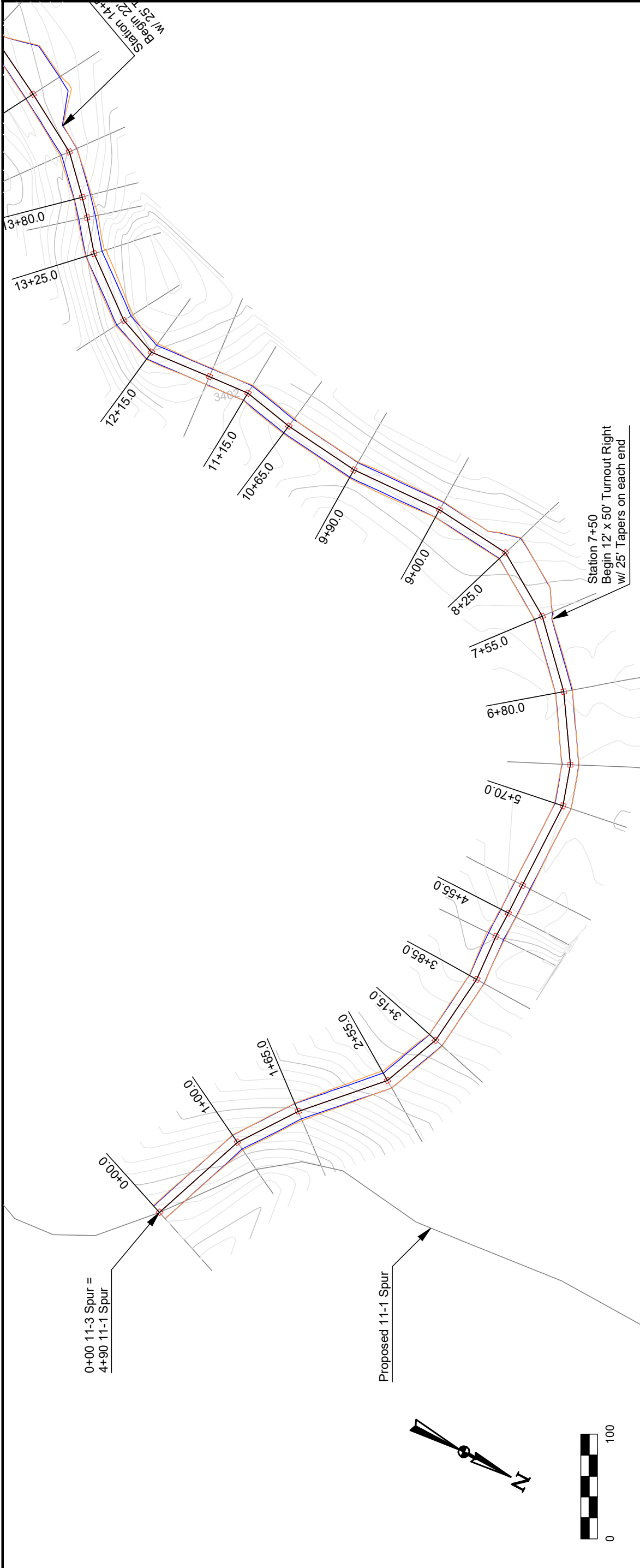
SHEET 2 OF 2





PROJECT NO: ORM05-TS-2020-0012	MARK	DESCRIPTION	DATE	APPV.
DESIGN OFFICE: BUTTE FALLS				
DESIGNED BY: J. BROWN				
DRAWN BY: J. BROWN				
CHK'D BY: R. SCHAFF				
APPROVED BY: J. BROWN				
DATE: 4/24/2020				

UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-21  
 34-3E-11.05  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON



Subgrade Width R ft. — Subgrade Width L ft.



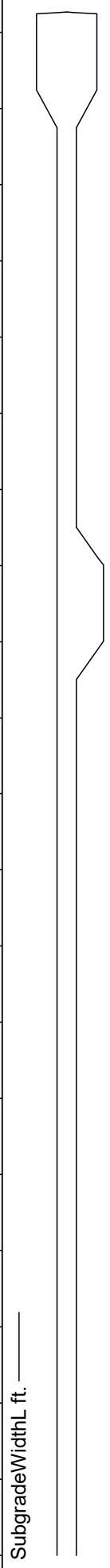
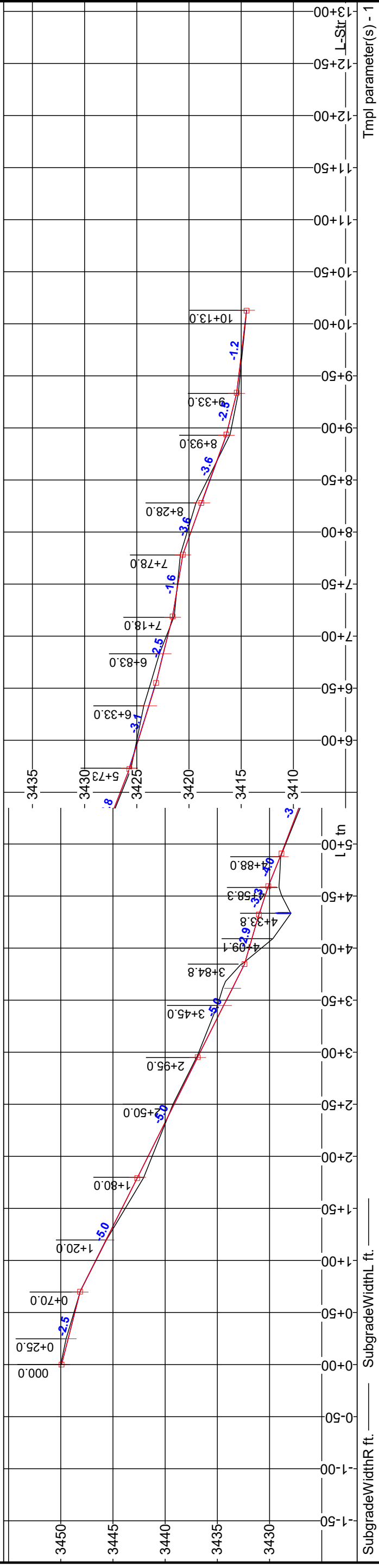
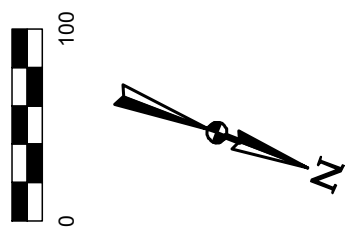
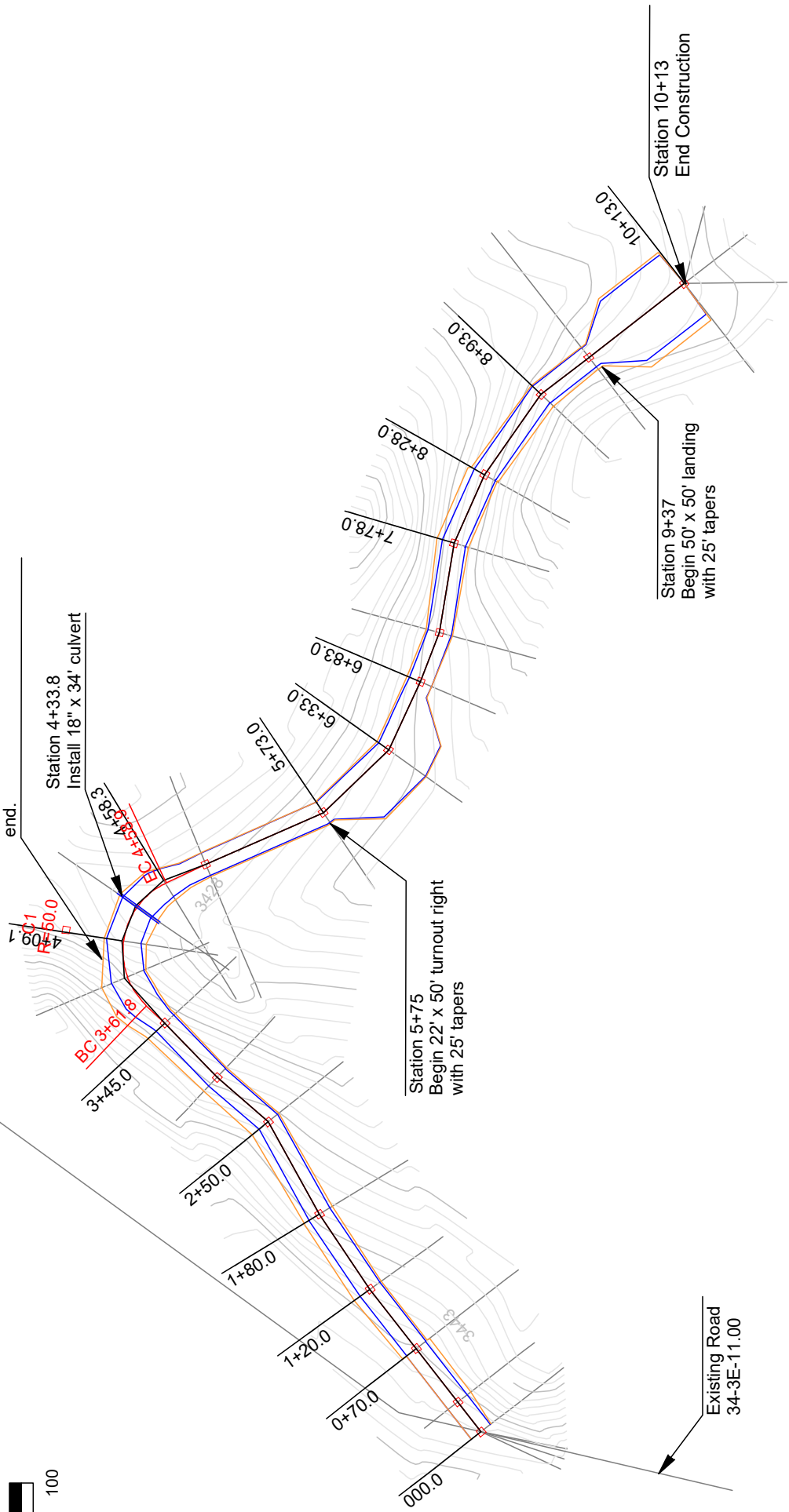


UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-22  
 34-3E-11.06  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

DATE:		DESCRIPTION	MARK
APPROVED BY:			
CHKD BY: R. SCHAFF			
DRAWN BY: J. BROWN			
DESIGNED BY: J. BROWN			
DESIGN OFFICE: BUTTE FALLS			
PROJECT NO: ORM05-TS-2020-0012			

SHEET 1 OF 1

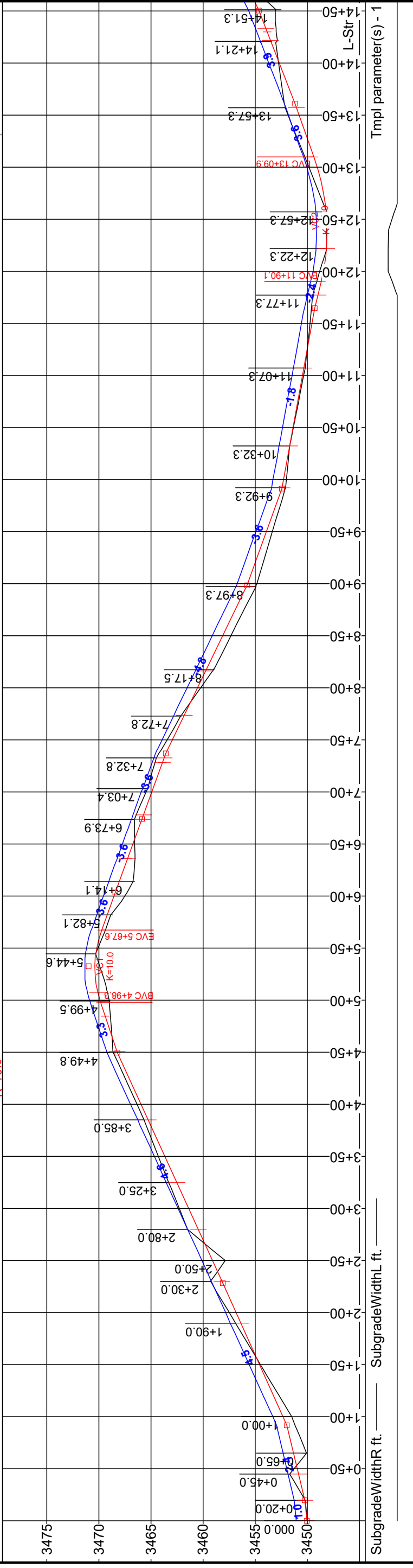
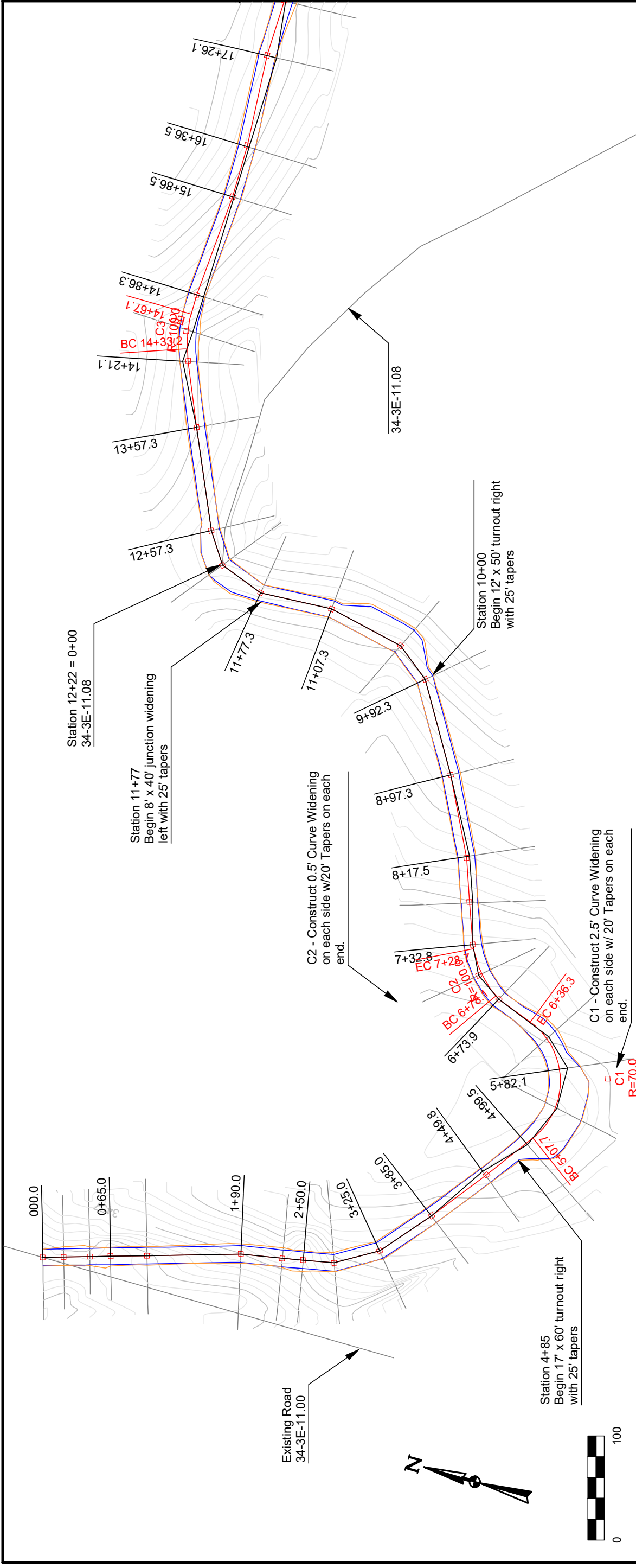
C1 - Construct 3.5' Curve Widening on each side w/ 20' Tapers on each end.





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-23  
 34-3E-11.07  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

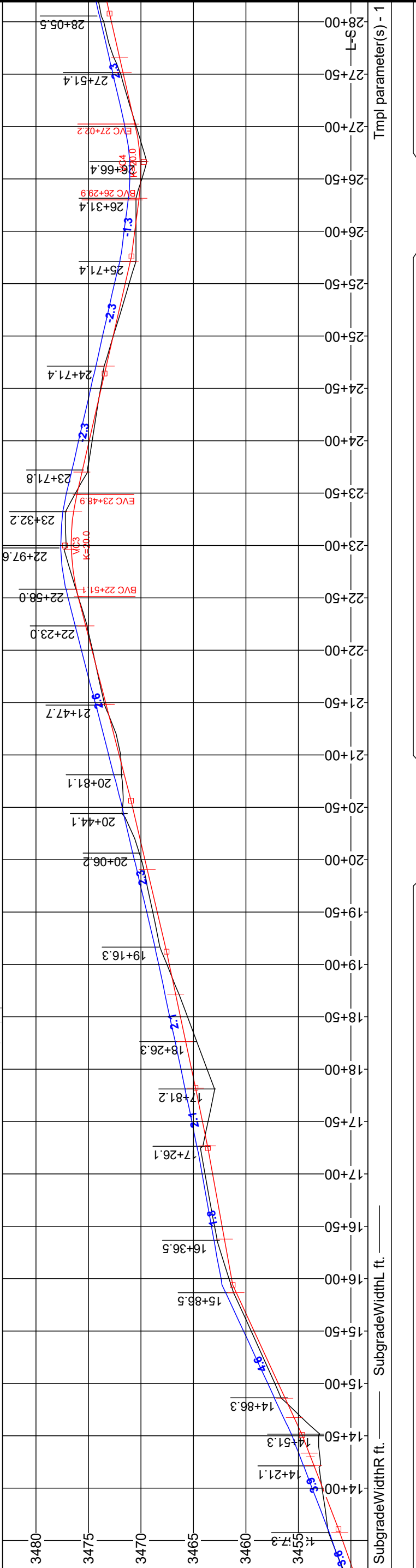
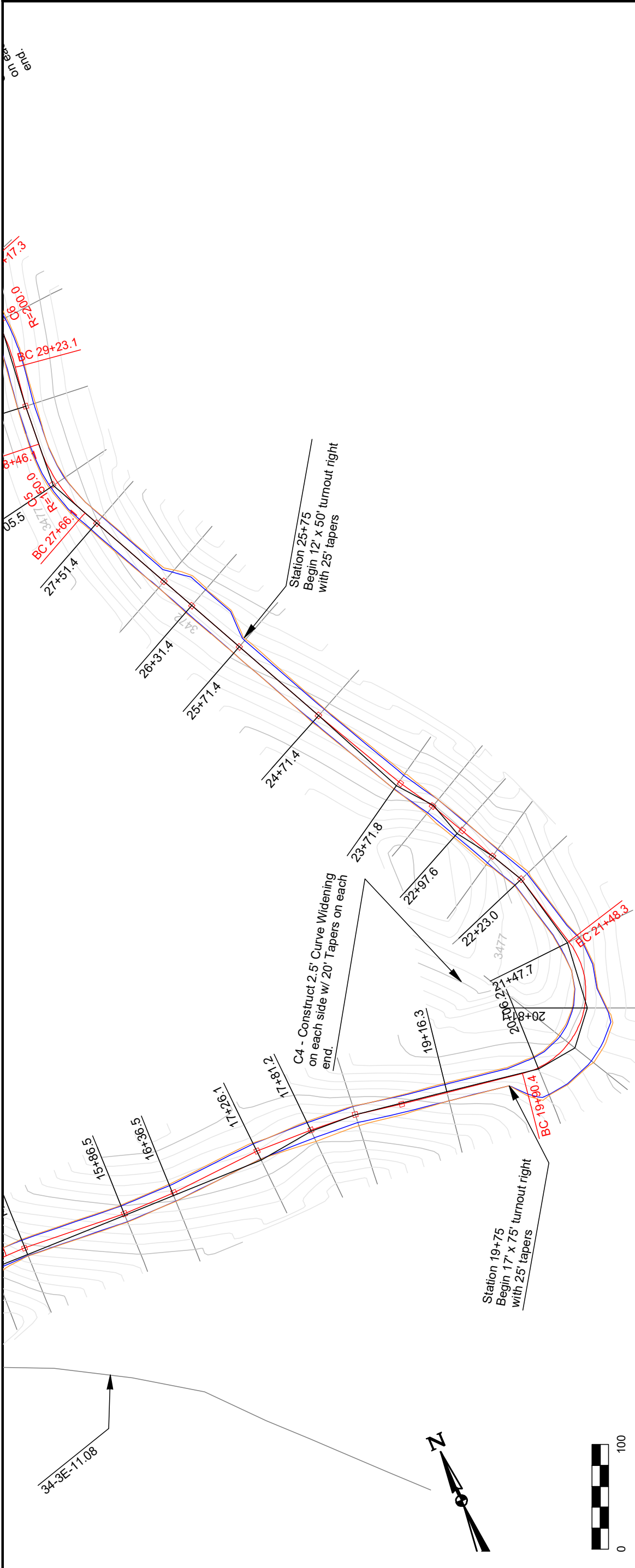
DATE:		DESCRIPTION	MARK
APPROVED BY:			
CHKD BY: R. SCHAFF			
DRAWN BY: J. BROWN			
DESIGNED BY: J. BROWN			
DESIGN OFFICE: BUTTE FALLS			
PROJECT NO: ORM05-TS-2020-0012			





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-23  
 34-3E-11.07  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

DATE:		DESCRIPTION	MARK
APPROVED BY:			
CHKD BY: R. SCHAFF			
DRAWN BY: J. BROWN			
DESIGNED BY: J. BROWN			
DESIGN OFFICE: BUTTE FALLS			
PROJECT NO: ORM05-TS-2020-0012			

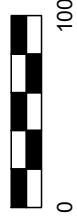
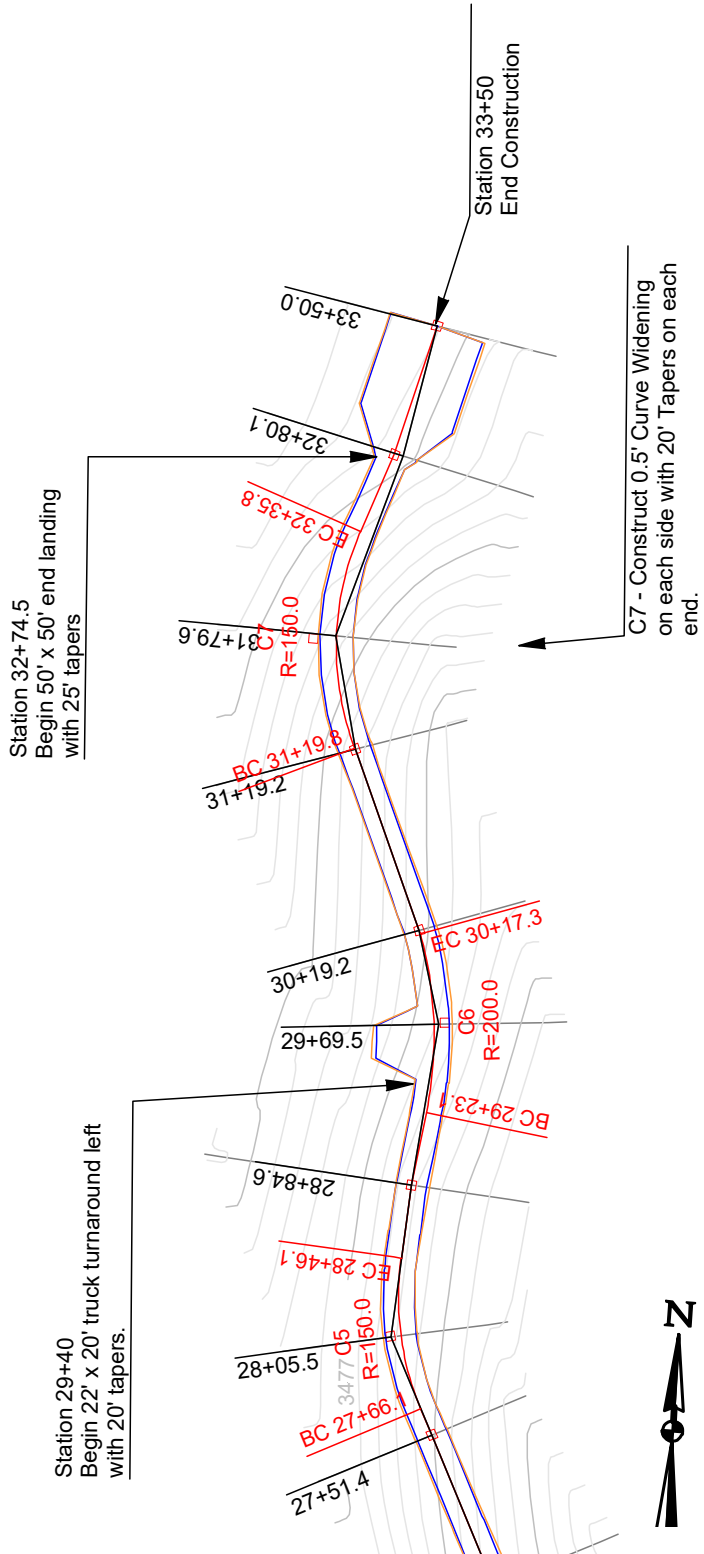




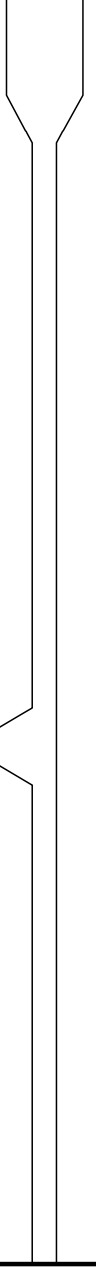
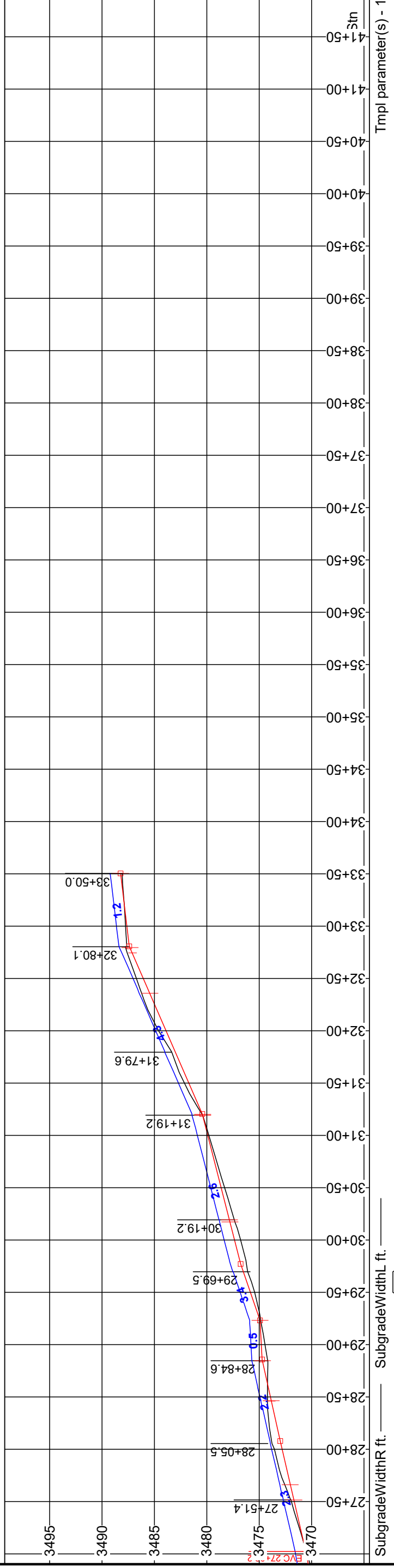
UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-23  
 34-3E-11.07  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

DATE:		DESCRIPTION	MARK
APPROVED BY:			
CHKD BY: R. SCHAFF			
DRAWN BY: J. BROWN			
DESIGNED BY: J. BROWN			
DESIGN OFFICE: BUTTE FALLS			
PROJECT NO: ORM05-TS-2020-0012			

SHEET 3 OF 3



out right

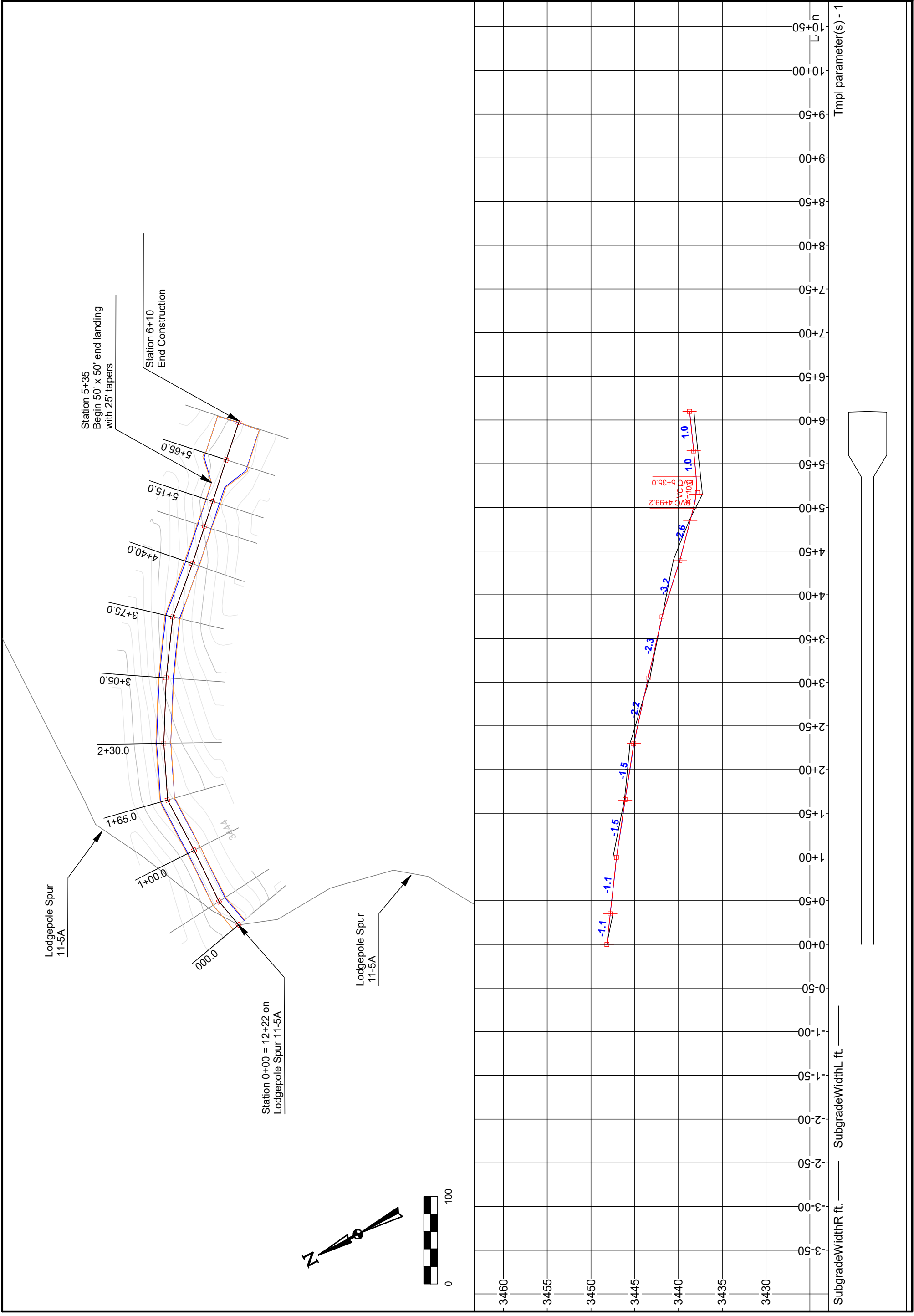




UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-24  
 34-3E-11.08  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

PROJECT NO: ORM05-TS-2020-0012	DESIGN OFFICE:				
	DESIGNED BY:				
	DRAWN BY:				
	CHK'D BY:				
	APPROVED BY:				
	DATE:				
	APPV:				

SHEET 1 OF 1

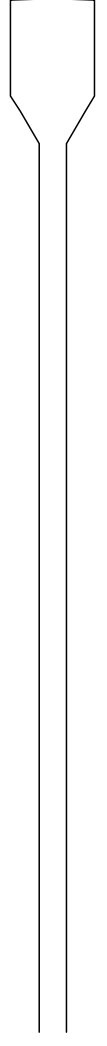
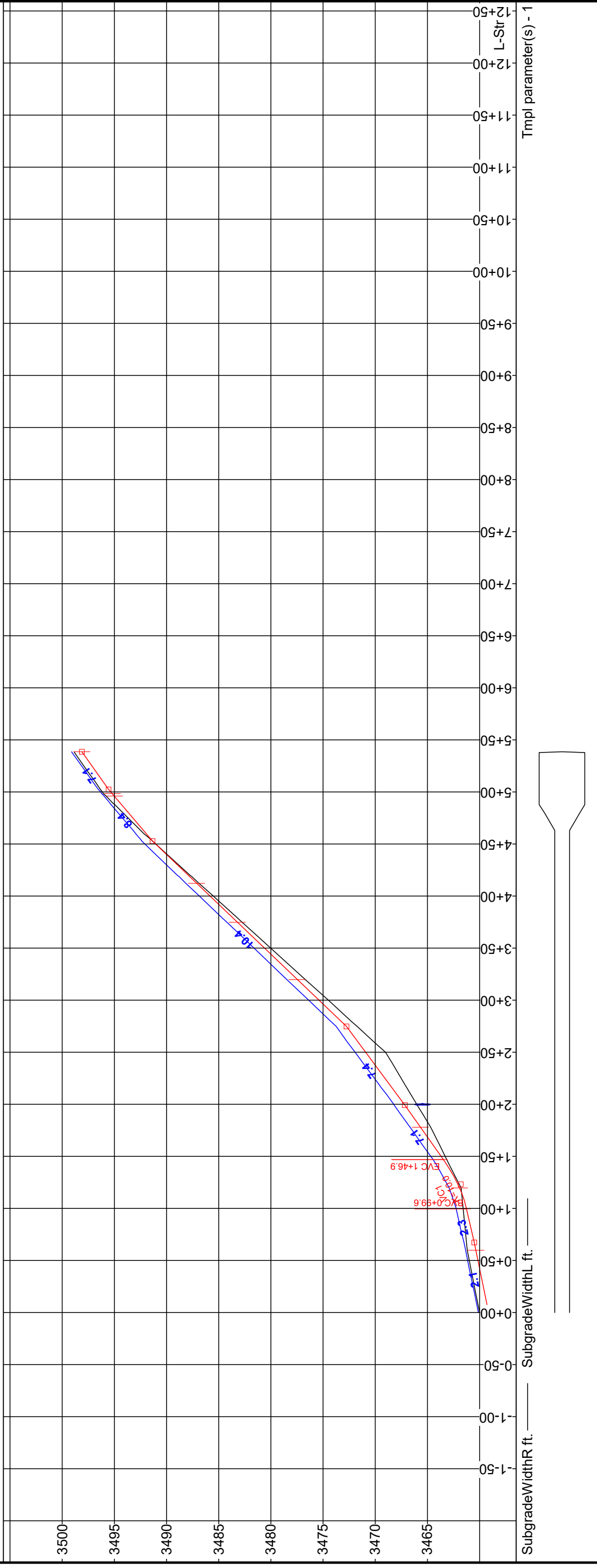
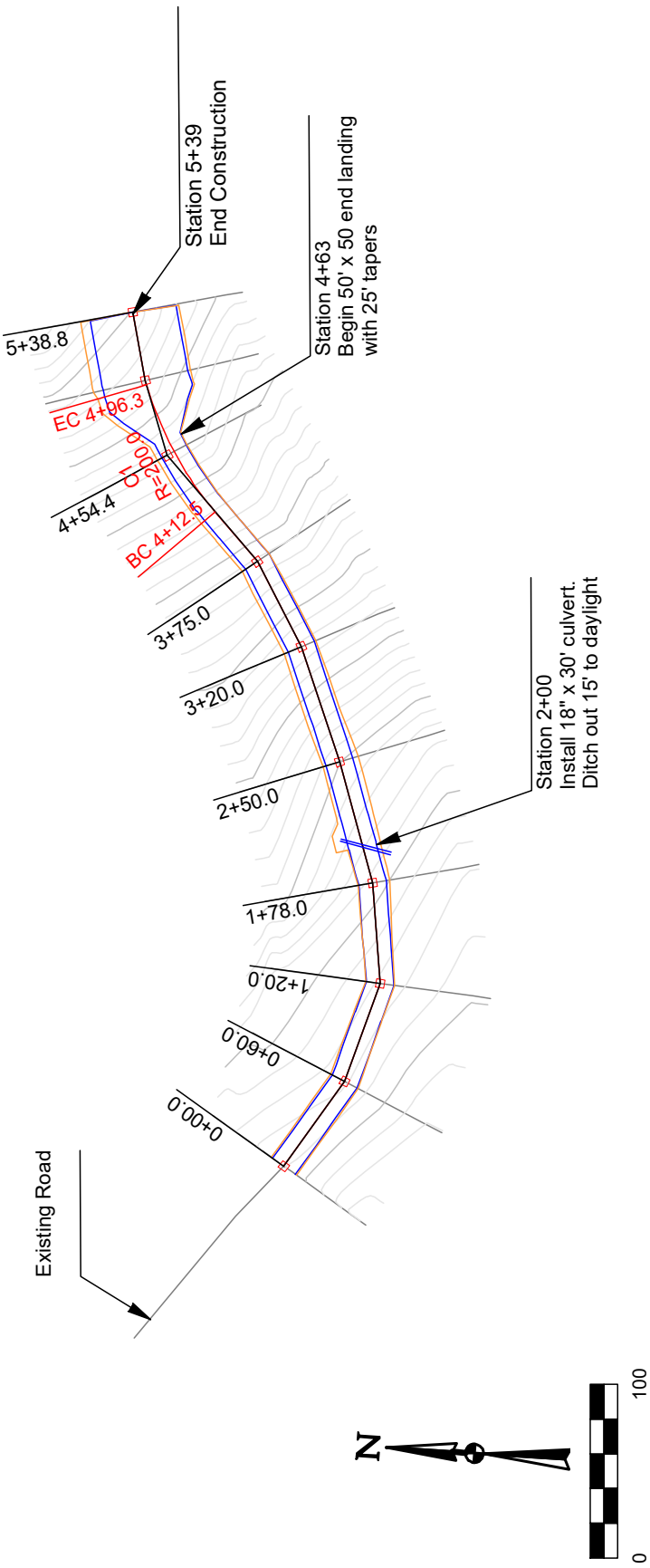




UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
EXHIBIT C-25  
34-3E-13.04 B  
LODGEPOLE TIMBER SALE  
MEDFORD DISTRICT  
OREGON

DATE:	DESCRIPTION	MARK	DATE	APPV.
PROJECT NO: ORM05-TS-2020-0012				
DESIGN OFFICE: BUTTE FALLS				
DESIGNED BY: J. BROWN				
DRAWN BY: J. BROWN				
CHK'D BY: R. SCHAFF				
APPROVED BY:				

SHEET 1 OF 1









**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**EXHIBIT C-27**  
**34-3E-23.00 B**  
**LODEPOLE TIMBER SALE**  
**MEDFORD DISTRICT**  
**OREGON**

PROJECT NO: ORM05-TS-2020-0012	DESIGNED BY: J. BROWN	MARK	DESCRIPTION	DATE	APPV.
DESIGN OFFICE: BUTTE FALLS	DRAWN BY: J. BROWN				
CHKD BY: R. SCHAFF	APPROVED BY:				
DATE: 5/6/2020					

Station 11+69  
Begin 12' x 50' Turnout Left  
w/ 25' Tapers on each end.

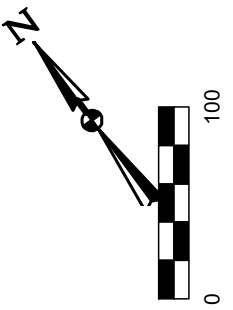
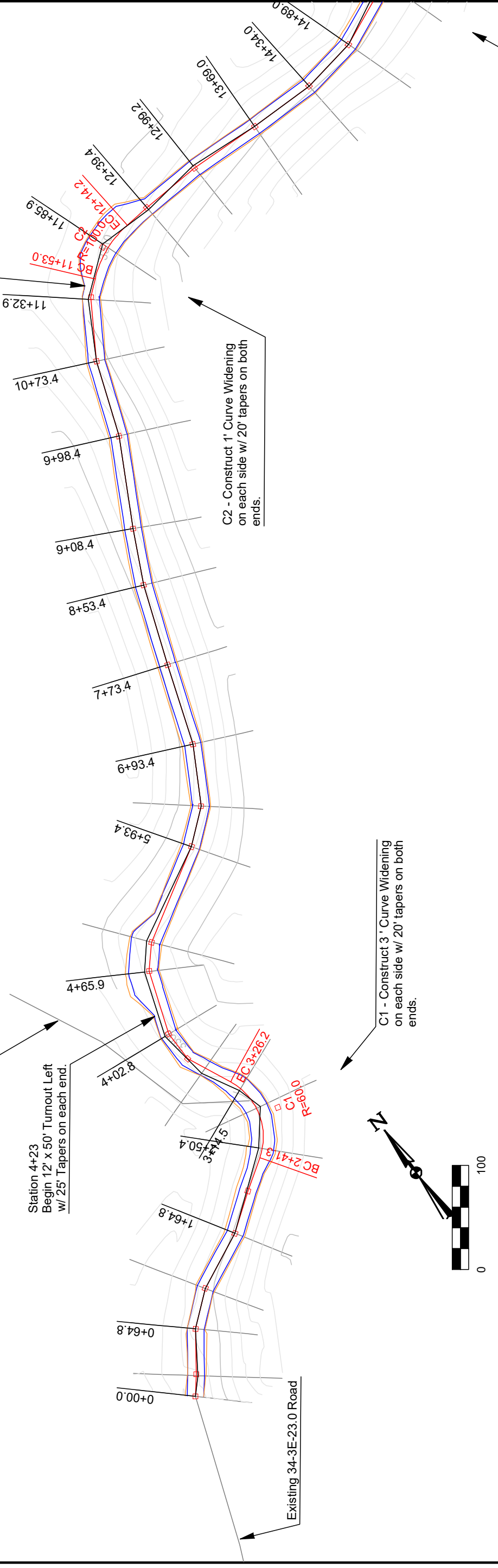
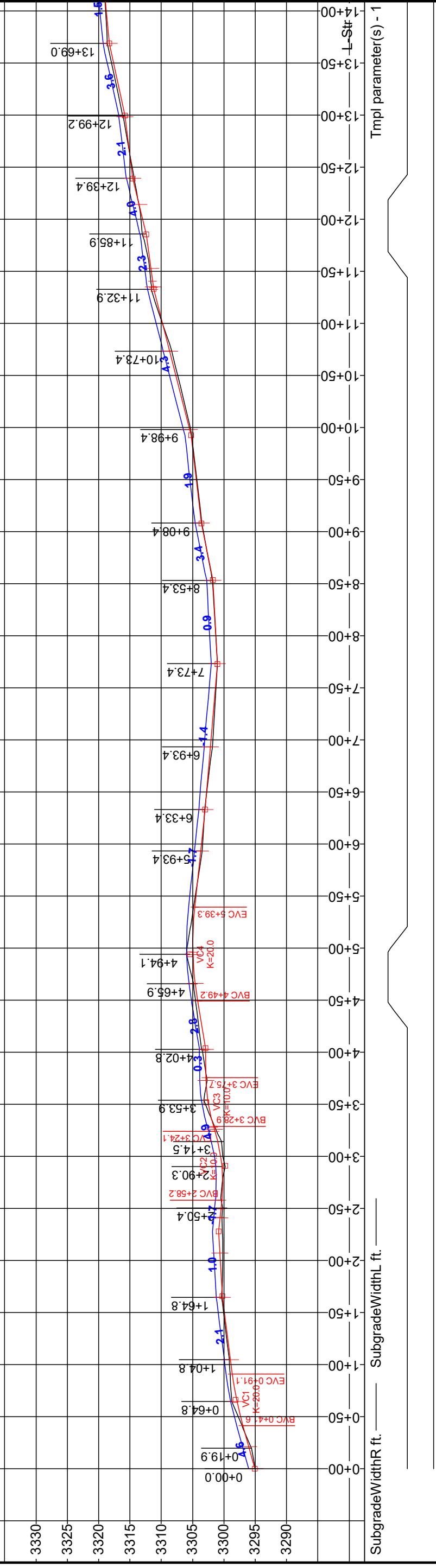
Station 4+23  
Begin 12' x 50' Turnout Left  
w/ 25' Tapers on each end.

14-1 Spur

C2 - Construct 1' Curve Widening  
on each side w/ 20' tapers on both  
ends.

C1 - Construct 3' Curve Widening  
on each side w/ 20' tapers on both  
ends.

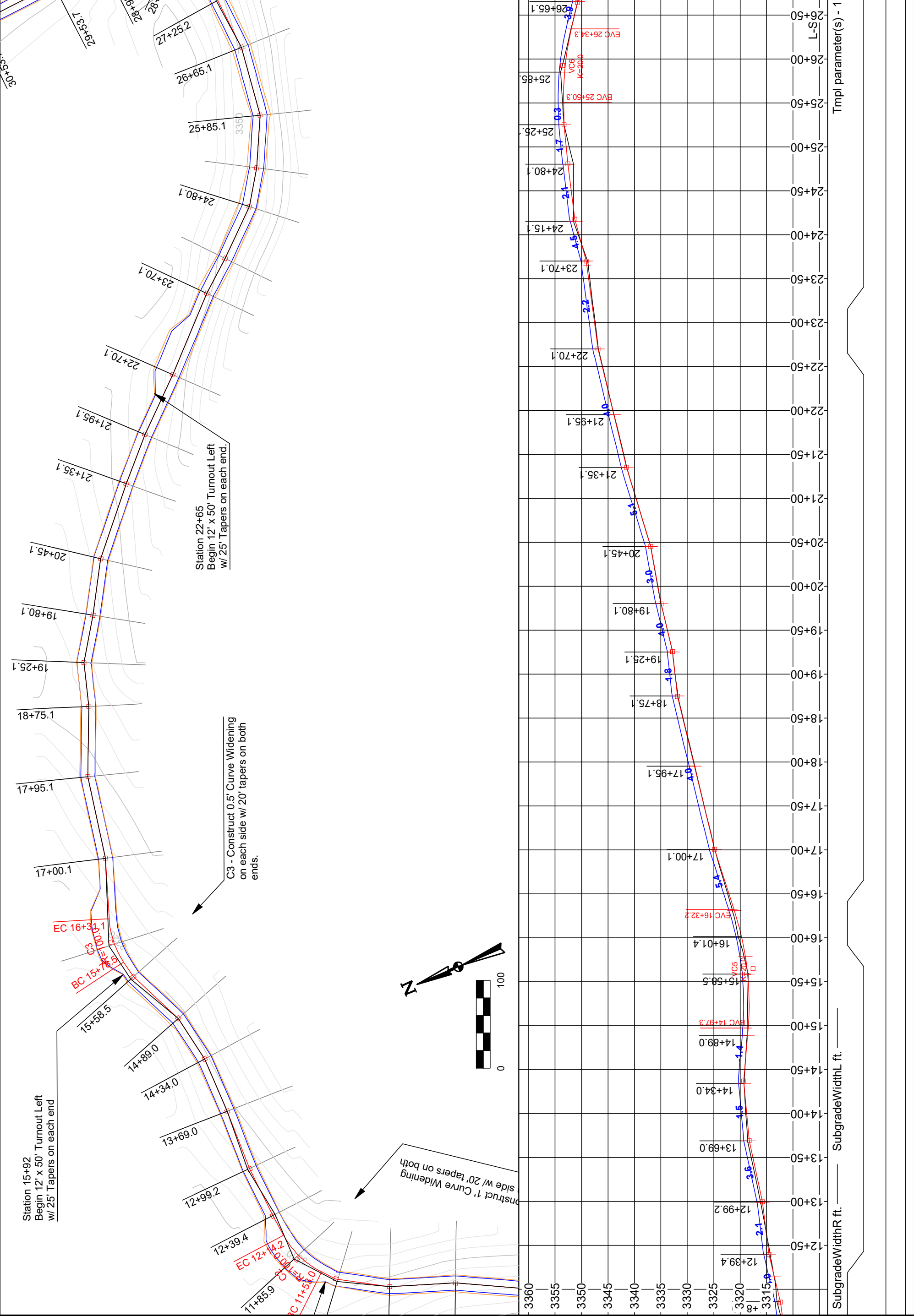
Existing 34-3E-23.0 Road





**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**EXHIBIT C-27**  
**34-3E-23.00 B**  
**LODEPOLE TIMBER SALE**  
**MEDFORD DISTRICT**  
**OREGON**

DATE: 5/6/2020	MARK	DESCRIPTION	DATE	APPV.
APPROVED BY:				
CHKD BY: R. SCHAFF				
DRAWN BY: J. BROWN				
DESIGNED BY: J. BROWN				
DESIGN OFFICE: BUTTE FALLS				
PROJECT NO: ORM05-TS-2020-0012				

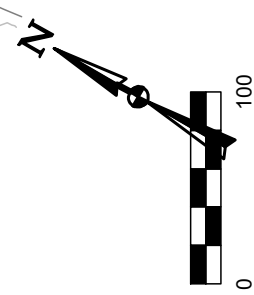
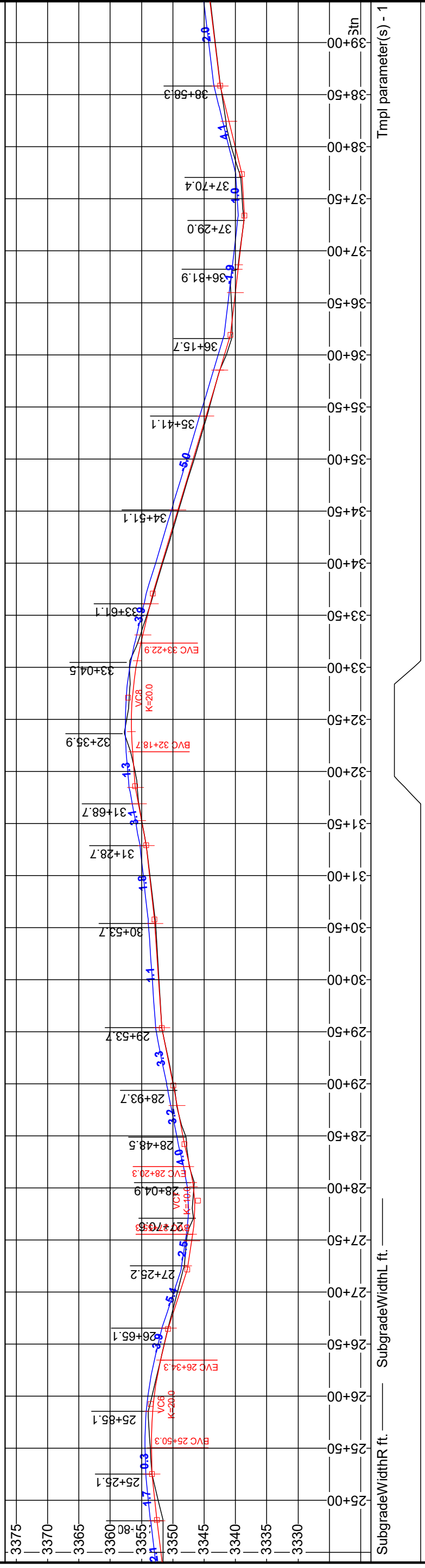
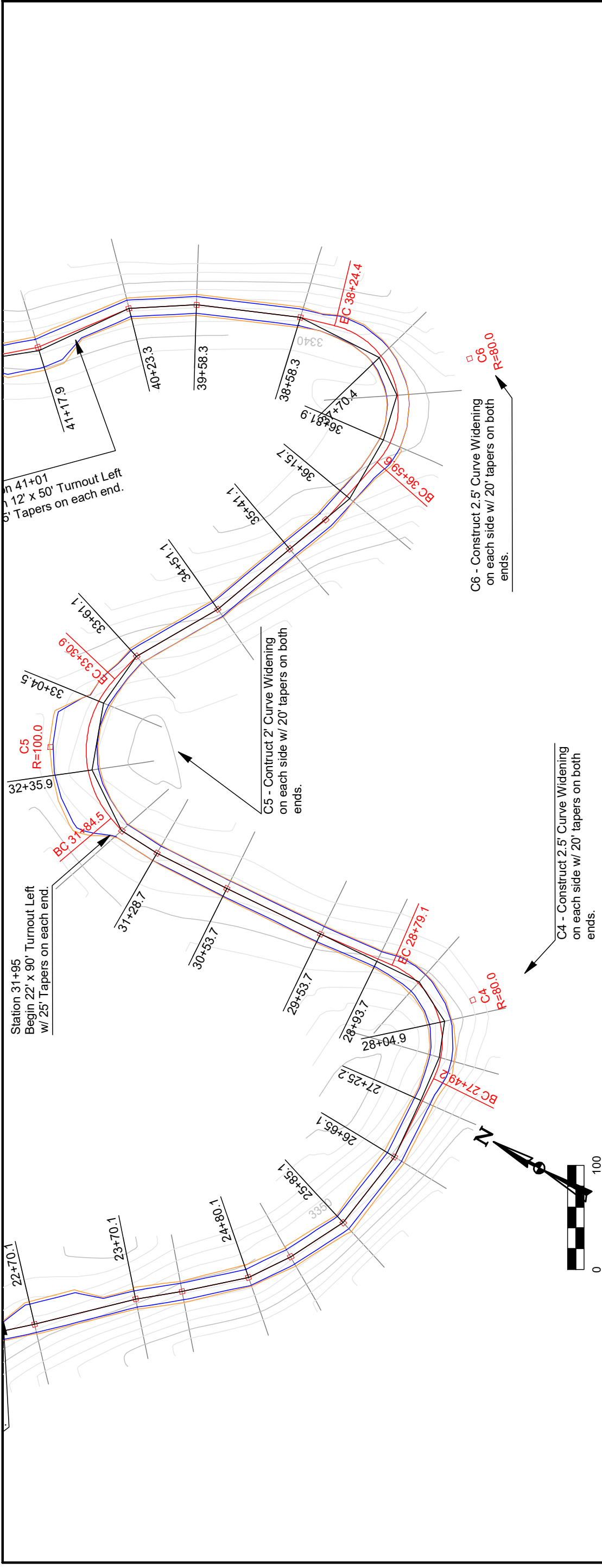




UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-27  
 34-3E-23.00 B  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

PROJECT NO: ORM05-TS-2020-0012	DESIGNED BY: J. BROWN	DESIGN OFFICE: BUTTE FALLS
	DRAWN BY: J. BROWN	
	CHKD BY: R. SCHAFF	
	APPROVED BY:	
	DATE:	5/6/2020

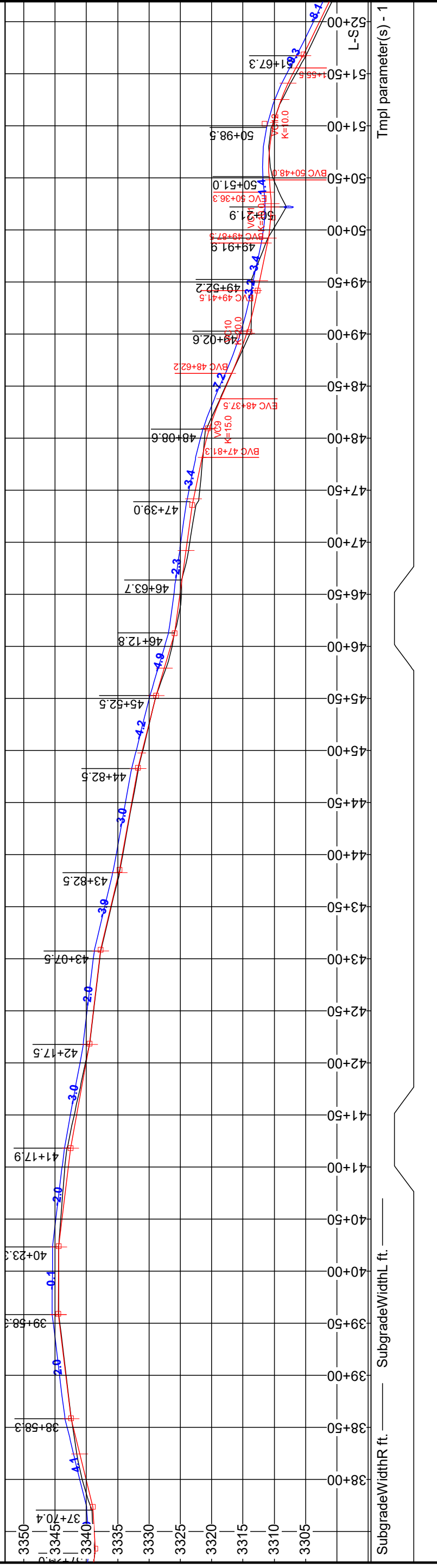
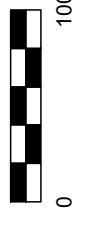
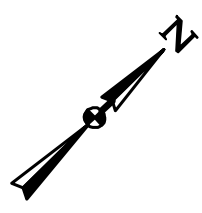
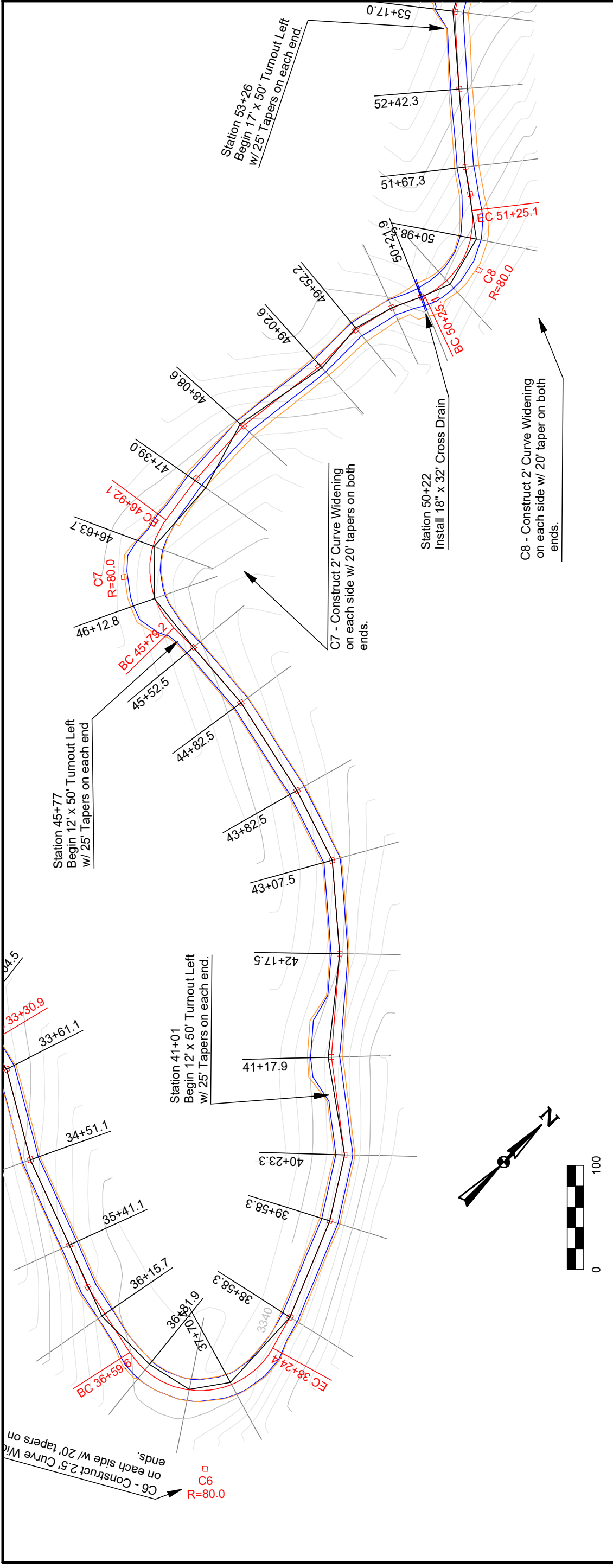
SHEET 3 OF 6





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-27  
 34-3E-23.00 B  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

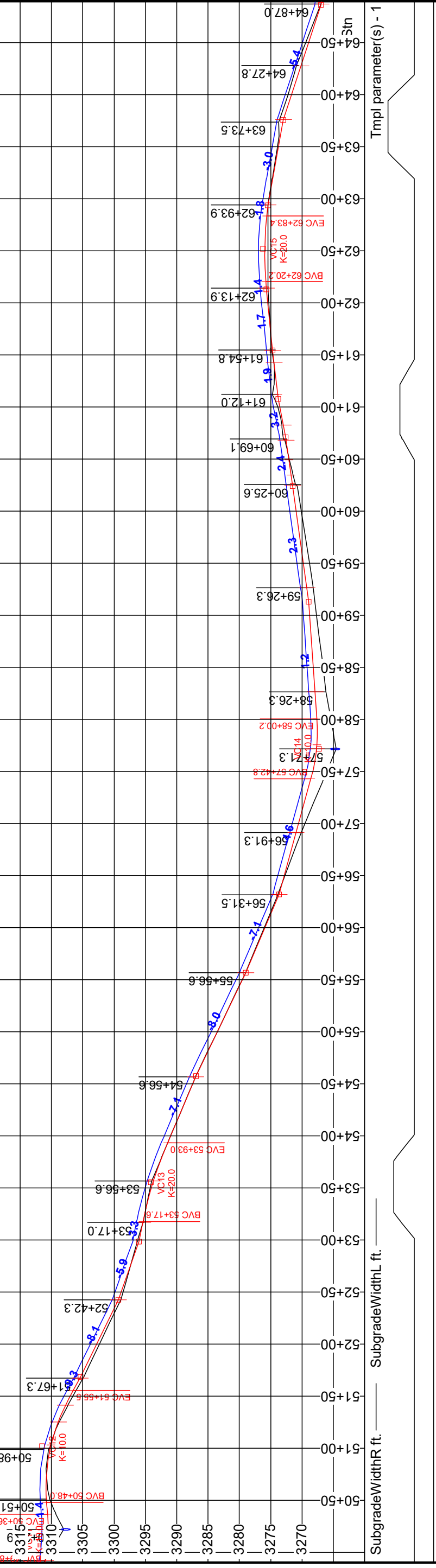
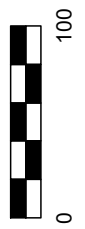
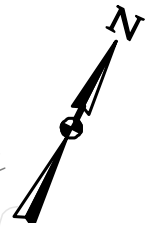
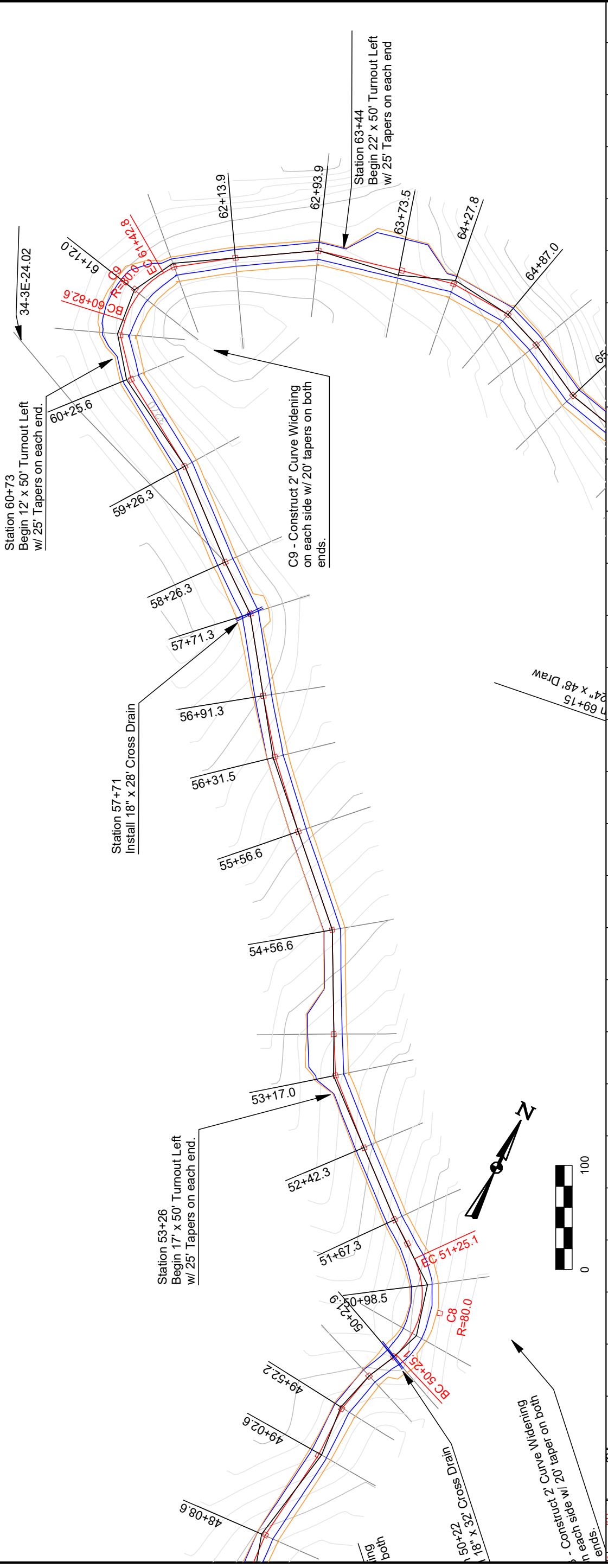
PROJECT NO: ORM05-TS-2020-0012	DESIGNED BY: J. BROWN	DATE	APV.
DESIGN OFFICE: BUTTE FALLS	DRAWN BY: J. BROWN		
	CHKD BY: R. SCHAFF		
	APPROVED BY:		
	DATE		
	DESCRIPTION		
	MARK		





UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-27  
 34-3E-23.00 B  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

DATE: 5/6/2020	MARK	DESCRIPTION	DATE	APPV.
APPROVED BY:				
CHKD BY: R. SCHAFF				
DRAWN BY: J. BROWN				
DESIGNED BY: J. BROWN				
DESIGN OFFICE: BUTTE FALLS				
PROJECT NO: ORM06-TS-2020-0012				



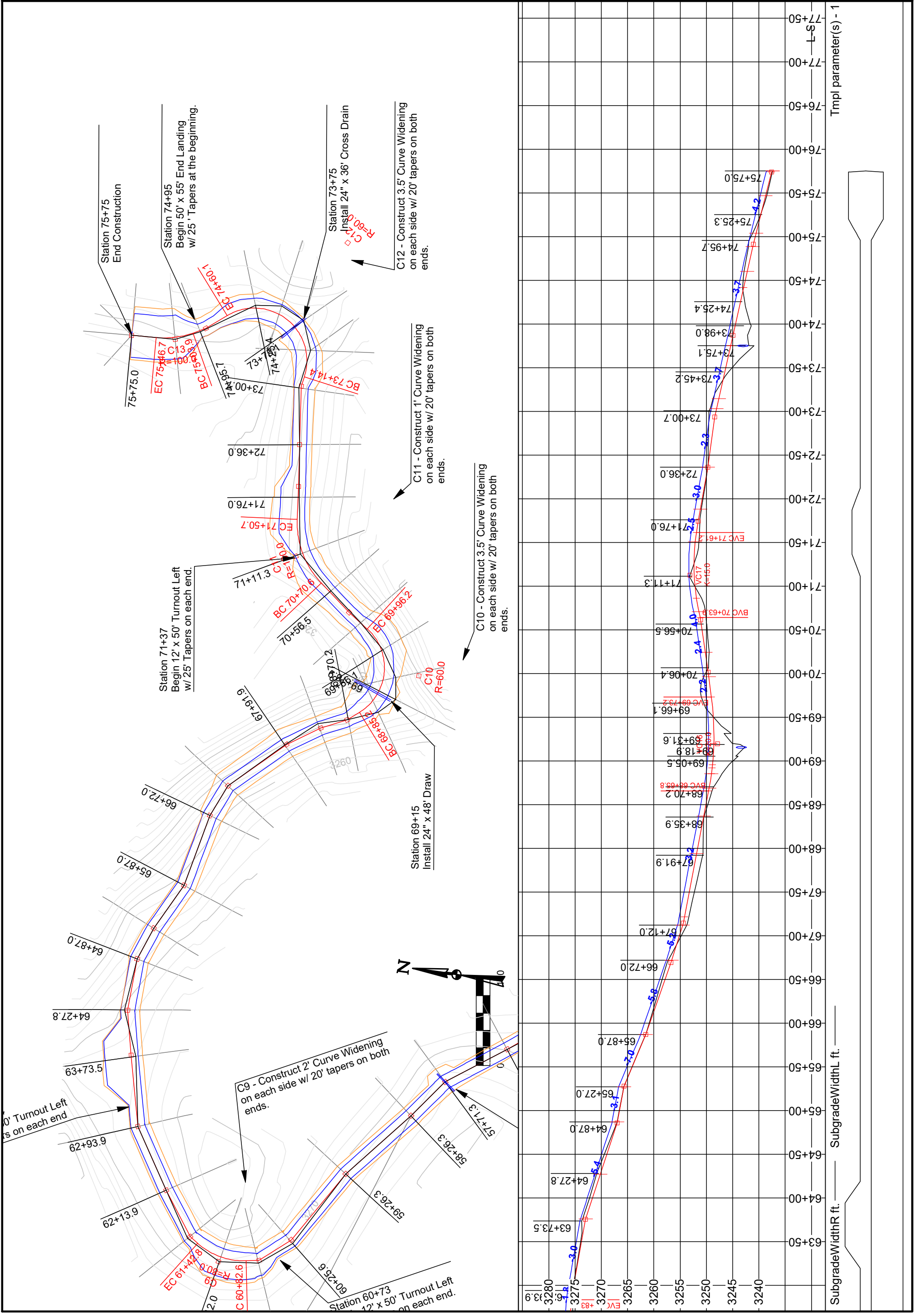
Subgrade Width R. ft. ——— Subgrade Width L. ft.

Subgrade Width R. ft. ——— Subgrade Width L. ft.

Tmpl parameter(s) - 1

PROJECT NO:	ORM05-TS-2020-0012
DESIGN OFFICE:	BUTTE FALLS
DESIGNED BY:	J. BROWN
DRAWN BY:	J. BROWN
CHKD BY:	R. SCHAFF
APPROVED BY:	
DATE:	5/6/2020

UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-27  
 34-3E-23.00 B  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

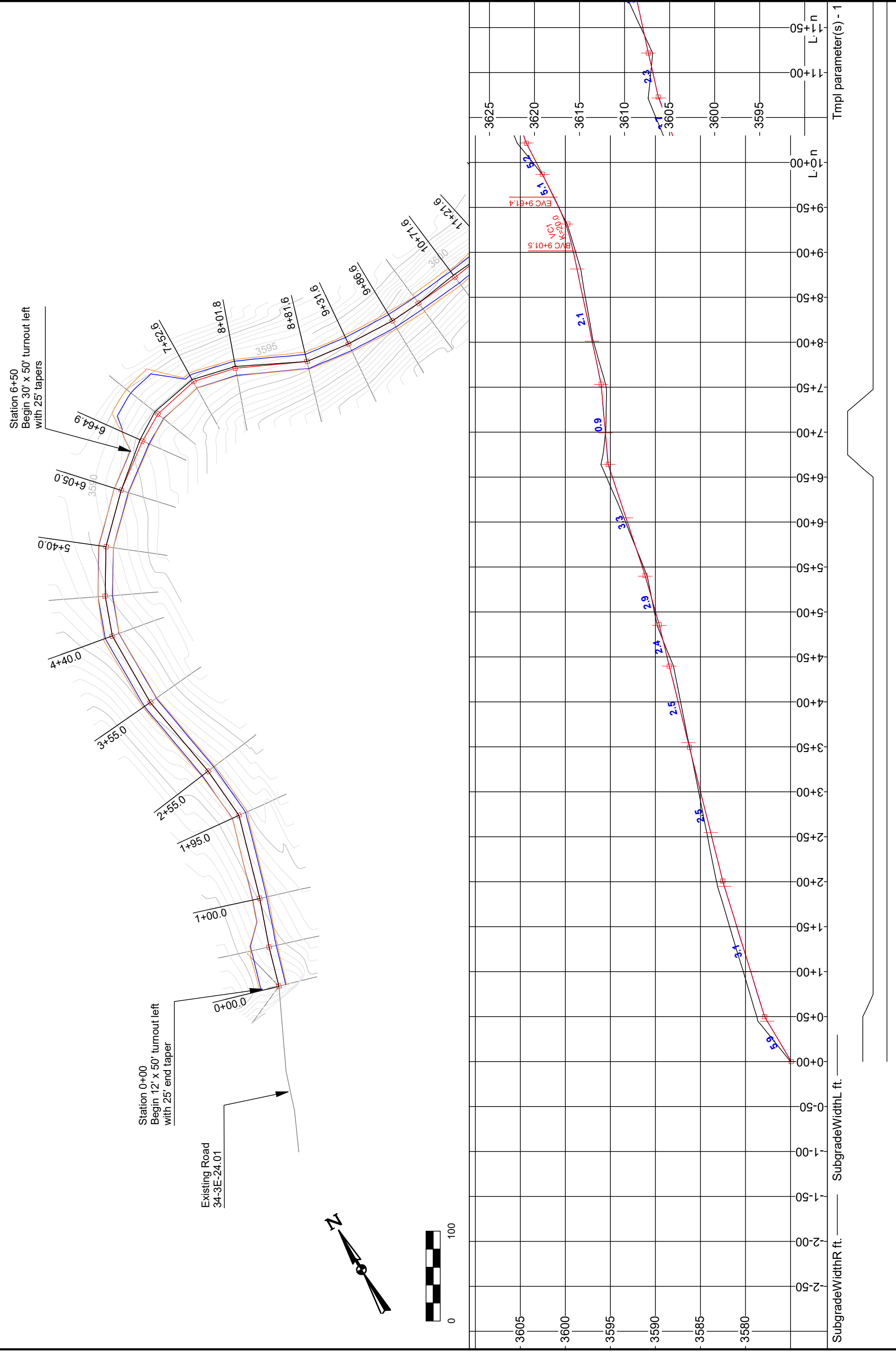




UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-28  
 34-3E-24.01 B  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

DATE:		DESCRIPTION	MARK
APPROVED BY:			
CHK'D BY: R. SCHAFF			
DRAWN BY: J. BROWN			
DESIGNED BY: J. BROWN			
DESIGN OFFICE: BUTTE FALLS			
PROJECT NO: ORM06-TS-2020-0012			
DATE			
APPV.			

SHEET 1 OF 2





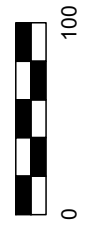
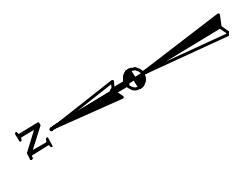
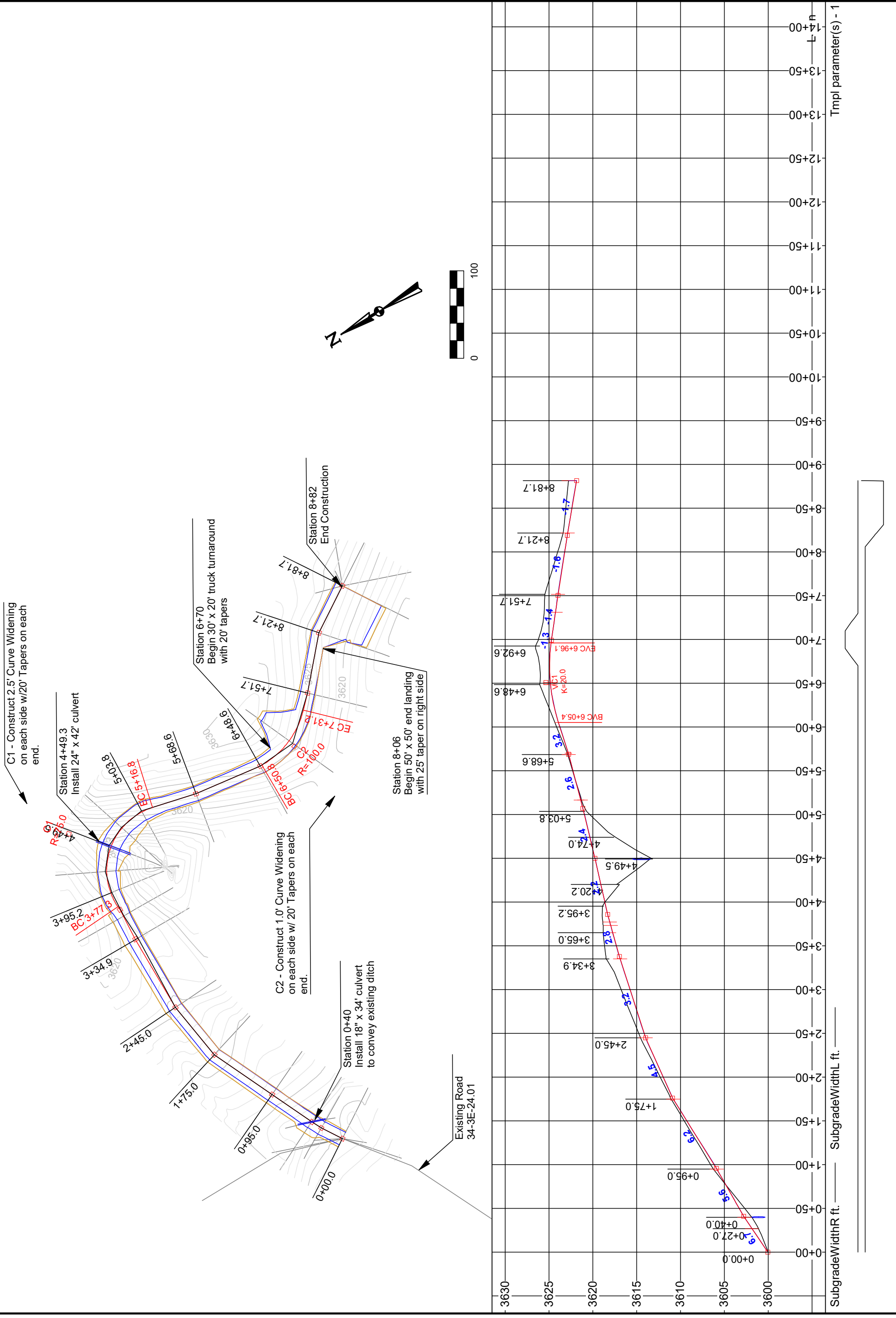




UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 EXHIBIT C-29  
 34-3E-24.05  
 LODGEPOLE TIMBER SALE  
 MEDFORD DISTRICT  
 OREGON

PROJECT NO: ORM05-TS-2020-0012	DESIGN OFFICE: Butte Falls	DESIGNED BY: J. Brown	DRAWN BY: J. Brown	CHK'D BY: R. Schaff	APPROVED BY:	DATE:

SHEET 1 OF 1



## **Road Renovation Work List**

**Renovation/Improvement/Construction:** This consists of road work to be performed on the road prior to its use. This work includes, but not limited to; clearing and grubbing, excavation for roads and landings, compacting, watering, blading and/or rolling the road surface, cleaning/constructing ditches where needed, cleaning or enlarging catch basins and outlets, replacing/installing new culverts, cleaning the entire barrel of all culverts, maintaining water dips (WDs), maintaining/constructing armored water dips (AWDs), spot rocking, road surfacing, seeding and mulching, constructing water bars, and constructing barricades. Remove all down trees from road surface, ditch lines, culvert catch basins, and within brushing limits. All aggregate conforming to Exhibit C-31, Section 900 (Gradation A) and 1200 (Gradation C-1) shall be from commercial quarries. All turnout and truck turnaround widths are in addition to 16' subgrade widths.

**Roadside Brushing:** This consists of road work to be performed on the road prior to its use. The work includes, but is not limited to: brushing 6 horizontal feet from the centerline of the ditch and 6 horizontal feet from the outside shoulder of the road prism, removing brush within 4' of the inlet and outlet of CMPs, removing brush, limbs, and trees along the roadway to improve sight distance. Vegetation to be cut and disposed of will generally be 6 inches in diameter at breast height or less. Disposal from roadside brushing shall be lop and scatter unless otherwise noted in this worklist. Debris shall not be allowed to accumulate in concentrations but shall be further reduced or removed. Concentrations will be defined as any debris, limbs or branches touching each other or piled on top of each other or any material sticking up over 2 feet in elevation above the ground. Cut trees or debris shall not be allowed to stand or lean against other standing uncut trees or brush. Such "hang ups" shall be removed and scattered down slope. Debris shall be cut so that the length of limbs, downed pole, hardwoods, or brush does not exceed eight feet. Brush shall be cut to meet regular specifications in Section 2100. While roadside brushing, there shall be no scarring or any other damage of the tree trunk or bole allowed. Use of excavators for brush removal will be at the discretion of the Authorized Officer.

**Roadside Vegetation Maintenance:** This work also includes removing merchantable and non-merchantable trees 6 horizontal feet from the centerline of the ditch and 6 horizontal feet from the outside shoulder of the road prism as designated in the work list and on Exhibit C-3 (Roadside Vegetation Management Maps). Vegetation to be cut and disposed of will be from 6 inches diameter at breast height up to approximately 28 inches diameter at breast height. All roadside vegetation maintenance sections shall be posted, flagged, and staked with beginning and ending mileposts. Merchantable trees in sections outside of timber sale units are marked with blue paint. All merchantable roadside trees within timber sale units shall be cut unless painted orange or pink (reserve trees). All stumps that may hinder road maintenance operations including road blading operations and snow plowing shall be removed. Any damage that occurs to the road shall be repaired and re-compacted. Any loose soil that remains on site shall be re-compacted or disposed of at areas designated by the Authorized Officer. All disturbed areas shall be seeded and mulched. Any stumps that will not hinder road maintenance operations can be left. All remaining brush and limbs from tree removal operations shall be either chipped, piled in locations designated by the Authorized Officer, or lopped and scattered below the road

in accordance with clearing and grubbing methods and/or roadside brushing disposal methods in Exhibit C-31 (Lodgepole Road Specifications, Sections 200 and 2100).

Jct. – Junction	CY – Cubic Yards
AWD – Armored Water Dip	WD – Water Dip
CMP – Corrugated Metal Pipe	ASC – Aggregate Surface Course
PRR – Pit Run Rock	BST – Bituminous Surface Treatment
GRR – Grid Rolled Rock	NAT – Natural Surface Roads
DO – Ditch Out	WB – Water Bar
PVT - Private	

**Road 34-3E-03.01 (Parsnip Creek R/W)**  
**(Private) NAT**

**M.P. Remarks**

0.00 Jct. w/ 34-3E-10.01. Begin road renovation and roadside brushing.  
0.06 Jct. w/ 34-3E-03.03 left. End road renovation and roadside brushing.

**Road 34-3E-03.02 (Parsnip Creek Spur)**  
**(BLM) NAT**

**M.P. Remarks**

0.00 Jct. w/ 34-3E-10.01. Begin road improvement including clearing, grubbing, scarification, and excavation. Berms on outside shoulder of the existing road shall be pulled back in to create a 16' wide outsloped subgrade. Construct barricade at station 0.01, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is improved.  
0.07 Construct armored water dip. Use 40CY of aggregate using gradation A from Table 903 in Exhibit C-13.  
0.15 End road improvement.

**Road 34-3E-03.03**  
**(Private) NAT**

**M.P. Remarks**

0.00 Jct. w/ 34-3E-03.01. Begin road renovation and roadside brushing.  
0.02 Property line (into Private).  
0.03 Jct. w/ private road left.  
0.04 Remove earth barricade. Re-establish prior to October 15<sup>th</sup> for winterization of natural surface roads.  
0.06 End road renovation and roadside brushing.

**Road 34-3E-10.01 (Thompson Ranch RR Grade)**  
**Segment A (Private) NAT**

**M.P. Remarks**

0.00 Jct. w/ Butte Falls – Prospect Highway. Begin road renovation and roadside brushing.  
0.02 Jct. w/ 34-3E-10.03 right.  
0.08 Clean ditchout left.

0.13 Property line (into BLM). End segment A.

**Segment B (BLM) NAT**

**MP** **Remarks**

- 0.13 Begin roadside vegetation maintenance.
- 0.20 End roadside vegetation maintenance.
- 0.24 Begin roadside vegetation maintenance.
- 0.29 End roadside vegetation maintenance.
- 0.34 Begin roadside vegetation maintenance.
- 0.50 Property line (into Private). End segment B. End roadside vegetation maintenance.

**Segment C (Private) NAT**

**MP** **Remarks**

- 0.64 Fill failure. Excavate unsuitable material. Utilize and compact 20 cubic yards of gradation C-1 (1.5" minus) from Table 1204 in Exhibit C-31 to backfill failure and excavated area.
- 0.74 Property line (into BLM). End segment C.

**Segment D (BLM) NAT**

**MP** **Remarks**

- 0.74 Remove boulder barricade. Re-establish prior to October 15<sup>th</sup>.
- 0.91 Begin roadside vegetation maintenance.
- 1.13 Existing cross drain culvert. Dig out outlet ditch for 50' to drain water away from existing culvert outlet.
- 1.20 Jct. w/ old railroad grade left. End Segment D.

**Segment E1 (BLM) NAT**

**MP** **Remarks**

- 1.26 Jct. w/ 34-3E-03.02 right.
- 1.28 End roadside vegetation maintenance.
- 1.42 Jct. w/ 34-3E-03.01 right. End road renovation and roadside brushing.

**Road 34-3E-10.02**

**(Private) ASC**

**M.P.** **Remarks**

- 0.00 Jct. w/ FS 34 (Lodgepole Road). Begin road renovation and roadside brushing.
- 0.17 Jct. w/ private road left.
- 0.43 Jct. w/ private road left.
- 0.48 Jct. w/ private road right.
- 0.82 Jct. w/ private road left.
- 1.00 Jct. w/ private road left.
- 1.16 Jct. w/ private road left. End road renovation and roadside brushing.

**Road 34-3E-10.03**

**Segment A (Private) ASC**

**M.P.** **Remarks**

- 0.00 Jct. w/ 34-3E-10.01. Begin road renovation and roadside brushing.
- 0.11 Jct. w/ private road right.
- 0.31 Jct. w/ private road left.

- 0.51 Jct. w/ private road right.
- 0.63 Jct. w/ private road right.
- 0.70 End segment A.

**Segment B (Private) NAT**

**MP** **Remarks**

- 0.76 Jct. w/ private road right.
- 0.92 Construct 34-3E-10.04 left.

**Road 34-3E-10.04 (Parsnip Creek Ridge Road)**  
**(BLM) NAT**

**Sta** **Remarks**

- 0+00 Jct. w/ 34-3E-10.03. Begin new construction by outsloping left. See Exhibit C-19 for plan, profile, and specifications. Construct barricade at station 1+00, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is constructed.
- 1+40 End outslope left. Begin crown road with a ditch.
- 3+86 Property line (into BLM).
- 4+00 Construct 17' x 50' turnout left with 25' tapers.
- 5+25 Install new 18" x 28' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 8+50 Construct 17' x 50' turnout left with 25' tapers.
- 9+75 Install new 18" x 34' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 11+07 Construct 50' x 50' landing with 25' tapers coming into landing.
- 11+82 End new construction.

**Road 34-3E-11.00 (Lodgepole Spur)**  
**Segment A (BLM) ASC**

**M.P.** **Remarks**

- 0.00 Jct. w/ FS 34 (Lodgepole Road). Begin road renovation, roadside brushing and roadside vegetation maintenance. Open up eastern portion of "Y" intersection by removing barricade, renovating the road, and roadside brushing.
- 0.12 Construct 34-3E-11.06 right.
- 0.22 Construct 34-3E-11.07 left.
- 0.30 End road renovation, roadside brushing, and roadside vegetation maintenance.

**Road 34-3E-11.01 (Phillips Creek Road)**  
**Segment A (BLM) ASC**

**M.P.** **Remarks**

- 0.00 Jct. w/ FS 34 (Lodgepole Road). Begin road renovation, roadside brushing and roadside vegetation maintenance. Begin surfacing 14' wide with an 8" compacted depth using gradation A from Table 903 in Exhibit C-31. Surface one turnout approximately 50' in length and 10' in width.
- 0.02 Remove earth barricade.
- 0.18 Construct 34-3E-11.04 left. **Construct earth barricade 50' past -11.04 road takeoff.**

End road renovation, roadside brushing, surfacing, and roadside vegetation maintenance.

**Road 34-3E-11.04 (Lodgepole Spur 1 North)**  
**(BLM) ASC**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0+00	Jct. w/ 34-3E-11.01. Begin new construction by outsloping left. See Exhibit C-20 for plan, profile, and specifications. Begin surfacing 15' wide with a 12" compacted depth using gradation A from Table 903 in Exhibit C-31.
2+00	Construct 12' x 50' turnout left with 25' tapers.
4+90	Jct. w/ 34-3E-35.00 left and right.
7+00	<b>Begin hauling clearing debris and grubbed stumps and scatter on old road located at station 12+35.</b>
12+35	Old road left and right. Correct drainage on old road left. <b>Camouflage old road bed left and right by scattering clearing debris and stumps from grubbing between stations 7+00 and 15+00 on first 300' of old road bed in both directions.</b>
14+00	Construct 12' x 50' turnout left with 25' tapers.
15+00	<b>End hauling grubbed stumps and scatter on old road located at station 12+35.</b>
17+85	Construct 27' x 20' truck turn around left with 20' tapers.
20+65	Construct 50' x 54' landing with 25' tapers coming into landing.
21+44	End new construction.

**Road 34-3E-11.05 (Lodgepole Spur 2 North)**  
**(BLM) ASC**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0+00	Jct. w/ 34-3E-11.04. Begin new construction by outsloping left. See Exhibit C-21 for plan, profile, and specifications. Begin surfacing 15' wide with a 12" compacted depth using gradation A from Table 903 in Exhibit C-31. <b>All clearing debris and grubbed stumps on this right-of-way shall be hauled and scattered on the old road that crosses back and forth across this right-of-way.</b>
4+50	End outslope left. Begin outsloping right.
7+50	Construct 12' x 50' turnout right with 25' tapers.
14+50	Construct 22' x 50' turnout right with 25' tapers.
17+95	Construct 50' x 50' landing with 25' tapers coming into landing.
18+70	End new construction.

**Road 34-3E-11.06 (Lodgepole Spur 1 South)**  
**(BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0+00	Jct. w/ 34-3E-11.00. Begin new construction by outsloping right. See Exhibit C-22 for plan, profile, and specifications. Construct barricade at station 1+00, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15 <sup>th</sup> of the same year it is constructed.
0.+70	End outslope right. Begin crown road with a ditch.
4+33	Install new 18" x 34' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).

- 4+35 End crowned road with a ditch. Begin outsloping right.
- 5+75 Construct 22' x 50' turnout right with 25' tapers.
- 9+37 Construct 50' x 50' landing with 25' tapers coming into landing.
- 10+13 End new construction.

**Road 34-3E-11.07 (Lodgepole Main Spur South)**  
**(BLM) ASC**

- | <b><u>Sta</u></b> | <b><u>Remarks</u></b>  |
|-------------------|--|
| 0+00              | Jct. w/ 34-3E-11.00. Begin new construction by outsloping right. See Exhibit C-23 for plan, profile, and specifications. Begin surfacing 15' wide with a 12" compacted depth using gradation A from Table 903 in Exhibit C-31. |
| 4+85              | Construct 17' x 60' turnout right with 25' tapers.   |
| 10+00             | Construct 12' x 50' turnout right with 25' tapers.   |
| 11+77             | Begin 8' x 40' widening left.  |
| 12+22             | Jct. w/ 34-3E-11.08 right.   |
| 19+75             | Construct 17' x 75' turnout right with 25' tapers.   |
| 25+75             | Construct 12' x 50' turnout right with 25' tapers.   |
| 29+40             | Construct 22' x 20' truck turnaround left with 20' tapers.   |
| 32+75             | Construct 50' x 50' landing with 25' tapers coming into landing.   |
| 33+50             | End new construction.  |

**Road 34-3E-11.08 (Lodgepole Spur 2 South)**  
**(BLM) NAT**

- | <b><u>Sta</u></b> | <b><u>Remarks</u></b>   |
|-------------------|---|
| 0+00              | Jct. w/ 34-3E-11.07. Begin new construction by outsloping right. See Exhibit C-24 for plan, profile, and specifications. Construct barricade at station 0+50, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15 <sup>th</sup> of the same year it is constructed. |
| 5+35              | Construct 50' x 50' landing with 25' tapers coming into landing.  |
| 6+10              | End new construction.   |

**Road 34-3E-13.03**  
**(Private) ASC**

- | <b><u>M.P.</u></b> | <b><u>Remarks</u></b>  |
|--------------------|--|
| 0.00               | Jct. w/ 34-3E-14.01. Begin road renovation, roadside brushing, and chipping. |
| 0.20               | Jct. w/ private road right.  |
| 0.34               | End road renovation. Begin temporary road 13-3B reconstruction.              |

**Road 34-3E-13.04**  
**Segment A (Private) ASC**

- | <b><u>M.P.</u></b> | <b><u>Remarks</u></b>   |
|--------------------|---|
| 0.00               | Jct. w/ 34-3E-14.01. Begin road renovation and roadside brushing.                 |
| 0.07               | Jct. w/ private road left.  |
| 0.36               | End road renovation and roadside brushing. Begin 34-3E-13.03 B road construction. |

**Segment B (BLM) ASC**



**MP   Remarks**

- 0.36/0+00    Begin new construction by outsloping right. See Exhibit C-25 for plan, profile, and specifications. Begin surfacing 15' wide with an 8" compacted depth using gradation A from Table 903 in Exhibit C-31. Place surface course surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-31 on top of 4" minus base.
- 1+78    Property line (into BLM).
- 1+99    End outslope right. Begin crown road with a ditch.
- 2+00    Install new 18" x 30' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type). Ditch out outlet of culvert to drain water away from culvert outlet if necessary.
- 4+63    Construct 50' x 50' landing with 25' tapers coming into landing.
- 5+39    End new construction.

**Road 34-3E-14.01**  
**Segment D (Private) ASC**

**M.P.   Remarks**

- 0.00    Jct. w/ 34-3E-13.04. Begin road renovation and roadside brushing.
- 0.10    Jct. w/ 34-3E-13.03 left.
- 0.13    Jct. w/ 34-3E-13.01 right and 34-3E-24.03 left. End road renovation and roadside brushing.

**Road 34-3E-14.02 (North Fork Overlook Spur)**  
**(BLM) NAT**

**Sta   Remarks**

- 0+00    Jct. w/ 34-3E-23.00. Begin new construction by outsloping left. See Exhibit C-26 for plan, profile, and specifications. Construct barricade at station 0+50, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is constructed.
- 2+25    Construct 50' x 50' landing with 25' tapers coming into landing.
- 3+00    End new construction.

**Road 34-3E-15.03 (Medco Railroad Grade)**  
**Segment A1 (BLM) ASC**

**M.P.   Remarks**

- 0.00    Jct. w/ Butte Falls – Prospect Highway. Begin road renovation and roadside brushing.
- 0.08    Jct. w/ 34-3E-15.00 left. Begin roadside vegetation maintenance.
- 0.32    Property line (into Private). End segment A1. End roadside vegetation maintenance.

**Segment A2 (Private) ASC**

**MP   Remarks**

- 0.74    End segment A2.

**Segment A3 (Private) ASC**

**MP   Remarks**

- 0.87    Jct. w/ 34-3E-14.01 left.
- 0.94    Jct. w/ 34-3E-14.01 left.

0.97 Property line (into BLM). End segment A3.

**Segment A4 (BLM) ASC**

**MP Remarks**

1.03 Begin roadside vegetation maintenance.

1.17 Jct. w/ 34-3E-23.03 left.

1.22 End road renovation, roadside brushing, and roadside vegetation maintenance.

**Road 34-3E-21.00 (Camp Creek)**

**Segment A (BLM) ASC**

**M.P. Remarks**

0.00 Jct. w/ Butte Falls – Prospect Highway. Begin road renovation and roadside brushing.

0.07 Begin roadside vegetation maintenance.

0.16 Property line (into Private). End segment A. End roadside vegetation maintenance.

**Segment B (Private) ASC**

**MP Remarks**

0.67 Jct. w/ 34-3E-33.03 right and jct. w/ private road left.

1.02 Property line (into BLM). End segment B.

**Segment C1 (BLM) ASC**

**MP Remarks**

1.02 Begin roadside vegetation maintenance.

1.11 End roadside vegetation maintenance.

1.31 Jct. w/ 34-3E-15.03 left and right. End segment C1.

**Segment C2 (BLM) ASC**

**MP Remarks**

1.31 Begin chipping.

1.66 Jack culvert inlet open.

1.95 Property line (into Private). End segment C2. End chipping.

**Segment D (Private) ASC**

**MP Remarks**

1.96 Jct. w/ private road left.

2.01 Jct. w/ 34-3E-26.03 right.

2.73 Jct. w/ 34-3E-26.00 right.

2.29 Property line (into BLM). End segment D.

**Segment E (BLM) ASC**

**MP Remarks**

2.29 Begin roadside vegetation maintenance (left side of road only).

2.35 Jct. w/ 34-3E-23.02 left.

2.55 End roadside vegetation maintenance.

2.73 Jct. w/ 34-3E-23.00 left.

3.18 Property line (into Private). End segment E.

**Segment F (Private) ASC**

**MP Remarks**

3.35 Jct. w. 34-3E-24.00 left. End road renovation and roadside brushing.

**Road 34-3E-23.00**  
**Segment A (BLM) ASC**

<b><u>M.P.</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-21.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance. Begin surfacing 14' wide with an 8" compacted depth using gradation A from Table 903 in Exhibit C-31. Surface three turnouts approximately 50' in length and 10' in width.
0.03	Existing mega gate.
0.08	Reshape existing armored water dip to drain ditch water across water dip to match Exhibit C-13 (Armored Water Dip Construction Details). Re-use existing aggregate.
0.17	Reshape existing armored water dip to drain ditch water across water dip to match Exhibit C-13 (Armored Water Dip Construction Details). Re-use existing aggregate.
0.30	End ASC. Begin NAT surface.
0.32	Begin scarification of ruts.
0.37	Reshape existing armored water dip to drain ditch water across water dip to match Exhibit C-13 (Armored Water Dip Construction Details).
0.78	End road renovation, roadside brushing, roadside vegetation maintenance, and surfacing. Begin constructing 34-3E-23.00 B right. <b>Begin full decommission of existing roadbed.</b> Scarify existing ruts. Pull back fill slopes and contour back to natural slope. Scatter clearing debris and stumps from 34-3E-23.00 B road construction on obliterated section.
1.17	<b>End full decommission of existing roadbed.</b>

**Segment B (BLM) ASC**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.78/0+00	Begin new construction by outsloping left. See Exhibit C-27 for plan, profile, and specifications. Begin surfacing 15' wide with a 12" compacted depth using gradation A from Table 903 in Exhibit C-31. <b>All clearing debris and grubbed stumps on this right-of-way from 0+00 to 21+00 shall be hauled and scattered on the old road that is being obliterated below this right-of-way.</b>
2+99	Construct Temporary Road 14-1 left.
4+23	Construct 12' x 50' turnout left with 25' tapers.
11+69	Construct 12' x 50' turnout left with 25' tapers.
15+92	Construct 12' x 50' turnout left with 25' tapers.
22+65	Construct 12' x 50' turnout left with 25' tapers.
31+95	Construct 22' x 90' turnout left with 25' tapers.
41+01	Construct 12' x 50' turnout left with 25' tapers.
45+77	Construct 12' x 50' turnout left with 25' tapers.
46+95	End outslope left. Begin crown road with a ditch.
50+22	Install new 18" x 32' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
53+26	Construct 17' x 50' turnout left with 25' tapers.
57+71	Install new 18" x 28' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
58+26	Construct 34-3E-24.02 left.
60+73	Construct 12' x 50' turnout left with 25' tapers.
63+44	Construct 22' x 50' turnout left with 25' tapers.

- 69+16 Install new 24" x 48' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type).
- 71+37 Construct 22' x 50' turnout left with 25' tapers.
- 73+75 Install new 24" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 74+95 Construct 50' x 55' landing with 25' tapers coming into landing.
- 75+75 End new construction.

**Road 34-3E-23.03**

**(BLM) PRR**

**M.P. Remarks**

- 0.00 Jct. w/ 34-3E-15.03. Begin road renovation, roadside brushing, and chipping.
- 0.01 Remove earth barricade and water bars. Re-establish earth barricade and water bars prior to October 15<sup>th</sup> for winterization of natural surface roads.
- 0.21 End road renovation, roadside brushing, and chipping.

**Road 34-3E-24.00 (Camp Creek R/W)**

**Segment A (Private) ASC**

**M.P. Remarks**

- 0.00 Jct. w/ 34-3E-21.00. Begin road renovation and roadside brushing.
- 0.46 Jct. w/ 34-3E-24.01 right.
- 0.60 Jct. w/ 34-3E-24.03 right. End road renovation and roadside brushing.

**Road 34-3E-24.01 (Cur TS Sp)**

**Segment A (BLM) ASC**

**M.P. Remarks**

- 0.00 Jct. w/ 34-3E-24.00. Begin road renovation and roadside brushing.
- 0.24 Jct. w/ 34-3E-24.02 left. Begin roadside vegetation maintenance.
- 0.29 BLM stockpile left – approximately 100 CY.
- 0.53 Construct 34-3E-25.05 right.
- 0.83 End roadside vegetation maintenance.
- 0.94 End segment A. End road renovation and roadside brushing.

**Segment B (BLM) NAT**

**MP Remarks**

- 0.94/0+00 Begin new construction by outslipping left. See Exhibit C-28 for plan, profile, and specifications. Construct barricade at station 1+00, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is constructed. Construct 12' x 50 turnout left with 25' end taper. Use existing wide area at end of segment A as beginning taper.
- 6+50 Construct 30' x 50' turnout left with 25' tapers.
- 15+42 Construct 50' x 50' landing with 25' tapers coming into landing.
- 16+17 End new construction.

**Road 34-3E-24.02 (Cur Creek Spur)**  
**(BLM) ASC**

**M.P.**   **Remarks**

- 0.00 Jct. w/ 34-3E-24.01. Begin road renovation, roadside brushing, chipping, and roadside vegetation maintenance.  
0.53 End road renovation, roadside brushing, chipping, and roadside vegetation maintenance.

**Road 34-3E-24.03 (Medco Camp Creek Spur)**  
**Segment A (Private) ASC**

**M.P.**   **Remarks**

- 0.00 Jct. w/ 34-3E-24.00. Begin road renovation and roadside brushing.  
0.43 End segment A.

**Segment B (Private) PRR**

**MP**   **Remarks**

- 0.54 Jct. w/ 34-3E-13.01 left and 34-3E-14.01 right. End road renovation and roadside brushing.

**Road 34-3E-24.05 (Mud Flap Spur)**  
**(BLM) NAT**

**Sta**   **Remarks**

- 0+00 Jct. w/ 34-3E-24.01. Begin new construction by insloping left with a ditch.. See Exhibit C-29 for plan, profile, and specifications. Construct barricade at station 0+00 (remove culvert after use), construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is constructed. Install new temporary 18" x 34' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type). Ditch line long -24.01 may have to be deepened in order to install CMP. Outlet drainage ditch needs to be installed to drain away from culvert outlet.  
3+75 End insloping left with a ditch. Begin outsloping right.  
4+49 Install new 24" x 42' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).  
6+70 Construct 30' x 20' truck turnaround left with 20' tapers.  
8+06 Construct 50' x 50' landing with 25' taper coming into landing on the right side.  
8+82 End new construction.

**Temp Road 13-3B (T34S, R03E, Section 13)**  
**(BLM) NAT**

**Sta**   **Remarks**

- 0+00 Jct. w/ 34-3E-13.03. Begin temporary road reconstruction, roadside brushing, and chipping of existing outsloped left road prism. Construct barricade at station 0+50, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15<sup>th</sup> of the same year it is constructed.  
3+15 End reconstruction, roadside brushing, and chipping. Begin road construction for a 14' wide outsloped left temporary road.  
5+78 Property line (into BLM).

12+14 Construct landing. End temporary road construction.

**Temp Road 23-2 (T34S, R03E, Section 23)**  
**(BLM) NAT**

**Sta**    **Remarks**

0+00	Jct. w/ 34-3E-23.00 B. Begin cut and fill construction for a 14' wide outsloped left temporary road. Construct barricade at station 0+50, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15 <sup>th</sup> of the same year it is constructed.
8+45	Construct landing. End temporary route construction.

## TIMBER SALE ROAD SPECIFICATIONS

### TABLE OF CONTENTS

SECTION	DESCRIPTION	Page(s)
100	General	2-8
200	Clearing and Grubbing	9-11
300	Excavation and Embankment	11-15
400	Pipe Culverts	15-17
500	Renovation and Improvement of Existing Roads	17-18
600	Watering	18-19
900	Aggregate Base Course - Screened Rock	19-21
1200	Aggregate Surface Course - Crushed Rock	21-23
1400	Slope Protection	23-25
1700	Erosion Control	25-26
1800	Soil Stabilization	26-29
2100	Roadside Brushing	29-30

**GENERAL – 100**

101 - Prewrite Conference(s):

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

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

102 - Definitions:

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

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

ACI - American Concrete Institute

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

ASTM - American Society for Testing and Materials.

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

BLM - Bureau of Land Management

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Road Centerline - The longitudinal center of a roadbed.

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

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

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

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

Scarification - The process of loosening or breaking up of the surface layer of

soil or road, usually to a specified depth.

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

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

Spalls - Flakes or chips of stone.

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

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

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

Subbase - Reinforcement of the subgrade with large particles of pitrun rock or crushed stone. Usually confined to roads having wet subgrades or subgrades with weak support characteristics.

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

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

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

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

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

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

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

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

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

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

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

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

102a - Tests Used in These Specifications:

- AASHTO T 11      Quantity of rock finer than No. 200 sieve.
- AASHTO T 27      Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.
- AASHTO T 89      Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.
- AASHTO T 90      Plastic limits and plasticity index of soil.  
a. Plastic limit - lowest water content at which the soil remains plastic.  
b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.
- AASHTO T 96      Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.
- AASHTO T 99      Relationship between soil moisture and density of soil.  
Method A - 4" mold, soil passing a No. 4 sieve 25 blows/layer & 3 layers.  
Method C - 4" mold, soil passing a 3/4 inch sieve 25 blows/layer & 3 layers.  
Method D - 6" mold, soil passing a 3/4 inch sieve. 56

blows/layer & 3 layers.

- AASHTO T 119 Slump of hydraulic cement concrete.
- AASHTO T 152 Air content of freshly mixed concrete.
- AASHTO T 166 Specific Gravity of compacted Bituminous Mixtures.
- AASHTO T 176 Shows relative portions of fine dust or claylike materials in soil or graded aggregate.
- AASHTO T 180 (OSHD 106-71) moisture density relationship of soil same as AASHTO T 99 proctor but uses a 10-lb rammer & 18-in drop height.
- AASHTO T 191 Sand Cone. Density of soil in place: For subgrade use 6-inch or 12- inch cone. For rock surfacing for 1-1/2-inch minus to 3-inch minus use 12-inch cone.
- AASHTO T 205 Rubber balloon. Density of soil in place. Use for compacted or firmly bonded soil.
- AASHTO T 209 Maximum Specific Gravity of Bituminous Paving Mixtures.
- AASHTO T 210 Durability of aggregates based on resistance to produce fines.
- AASHTO T 224 Correction for coarse particles in the soil.
- AASHTO T 238 Density of Soil and Soil-Aggregate in place by nuclear methods.
- AASHTO T 248 Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.
- ASTM D 4564 Determination of relative density of cohesionless soils.
- DMSO (dimethyl sulfide) Determines volume of expanding clays in aggregates.  
Usually associated with marine basalts.
- 103 - Compaction equipment shall meet the following requirements:
- 103b - Sheepfoot and Tamping rollers. A tamping roller unit shall consist of two watertight metal drums mounted in frames in such manner as to be fully oscillating, together with a tractor having sufficient weight and power under actual working conditions to pull the roller drums at a minimum speed of 2.5 miles per hour. The drums shall be no less than 60 inches in diameter and no less than 54 inches in length, measured at

the drum's surface, and shall be studded with tamping feet projecting not less than 7 inches from the face of the drums.

The distance between circumferential rows of tamper feet shall be such that the diagonal distance from any foot to the nearest foot in each adjacent row shall be not more than 12 inches. The cross-sectional area of the face of each tamper foot, measured perpendicular to the axis of the stud, shall be not less than 5-1/2 square inches nor more than 8 square inches.

The weight of the tamping-roller unit shall be such as to exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet, and the roller shall be so designed that the weight may be increased to exert a pressure up to 500 pounds per square inch on the ground area in contact with the tamping feet. The ground pressure shall be determined by dividing the total weight of the roller unit, not including the weight of the tractor, by the total cross-sectional area of the tamping feet in one row of tamping feet parallel to the axis of the roller.

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

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

- 103g - Vibratory compactor. Vibratory compactors shall consist of multiple or gang- type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.
- 103h - Drum drive self-propelled vibratory grid roller. The unit shall consist of one cylindrical drum with a drum diameter of not less than 56 inches, nor more than 66 inches and the drum width shall be 84 inches. Vibratory frequency shall be regulated in seeps from 1200 to 1800 vibrations per minute (VPM), and the centrifugal force developed shall be at least 40,000 pounds at 1800 RPM. The vibratory grid roller shall be self-propelled and have a power unit of not less than 112 horsepower. The "grid" design shall be a herringbone or z-bar pattern around the circumference of the drum. The grid bars shall be 1 inch in height and spaced not more than 8-1/2 inches apart.
- 103i - Other. Compaction equipment approved by the Authorized Officer.

**CLEARING AND GRUBBING - 200**

- 201 - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans and as staked on the ground.
- 202 - Where clearing limits have not been staked, established by these specifications or shown on the plans, the limits shall extend 10 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope.
- 203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202, as shown on the plans, as staked on the ground, and as posted.
- 203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.
- 204 - Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground and protruding obstacles remaining as a result of the clearing operation (in accordance with Subsections 204a, 204b, 204c, 204d, and 204e 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.
- 204b - Stumps and other protruding objects shall be completely removed within the limits of required embankments having heights of less than 4 feet.
- 204c - On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 204d - On areas to be occupied by embankments having heights greater than 4 feet, no stump or portion thereof shall remain within 3 feet of embankment subgrades or slope surfaces after grubbing is completed.
- 204e - Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.
- 206 - Clearing and grubbing debris shall be disposed of by chipping in accordance with Subsection 209, and/or scattering in accordance with Subsection 210, and/or piling in

accordance with Subsection 211 and at the following road locations.

- 208b - Trees, firm logs, and other firm large pieces, 4 inches in diameter and 8 feet in length and larger and not removed from the contract area by the Purchaser, shall be piled at locations determined by the Authorized Officer.

Road No.	From M.P./Sta	To M.P./Sta	Activity Type	Disposal Method
34-3E-03.02	0.00	0.15	Road Improvement	Pile
34-3E-10.01 B	0.13	0.20	Rdside Veg. Maint.	Scatter and/or Pile
	0.24	0.29	Rdside Veg. Maint.	Scatter and/or Pile
	0.34	0.50	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-10.01 D-E1	0.91	1.28	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-10.04	0+00	11+82	Road Construction	Pile
34-3E-11.00 A	0.00	0.30	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-11.01 A	0.00	0.18	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-11.04	0+00	21+44	Road Construction	Pile
34-3E-11.05	0+00	18+70	Road Construction	Pile
34-3E-11.06	0+00	10+13	Road Construction	Pile
34-3E-11.07	0+00	33+50	Road Construction	Pile
34-3E-11.08	0+00	6+10	Road Construction	Pile
34-3E-13.04 B	0+00	5+39	Road Construction	Pile
34-3E-14.02	0+00	3+00	Road Construction	Pile
34-3E-15.03 A1	0.08	0.32	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-15.03 A4	1.03	1.22	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-21.00 A	0.07	0.16	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-21.00 C1	1.02	1.11	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-21.00 E	2.29	2.55	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-23.00 A	0.00	0.78	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-23.00 B	0+00	21+00	Road Construction	Scatter (on oblit road)
	21+00	75+75	Road Construction	Pile
34-3E-24.01 A	0.24	0.83	Rdside Veg. Maint.	Scatter and/or Pile
34-3E-24.01 B	0+00	16+17	Road Construction	Pile
34-3E-24.05	0+00	8+82	Road Construction	Pile
Temp Road 13-3B	0+00	12+14	Road Construction	Pile
Temp Road 23-2	0+00	8+45	Road Construction	Pile

- 208c - Clearing debris shall be placed outside the roadway in a neat, compacted windrow laid approximately parallel and along the toe-line of embankment slopes. The top of the windrow shall not extend above the subgrade. Material in the windrow shall be matted down with construction equipment to form a compact and uniform pile. Windrows shall have 16-foot minimum breaks at least every 150 feet. Windrows shall not be placed against trees. A pioneer road may be constructed to provide an area for



- placement of windrows provided the excavated material is kept within the clearing limits and does not adversely affect the road construction.
- 209a - Clearing and grubbing debris shall be reduced to chips (if chipped) having a maximum thickness of 2 inches and faces not exceeding 6 square inches on an individual surface. Chips can be used as a mulch and be produced and stockpiled at locations that will not interfere with construction, and ultimately spread over designated portions of embankments and cut slopes in layers not to exceed 3 inches in loose thickness.
  - 210 - Disposal of clearing and grubbing debris or stumps and cull logs 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.
  - 210a - Disposal of clearing and grubbing debris stumps and cull logs on non- government property by piling 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.
  - 211 - Disposal of clearing and grubbing debris or stumps and cull logs shall be by piling on government lands outside of established clearing limits in an area and in a manner acceptable to the Authorized Officer.
  - 212 - No grading will be permitted prior to completion and approval by the Authorized Officer of the required clearing and grubbing work, except that stump grubbing may proceed with the excavation of the road prism.
  - 213 - No clearing or grubbing debris shall be left lodged against standing trees.

### **EXCAVATION AND EMBANKMENT - 300**

- 301 - This work shall consist of excavating, overhaul, placement of embankments, backfilling, borrowing, leveling, ditching, grading, insloping, outsloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earth-moving work in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 302 - 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 or metal tags.

- 303 - 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.
- 304 - 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 and as marked on the ground with stakes.
- 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.
- 305c - Embankments formed of material containing less than 25 percent rock not larger than 8 inches in the greatest dimension shall be placed in 12-inch layers. Material containing more than 25 percent rock not larger than 12 inches in the greatest dimension shall be placed in successive layers not exceeding 2 feet in thickness.
- 306 - Layers of embankment, final subgrade, and selected roadway excavation material as specified under Subsections 305a, 305b, and 317 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 103b, 103f, 103g, 103h, and 103i and in accordance with the following table:

Road No.	From Sta./M/P.	To Sta./M.P.	Subsection 306
34-3E-03.02	0.00	0.15	306 e
34-3E-10.04	0+00	11+82	306 a
34-3E-11.04	0+00	21+44	306 a
34-3E-11.05	0+00	18+70	306 a
34-3E-11.06	0+00	10+13	306 a

34-3E-11.07	0+00	33+50	306 a
34-3E-11.08	0+00	6+10	306 a
34-3E-13.04 B	0+00	5+39	306 a
34-3E-14.02	0+00	3+00	306 a
34-3E-23.00 B	0+00	75+75	306 a
34-3E-24.01 B	0+00	16+17	306 a
34-3E-24.05	0+00	8+82	306 a
Temp Road 13-3B	0+00	12+14	306 f
Temp Road 23-2	0+00	8+45	306 f

- 306a - Minimum compaction for each layer of embankment, selected borrow, and selected roadway excavation material placed at optimum moisture shall be 1 hour of continuous compacting for each 150 cubic yards in place or fraction thereof.
- 306e - The final subgrade except landings and temporary roads shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103b, 103f, 103g, 103h, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 8 stations of road or a fraction of as measured along the center line of the constructed road. Landings and temporary roads shall be compacted by routing construction equipment over full width.
- 306f - Compaction of embankment layers placed as specified under Subsection 305b above shall be accomplished by routing construction equipment over full width of embankment structures except as specified in Subsection 306.
- 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.
- 308 - 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.
- 309 - 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.
- 311 - In solid rock cuts where pockets that will not drain are formed by blasting below the subgrade elevation, drainage shall be provided by ditching to the edge of the subgrade and backfilling to grade, and compacting the pockets and the ditch with rock fragments, gravel, or other suitable porous material.

- 312 - When material, except solid rock, encountered in cuts at subgrade, is suitable for use in forming the finished roadbed, the top 6-inch layer of the subgrade shall be thoroughly scarified for the full width of the roadbed. Roots, sod, and other deleterious material or stones that will not pass a 6-inch square opening shall be removed. The scarified material shall be processed to the optimum moisture content suitable for maximum density and compacted in accordance with these specifications.
- 313 - In cut areas where solid rock is encountered at, or near subgrade, the rock shall be excavated to a minimum depth of 6 inches below subgrade elevation and the excavated area backfilled with suitable material. The backfill material shall be processed to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.
- 314 - 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.
- 318 - 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.

- 320 - 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.
- 321 - 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.
- 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 1 foot on the uphill side.
- 327 - The finished grading shall be approved in writing by the Authorized Officer in segments. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations and start of surfacing operations.
- 328 - The Purchaser shall adopt methods and procedures in using explosives, which will prevent damage to adjacent landscape features, and which will minimize scattering rocks and other debris outside the road prism.

### **PIPE CULVERTS – 400**

- 401 - This work shall consist of furnishing and installing pipe culverts and splash pads 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 completion of the roadbed and upon installation of the appurtenance structures. Additional pipe and splash pads 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.
- 403 - Grade culverts shall have a gradient of from 2 percent to 4 percent greater than the adjacent road grade. Grade culverts shall be skewed down grade 30 degrees as measured from the perpendicular to the centerline unless otherwise specified on the plans.
- 404 - Damage to the spelter, or burn back in excess of 3/8 inch, shall be wire brushed and painted with two coats of zinc-rich paint on zinc-coated, steel pipe and 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.
- 407 - Special sections, such as elbows, branch connections, and flared-end sections, shall be **aluminized** and of the same gauge as the pipe to which they are joined, and shall conform to the requirements of AASHTO M 36 and AASHTO M 218 or AASHTO M 274.
  - 408 - Pipe culverts and pipe-arch culverts shall be placed on the bed starting at the downstream 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 so as 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 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 Exhibit C-11 (Culvert Installation Detail Sheet).
  - 412 - 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 or crushed rock material in accordance with Section 1200 gradation C.
  - 413 - Pipe culverts and pipe-arch culverts shall be bedded on a selected granular, crushed rock material in accordance with Section 1200 gradation C, 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.
  - 416 - 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, crushed rock material in accordance with Section 1200 gradation C, 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.
  - 417 - For pipe culverts, 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 8 inches in depth and 1 pipe diameter/span, or a minimum of 1 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.
- 418 - Side fills beyond the compaction limits specified under Subsection 417 shall be compacted as specified under Section 300.
- 419 - The pipe culverts after being bedded and backfilled as required by these specifications shall be protected by a 1.5-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 culverts.
- 424 - Construction of splash pads conforming to lines, grades, dimensions and typical diagram shown on the plans, shall be required for culverts.
- 425 - Where pervious materials are used for backfill and bedding, collars consisting of selected impervious material shall be placed at the inlet and at various intervals along the pipe barrel as shown on the plans and as directed by the Authorized Officer.
- 427 - Record culvert sizes, lengths and location actually installed on a copy of the culvert list. This culvert list shall be furnished to the Authorized Officer.
- 428 - Remove and dispose of old culverts in a legal manner, and for any fees required. The Purchaser shall remove the old culverts from the work site prior to road acceptance.
- 429 - Keep the excavation site dewatered so that the installation of culverts is completed under dry conditions. Dispose of excess water by using pumping or natural drainage ways near the site. 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, shown on the plans, and as marked on the ground with stakes.

- 502 - The existing road surface shall be scarified (where needed) 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 marked on the ground with stakes.
- 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.
- 504 - Scarified material and existing road surface shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i and in accordance with Subsection 504a.
- 504a - Minimum compaction required shall be 1 hour of continuous rolling for each 5 stations of road, or fraction thereof, as measured along the centerline per layer of material.
- 506 - The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- 507 - New drainage structures at the following locations shall be 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.
- 508 - Vegetation encroaching on the roadbed and the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Subsection 2100 of these specifications.
- 509 - The finished grading shall be approved in writing by the Authorized Officer 3 days prior to surfacing operations. The Purchaser shall give the Authorized Officer notice 3 days prior to final inspection of the grading operations.

#### **WATERING - 600**

- 601 - This work shall consist of furnishing and applying water required for the compaction of embankments, roadbeds, backfills, base courses, surface courses, finishing and



- reconditioning of existing roadbeds, laying dust, or for other uses in accordance with these specifications.
- 602 - Water, when needed for compaction or laying dust, shall be applied at the locations, in the amounts, and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods.
  - 603 - Water trucks used in this work shall be equipped with a distributing device of ample capacity and of such design as to ensure uniform application of water on the road bed.
  - 605 - The Purchaser shall secure the necessary water permits and pay all required water fees for use of water source(s) 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 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 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 Designation	Gradation			
	A	B	C	D
4 inch	<b>100</b>			

3 inch	<b>95-100</b>	100		
2 inch		95-100	100	
1-1/2 inch			95-100	100
1 inch				95-100
No. 4	<b>11-44</b>	16-49	21-54	26-59
No. 200	<b>2-15</b>	2-15	0-15	0-15

- 904 - Screened 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.
- 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 10 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 subgrades shall not be construed as surfacing under this specification.
- 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, 103h, and 103i. Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.

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

- 1201 - This work shall consist of furnishing, 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 sources selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the 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.
  
- 1204 - Crushed rock material shall consist of hard durable rock fragments conforming to the following gradation requirements:

TABLE 1204

**AGGREGATE SURFACE**  
**COURSE CRUSHED ROCK**  
**MATERIAL**

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

Sieve Designation	C	<b>C-1</b>	D	D-1	E	E-1
1-1/2-inch	100	<b>100</b>	-	-	-	-
1-inch	-	-	100	100	-	-
3/4-inch	50-90	<b>60-90</b>	-	70-98	100	100

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

- 1205 - Crushed rock material retained on the No. 4 sieve shall have a percentage of loss of not more than 35 at 500 revolutions, as determined by AASHTO T 96.
- 1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T210.
- 1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler, 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.
- 1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be obtained from sources approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.
- 1208a - Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.
- 1209 - Shaping and compacting of roadbed or base course shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsections 300 and 500 for placing on the roadbed and landings and Subsection 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 10 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 in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and staked on the ground. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved in writing by the Authorized Officer before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.
- 1210a - Crushed rock material used to repair or reinforce soft, muddy, frozen, yielding, or rutted roadbed shall not be construed as surfacing required by this specification.
- 1212 - Each layer of crushed rock material placed, processed, and shaped as specified shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted to full width by compacting equipment conforming to the requirements of Subsections 103f, 103g, 103h, and 103i . Minimum compaction shall be 1 hour of continuous compacting for each 150 cubic yards of crushed rock material placed per layer, or fraction thereof.

**SLOPE PROTECTION - 1400**

- 1401 - This work shall consist of furnishing, hauling, and placing stone materials for splash pads 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 and 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.

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

<i>Volume/ Cubic Foot</i>	<i>Average Dimension in inches</i>	<i>Approximate Weight in Pounds</i>
<i>12</i>	<i>27.5 x 27.5 x 27.5</i>	<i>2100</i>
<i>6</i>	<i>21.8 x 21.8 x 21.8</i>	<i>1050</i>
<i>4</i>	<i>19.1 x 19.1 x 19.1</i>	<i>700</i>
<i>3</i>	<i>17.3 x 17.3 x 17.3</i>	<i>525</i>
<i>1</i>	<i>12.0 x 12.0 x 12.0</i>	<i>175</i>
<i>2/3</i>	<i>10.5 x 12.0 x 12.0</i>	<i>120</i>
<i>1/2</i>	<i>9.5 x 9.5 x 9.5</i>	<i>88</i>
<i>1/3</i>	<i>8.3 x 8.3 x 8.3</i>	<i>60</i>
<i>1/4</i>	<i>7.6 x 7.6 x 7.6</i>	<i>44</i>

<i>1/6</i>	<i>6.6 x 6.6 x 6.6</i>	<i>30</i>
<i>1/8</i>	<i>6.0 x 6.0 x 6.0</i>	<i>22</i>
<i>1/100</i>	<i>2.6 x 2.6 x 2.6</i>	<i>2</i>

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.

1405 - Rip rap shall conform to the following gradations:

TABLE 1405

Class	Approx. Cubic Dimension (inches)	Sphere Diameter (inches)	% of Total Volume Smaller than Size of Stone
1	6-8	8	100
	5-6	6	80
	2-5	6	50
	0-2	2	10
2	8-10	12	100
	6-8	8	80
	3-6	6	50
	0-3	4	10
<b>3</b>	<b>14-16</b>	<b>21</b>	<b>100</b>
	<b>10-14</b>	<b>18</b>	<b>80</b>
	<b>5-10</b>	<b>12</b>	<b>50</b>
	<b>0-5</b>	<b>6</b>	<b>10</b>
4	18-20	24	100
	14-18	22	80
	6-14	18	50
	0-6	8	10
5	26-28	36	100
	20-26	32	80
	8-20	25	50
	0-8	10	10
6	28-34	42	100
	22-28	34	80
	10-22	27	50
	0-10	12	10

\*Rocks smaller than six inches in diameter are not counted.

1406 - The placement of slope protection stones by the end dumping method shall be conducted to prevent the stones from escaping beyond the embankment toe.

- 1407 - Determination of the acceptability of the slope protection material gradation will be through visual inspection by the Authorized Officer.

**EROSION CONTROL - 1700**

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

Road No.	From Sta./M/P.	To Sta./M.P.
34-3E-03.02	0.00	0.15
34-3E-10.04	0+00	11+82
34-3E-11.04	0+00	21+44
34-3E-11.05	0+00	18+70
34-3E-11.06	0+00	10+13
34-3E-11.07	0+00	33+50
34-3E-11.08	0+00	6+10
34-3E-13.04 B	0+00	5+39
34-3E-14.02	0+00	3+00
34-3E-23.00 B	0+00	75+75
34-3E-24.01 B	0+00	16+17
34-3E-24.05	0+00	8+82
Temp Road 13-3B	0+00	12+14
Temp Road 23-2	0+00	8+45

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

- 1708 - Newly constructed roads to be carried over the winter period, shall be water barred and 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 catch basins and energy dissipators for pipe culverts (splash pads) conforming to the requirements and details shown on the respective exhibits.
- 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.

**SOIL STABILIZATION – 1800**

- 1801 - This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications. This work is not required for road acceptance under Section 18 of this contract.
- 1802 - Soil stabilization work consisting of seeding and mulching shall be performed on existing roads and designated locations in accordance with these specifications at the following locations:

Road No.	From M.P.	To M.P.	Reason
34-3E-03.02	0.00	0.15	Road Improvement
34-3E-10.01 B	0.13	0.20	Roadside Veg Maintenance
	0.24	0.29	Roadside Veg Maintenance
	0.34	0.50	Roadside Veg Maintenance
34-3E-10.01 D-E1	0.91	1.28	Roadside Veg Maintenance
34-3E-10.04	0+00	11+82	Road Construction
34-3E-11.00 A	0.00	0.30	Roadside Veg Maintenance
34-3E-11.01 A	0.00	0.18	Roadside Veg Maintenance
34-3E-11.04	0+00	21+44	Road Construction



34-3E-11.05	0+00	18+70	Road Construction
34-3E-11.06	0+00	10+13	Road Construction
34-3E-11.07	0+00	33+50	Road Construction
34-3E-11.08	0+00	6+10	Road Construction
34-3E-13.04 B	0+00	5+39	Road Construction
34-3E-14.02	0+00	3+00	Road Construction
34-3E-15.03 A1	0.08	0.32	Roadside Veg Maintenance
34-3E-15.03 A4	1.03	1.22	Roadside Veg Maintenance
34-3E-21.00 A	0.07	0.16	Roadside Veg Maintenance
34-3E-21.00 C1	1.02	1.11	Roadside Veg Maintenance
34-3E-21.00 E	2.29	2.55	Roadside Veg Maintenance
34-3E-23.00 A	0.00	0.78	Roadside Veg Maintenance
34-3E-23.00 (Oblit)	0.78	1.17	Road Obliteration
34-3E-23.00 B	0+00	75+75	Road Construction
34-3E-24.01 A	0.24	0.83	Roadside Veg Maintenance
34-3E-24.01 B	0+00	16+17	Road Construction
34-3E-24.02	0.00	0.53	Roadside Veg Maintenance
34-3E-24.05	0+00	8+82	Road Construction
Temp Road 13-3B	0+00	12+14	Road Construction
Temp Road 23-2	0+00	8+45	Road Construction

1802a - Soil stabilization work consisting of seeding and mulching shall be performed on new road construction, landings, disturbed areas, borrow sites, waste disposal sites, and specials areas 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)
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If soil stabilization of disturbed areas is not completed by the specified fall date, the Purchaser shall treat disturbed areas in accordance with Subsection 1707 and then complete the requirements of Section 1800 the next construction season.

The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

1803a - The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.

1806a - Additional soil stabilization work consisting of seeding and mulching, may be required at the option of the Authorized Officer. Providing the additional

stabilization is not due to Purchaser negligence as specified in Sec. 12 of the contract, 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 **15.15 acres** designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch material at the following rate of application:

a. Two Stage:

Grass Seed	20 lbs./acre
Mulch	2,000 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, fertilizer spreaders, or other approved mechanical seeding equipment may be used when seed and fertilizer are to be applied in dry form.

- 1817 - At the beginning of each day's operation, a measured area will be seeded and mulched to assure uniform application.
- 1819 - The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.
- 1821 - Mulch that collects at the end of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer.
- 1822 - No materials shall be applied when wind velocities would prevent a uniform application of the mix or slurry or when winds would drift the mix or slurry spray outside of the designated treatment area.
- 1824 - Twine, rope, sacks, and other debris resulting from the soil-stabilization operation shall be picked up and disposed of to the satisfaction of the Authorized Officer.

#### **ROADSIDE BRUSHING - 2100**

- 2101 - This work shall consist of the removal of vegetation from the road prism - variable distance, and inside curves in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail Sheet (Exhibit C-15) 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 1 inch above the ground surface or above obstructions such as rocks or stumps on cut and fill slopes and all limbs below the 2 inch area will be severed from the trunk.
- 2103a - Vegetation shall be cut and removed from the road bed between the outside shoulders and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. Limbs below the 1 inch area will be severed from the trunk. Sharp pointed ends will not be permitted. Cuts shall be parallel to the ground line or running surface.
- 2104 - Trees in excess of 6 inches in diameter at D.B.H. shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway on cut and fill slopes, within the road prism- variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may

- be directed by the Authorized Officer.
- 2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inch of the trunk to produce a smooth vertical face.
  - 2106 - Vegetative growth capable of growing 1 foot in height or higher shall be cut, within the road prism-variable distance or as directed by the Authorized Officer.
  - 2107 - Inside curves shall be brushed out for a sight distance of 200 feet chord distance or a middle ordinate distance of 25 feet, whichever is achieved first. Overhanging limbs and vegetation in excess of 1 foot in height, shall be cut within these areas.
  - 2108 - Self-propelled equipment shall not be permitted on cut and fill slopes or in ditches.
  - 2109 - Debris resulting from this operation shall be scattered or chipped downslope from the roadway as indicated on Exhibit C-4 (Estimate of Quantities) and Exhibit C-30 (Road Renovation Worklist). Debris shall not be allowed to accumulate in concentrations. Debris in excess of 1 foot in length and 2 inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer.
  - 2110 - Vegetation 6 inches and smaller in diameter shall be chipped where indicated on Exhibit C-4 (Estimate of Quantities) and Exhibit C-30 (Road Renovation Worklist). Chips shall be scattered downslope from the roadway. Vegetation over 6 inches in diameter shall be disposed of by direction of the Authorized Officer.
  - 2114 - Sections of roadway to have vegetation removed will be marked at start and stop points with red-topped painted stakes.
  - 2115 - Mechanical brush cutters shall not be operated when there are people and occupied vehicles within 400 feet of the immediate operating area.
  - 2116 - Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.

## SPECIAL PROVISIONS

1. **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 CO prior to entering BLM lands. Provide 48 hours' notice of inspection to BLM prior to mobilization.
2. **SOIL STABILIZATION:**
  - All disturbed soil shall be seeded and mulched. Purchaser shall apply native grass seed and certified weed free straw mulch for soil stabilization operations. The Purchaser shall supply native seed and certified weed free straw. Native seed and certified weed free straw may be purchased from the BLM, if available.
3. **DAMAGE:**
  - The Purchaser shall protect and is responsible for any damage to existing telephone lines, transmission lines, fiber optic lines, fences, ditches, and other existing improvements as required in Section 14. Damage to utilities and existing improvements shall be promptly paid for or repaired to a condition which is, in the opinion of the Authorized Officer and the governing utility company, at least as good as the condition just prior to such damage.
4. **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.
5. **WATER SOURCES:**
  - The Purchaser is responsible for obtaining water and associated rights and permits.
6. **PERMITS:**
  - All permits required are the responsibility of the Purchaser.
7. **CULVERT REMOVAL:**
  - When removing culverts unless constructing armored water dips, pull slopes back to the natural slope, or at least 1.5:1, to minimize sloughing, erosion, and the potential for the stream to undercut stream banks during periods of high stream flows. Remove excess sediment from stream channels during culvert removal, replacement, and installation activities. Apply seed and mulch to all disturbed or exposed soils at each stream culvert removal site.
8. **COMMERCIAL AGGREGATE**
  - If aggregate furnished for this work comes from a commercial source, then the

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

9. ROAD RENOVATION:

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

10. STREAMS:

- All in-stream work shall be done from June 15 thru September 15 both days included.
- Construct silt fences 25 and 50 feet below culvert replacement sites (on live streams) to trap sediment and prevent it from entering nearby stream channels.
- 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 stream side of a culvert to the downstream side of the culvert.

11. TEMPORARY ROUTES

- All temp routes and native surfaced roads (that were previously closed before timber sale activities began) shall be winterized if access is needed over two dry seasons by October 15<sup>th</sup>. Winterization includes water barring, seeding, mulching, and barricading. All temp routes shall be ripped, water barred, barricaded, seeded, and mulched after use unless otherwise specified.
- Clearing, grubbing, and excavation activities of temporary spur routes shown on Exhibit C shall be performed in accordance with Exhibit C-31.
- Construction of temporary spur routes shall be to a subgrade width of 14'.

12. ROADSIDE BRUSHING

- While roadside brushing, there shall be no scarring or any other damage of the tree trunk or bole allowed.

- Use of Excavators and/or flailers 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.
- All bridges shall be brushed 8 horizontal feet from the outer most portion of the structure.

13. WET SEASON HAUL

- The Purchaser may wet season haul, with the Authorized Officer’s approval on the following roads: 34-3E-10.02, 34-3E-10.03 A, 34-3E-14.01 D, 34-3E-15.03 A1-A4, 34-3E-21.00 A-F, 34-3E-24.00 A, 34-3E-24.03 B, and the FS34 (Lodgepole Road). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser’s expense to repair any damage that occurs to the road during wet season haul.
- The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer’s approval on the following roads: 34-3E-11.01 A, 34-3E-11.04, 34-3E-11.05, 34-3E-11.07, 34-3E-13.04 B, 34-3E-23.00 A-B, and the 34-3E-24.01 B. If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser’s expense to repair any damage that occurs to the road during wet season haul.
- The Purchaser shall have the option to rock road numbers 34-3E-03.01, 34-3E-03.02, 34-3E-10.01 A-E1, 34-3E-10.03 B, 34-3E-10.04, 34-3E-11.00 A, 34-3E-11.06, 34-3E-11.08, 34-3E-13.04 A, 34-3E-14.02, 34-3E-23.03, 34-3E-24.01 A, 34-3E-24.02, 34-3E-24.03 A, and the 34-3E-24.05, for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract.

14. WILDLIFE RESTRICTIONS

- Seasonally restrict permanent road construction for the following road:

Road Number	Segment	Starting M.P.	Ending M.P.	Starting Seasonal Restriction	Ending Seasonal Restriction
34-3E-10.04		0+00	11+82	February 1	August 15

Wildlife seasonal restrictions may be waived if nesting is not determined by the wildlife biologist.

15. Full Decommission
  - See Exhibits C-17, C-18, and D-2 (Section 3500) for road decommissioning specifications for the section of the 34-3E-23.00 road that is to be decommissioned.
  
16. Cut-leave trees
  - Within right-of-ways for temporary and permanent roads, all trees marked with C/L on them shall be felled and left on the ground. These trees can be felled or moved outside of the right-of-way in order to construction roads and landings.

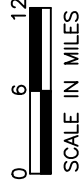
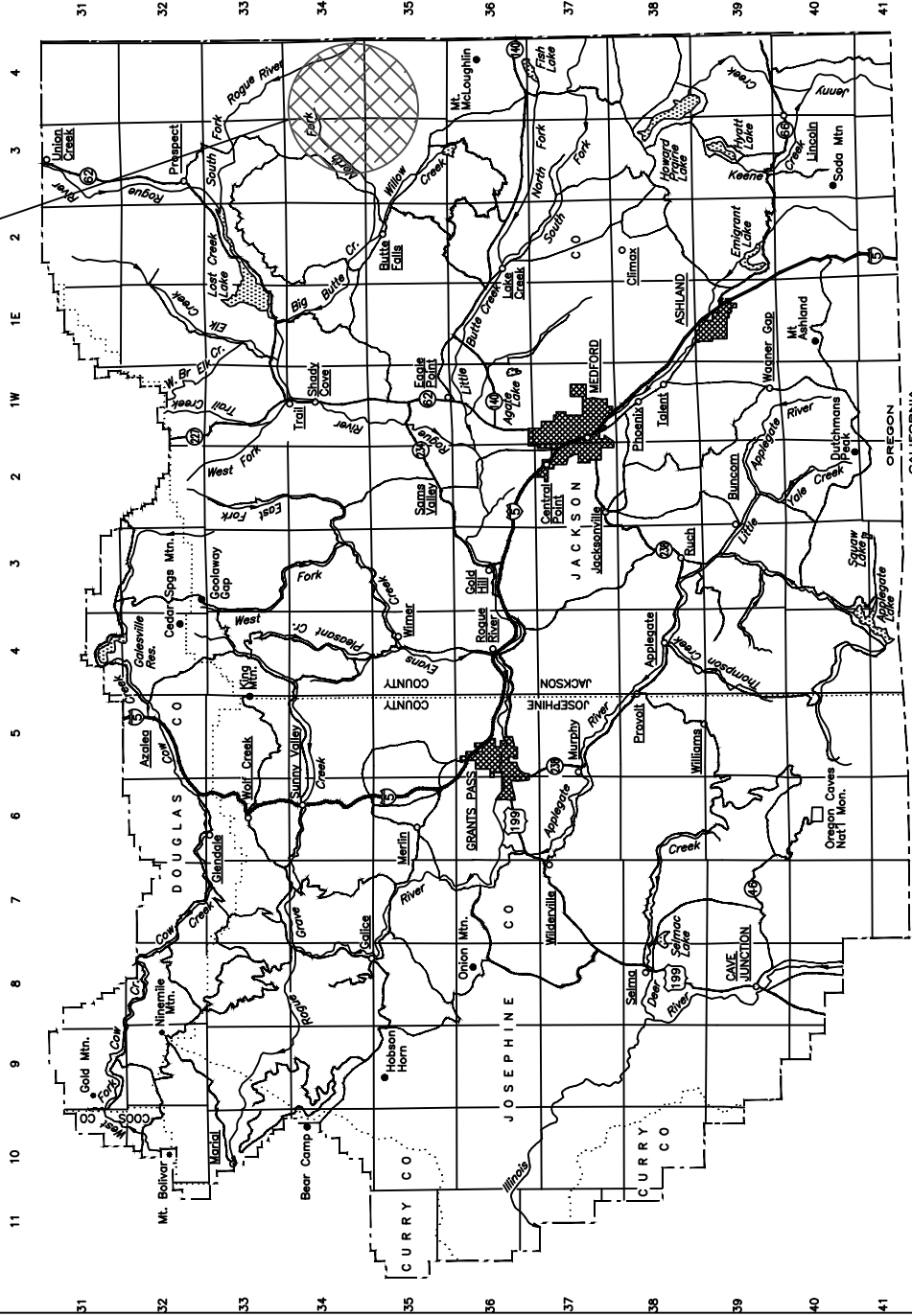


*EXHIBIT D-1*  
*SHEET 1 OF 1*

**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**MEDFORD DISTRICT**  
**LOGCEPOLE TIMBER SALE**  
**TRACT NO. ORM05-TS-2020.0012**

Exhibit No.	Description
D-1	TITLE SHEET
D-2	ROAD MAINTENANCE SPECIFICATIONS
D-3	ROAD MAINTENANCE MAPS
D-4	ROAD DECOMMISSIONING WORKLIST
D-5	ROAD DECOMMISSIONING MAPS
D-6	ESTIMATE OF QUANTITIES
D-7	TYPICAL ROAD CAMOUFLAGE
D-8	DRAINAGE & EROSION CONTROL DETAILS
D-9	TYPICAL DECOMMISSIONING DETAILS

**PROJECT LOCATION**



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REV. NO. DESCRIPTION DATE APPROV.  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT - MEDFORD, OREGON

**LOGCEPOLE T.S.**  
**TITLE SHEET**

DRAWN JOB SCALE AS SHOWN  
DATE JULY 2020 SHEET 1 OF 1  
DRAWING NO. ORM05-TS-2020.0012-D1

## ROAD MAINTENANCE SPECIFICATIONS

### TABLE OF CONTENTS

SECTION	DESCRIPTION	Page(s)
3000	General	2-2
3100	Operational Maintenance	2-4
3200	Seasonal Maintenance	4-5
3300	Final Maintenance	5-5
3400	Other Maintenance	5-6
3500	Decommissioning	7-8

**GENERAL - 3000**

- 3001 - The Purchaser shall be required to maintain all roads as shown on the Exhibit D-3 maps of this contract in accordance with Sections 3000, 3100, 3200, 3300, and 3400 of this exhibit.
- 3001a - The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403.
- 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 roads with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non- cleanup of the road prism shall not exceed the sum of one (1) mile at any time.

Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

**OPERATIONAL MAINTENANCE - 3100**

- 3101 - The Purchaser shall blade and shape the road surface and shoulders with a motor grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3102 - The Purchaser shall furnish and place (commercial source) **600** cu. yds. of aggregate conforming to the requirements in Section 1200 of Exhibit C of this contract on the roadway and landings at locations and in the amounts designated by the Authorized Officer. Of this amount, **100** cu. Yds. Of this aggregate shall be used on Juniper Properties roads where needed. Juniper Properties roads include road nos. 34-3E-03.01, 34-3E-03.03, 34-3E-10.01 A&C, 34-3E-10.02, 34-3E-10.03 A-B, 34-3E-13.03, 34-3E-13.04 A, 34-3E-14.01 D, 34-3E-21.00 F, 34-3E-24.00 A, and 34-3E-24.03 A-B.

This aggregate shall be used to 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 includes placement of material at the nearest designated, suitable disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion as directed by the Authorized Officer.
  - 3104b - The Purchaser shall be responsible for removal of all slides or slough, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the purchaser.
- Prior to removal of any slough or slide material exceeding fifteen station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, method of disposal, and the disposal site. Work may commence immediately after agreement.
- Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based on current BLM Road Cost Guide. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.
- 3105 - The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe, and maintaining water dips and water-bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
  - 3106 - The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source and method of repair. Work may commence immediately after agreement.

- Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work based upon current BLM Road Cost Guide. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.
- 3107 - The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way when directed by the Authorized Officer.
- The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road in accordance with Section 2100 of Exhibit C.
- 3108 - The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway.
- Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required caused by such skidding activity is not considered maintenance and shall be repaired at the Purchaser's expense.
- 3108a - The Purchaser shall perform logging operations on gravel roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. The Purchaser shall furnish gravel for necessary repairs at designated locations. Repair of the roads is not considered maintenance and shall be repaired at the Purchaser's expense.

**SEASONAL MAINTENANCE - 3200**

- 3201 - The Purchaser shall perform preventative maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes requirements specified in Section 3100.
- 3202 - The purchaser shall perform and complete maintenance specified in Sections 3000, 3100, and 3200 on all roads maintained by him, prior to October 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.

- 3203 - The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads located in an area separate from the area where logging activities will resume.
- 3204 - The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential road or watershed damage.

**FINAL MAINTENANCE - 3300**

- 3301 - The Purchaser shall complete final maintenance and/or damage repairs on all roads used under terms of their contract within thirty 30 calendar days following the completion of hauling and in accordance with Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section.

The Authorized Officer may grant acceptance of Purchaser's maintenance responsibility in part where certain individual roads or road segments are no longer of any use to the Purchaser's remaining removal operations, providing that all contract requirements as specified under Sec. 16(b), Special Provisions Sections 3000, 3100, 3200 and 3300 of the maintenance specifications have been completed and a relinquishment of cutting and removal rights on cutting units tributary to these roads is signed by the Purchaser. Request for partial acceptance must be submitted in writing by the Purchaser.

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

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

**OTHER MAINTENANCE - 3400**

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

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

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

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

The following roads shall be watered:

Road Number	From Sta./M.P.	to Sta./M.P.
34-3E-10.01 A-E1	0.00	1.42
34-3E-11.00 A	0.00	0.30
34-3E-11.01 A	0.00	0.18
34-3E-15.03 A1-A4	0.00	1.22
34-3E-21.00 A-F	0.00	3.35

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

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.

- 3408 - Dust palliatives shall be applied with standard commercial distribution equipment operated in a manner that the material is uniformly applied on variable widths of surface at controlled rates.
- 3409 - The Purchaser shall notify the Authorized Officer a minimum of 3 days in advance of application of required dust palliative.

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

**DECOMMISSIONING – 3500**

- 3501 - Decommissioning shall consist of removing a cross drain culvert. Decommissioning work includes ripping and/or subsoiling, installing water bars, placement of slash and/or placement of soil stabilization material, and blocking road from access by vehicles. 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, and as shown on the plans at the following locations:

Road No or Site	From Sta/MP	To Sta/MP	Decommission or Obliterate
34-3E-03.02	0.00	0.15	Barricade and water bar
34-3E-03.03	0.00	0.06	Re-barricade and re-water bar
34-3E-10.01 D	0.74	0.74	Re-barricade with boulders
34-3E-10.04	0.00	0.22	Barricade and water bar
34-3E-11.06	0.00	0.19	Barricade and water bar
34-3E-11.08	0.00	0.12	Barricade and water bar
34-3E-14.02	0.00	0.06	Barricade and water bar
34-3E-23.03	0.00	0.21	Re-barricade and re-water bar
34-3E-24.01	0.94	1.25	Barricade and water bar
34-3E-24.05	0.00	0.17	Barricade and water bar
Temp Road 13-3B	0.00	0.23	Full Decommission
Temp Road 23-2	0.00	0.16	Full Decommission

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



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








- 3506 - 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. Where slash is not available, exposed soil areas shall be stabilized in accordance with Section 1800.
- 3507 - Culverts not designated as salvage by the Authorized Officer for the Government shall become the property of the Purchaser. The Purchaser shall be responsible for disposal of materials in a legal manner and for payment of any fees required. Sale of material on site is not allowed unless authorized in writing by the Authorized Officer.
- 3508 - Protect areas mulched and treated with slash placement from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3509 - Access shall be blocked with barricades as shown on the Typical Road Camouflage Sheet Exhibit D-7 and Drainage and Erosion Control Detail Sheet Exhibit D-8 and at locations as shown on Exhibits D-4 and D-5.
- 3510 - Sections of roadway where ripping and/or 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 and/or subsoiling and water barring shall be done on designated roadways. Ripping shall be performed with wing-toothed rippers or excavators modified for tillage.
- 3513 - Water bars shall be installed across full width of roadway at spacing shown in the decommissioning worklist. Water bars shall be constructed as shown on Exhibit D-8.
- 3514 - Protection of exposed surfaces shall be accomplished by placement of soil stabilization material in accordance with Section 1800 and/or placement of slash described in Subsection 3506 on designated roadways, temporary roads, landings, other areas disturbed by the purchaser's decommissioning operations in accordance with these specifications and as shown in the plans.

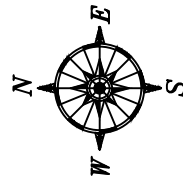
# EXHIBIT D-3

## SHEET 1 OF 3

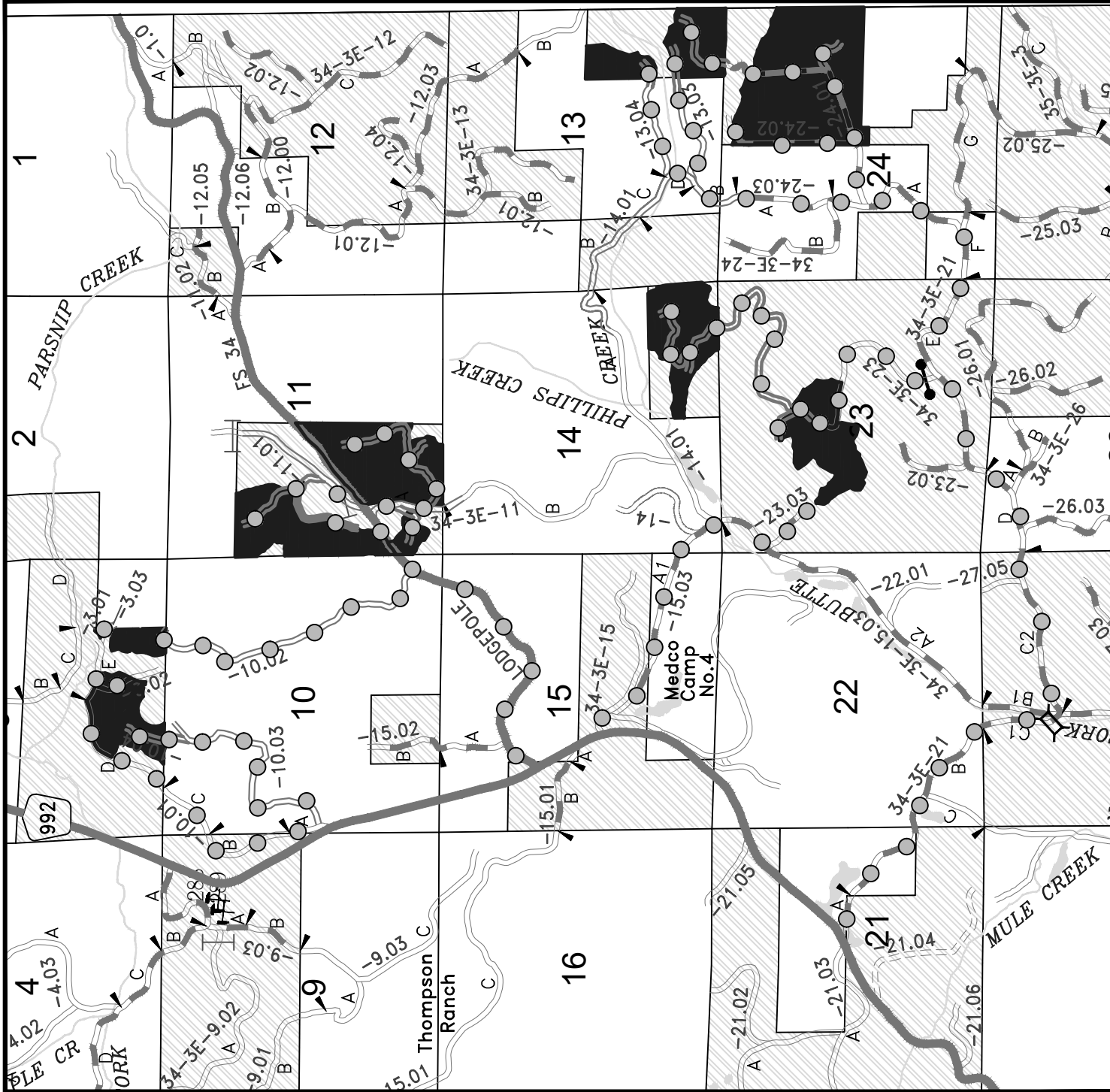
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### SALE AREA MAP

-  BLM OWNERSHIP
-  T.S. UNITS
-  BST ROAD
-  ROCKED ROAD
-  NATURAL SURFACE ROAD
-  PRIMITIVE ROUTE
-  LOGEPOLE HAUL ROUTES



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# EXHIBIT D-3

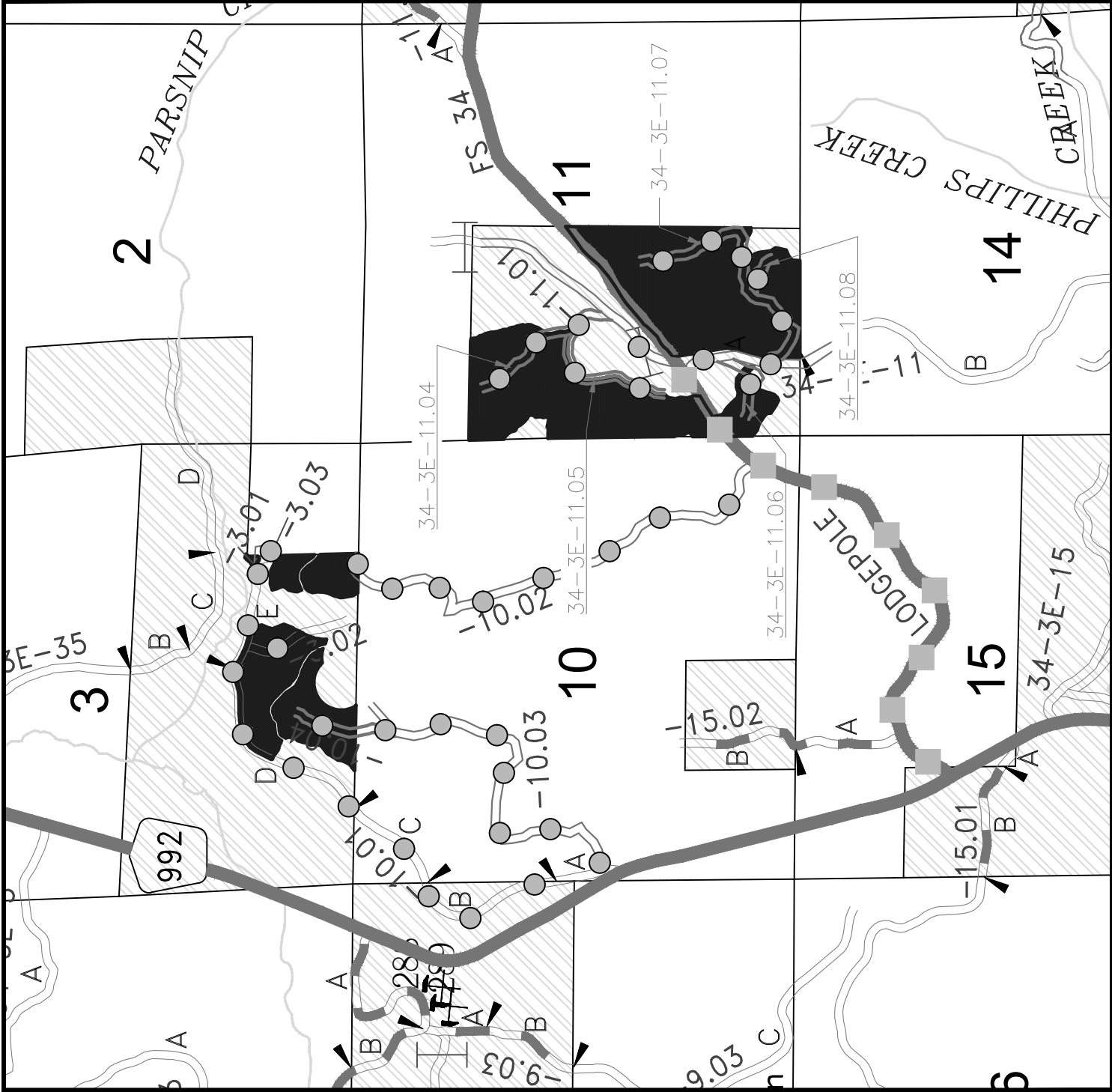
## SHEET 2 OF 3

LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROAD MAINTENANCE MAP

- BLM OWNERSHIP
- T.S. UNITS
- BST ROAD
- ROCKED ROAD
- NATURAL SURFACE ROAD
- PRIMITIVE ROUTE
- PURCHASER MAINTENANCE
- BLM MAINTENANCE
- 3rd Party MAINTENANCE






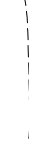



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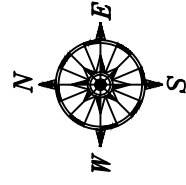


# EXHIBIT D-3 SHEET 3 OF 3

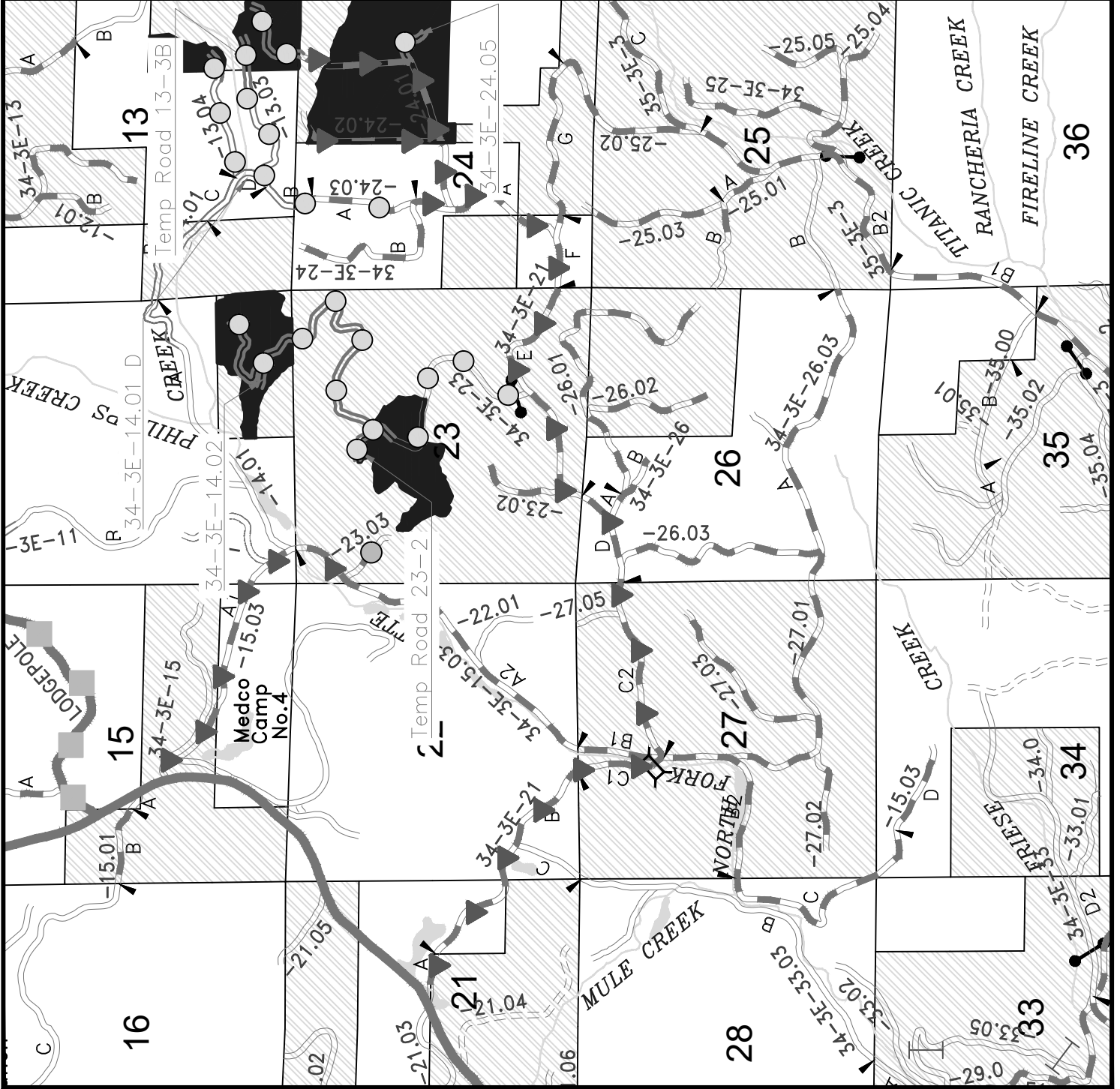
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020-0012

## ROAD MAINTENANCE MAP

- BLM OWNERSHIP 
- T.S. UNITS 
- BST ROAD 
- ROCKED ROAD 
- NATURAL SURFACE ROAD 
- PRIMITIVE ROUTE 
- PURCHASER MAINTENANCE 
- BLM MAINTENANCE 
- 3rd Party MAINTENANCE 



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## **LOGEPOLE TIMBER SALE Road Decommissioning Work List**

### GENERAL DEFINITIONS:

**Decommission (Full)** = Full Decommissioning shall include decompacting the surface to a depth of 12 to 18 inches, installing water bars every 100', and barricading and camouflaging the road entrance. Seeding with approved native seed species and mulching with weed-free straw or approved native materials.

**Long Term Closure** = Work shall include installing water bars every 100', and barricading and camouflaging the road entrance. Seeding with approved native seed species and mulching with weed-free straw or approved native materials.

### **34-3E-03.02 (Parsnip Creek Spur) (BLM) NAT**

<b><u>MP</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-10.01. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.01	Construct earth barricade.
0.15	End long term closure.

### **Road 34-3E-03.03 (Private) NAT**

<b><u>M.P.</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-03.01. Begin long term closure.
0.04	Re-establish earth barricade.
0.06	End long term closure.

### **Road 34-3E-10.01 (Thompson Ranch RR Grade)**

<b><u>M.P.</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ Butte Falls – Prospect Highway.
0.74	Property line (into BLM). Re-establish boulder barricade. Use additional boulders from old quarry at milepost 0.36.

### **Road 34-3E-10.04 (Parsnip Creek Ridge Road) (BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-10.03. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.03	Construct earth barricade.
0.10	Remove cross drain culvert.
0.18	Remove cross drain culvert.
0.22	End long term closure.

**Road 34-3E-11.06 (Lodgepole Spur 1 South)**  
**(BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-11.00. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.02	Construct earth barricade.
0.19	End long term closure.

**Road 34-3E-11.08 (Lodgepole Spur 2 South)**  
**(BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-11.07. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.01	Construct earth barricade.
0.12	End long term closure.

**Road 34-3E-14.02 (North Fork Overlook Spur)**  
**(BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-23.00. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.01	Construct earth barricade.
0.06	End long term closure.

**Road 34-3E-23.03**  
**(BLM) PRR**

<b><u>M.P.</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-15.03. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.01	Construct earth barricade.
0.21	End long term closure.

**Road 34-3E-24.01 (Cur TS Sp)**  
**Segment A (BLM) ASC**

<b><u>M.P.</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-24.00.

**Segment B (BLM) NAT**

0.94	Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
0.96	Construct earth barricade.
1.25	End long term closure.

**Road 34-3E-24.05 (Mud Flap Spur)**  
**(BLM) NAT**

<b><u>Sta</u></b>	<b><u>Remarks</u></b>
0.00	Jct. w/ 34-3E-24.01. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7. Remove temporary culvert. Place material from culvert removal on far side of ditch to create earth barricade. Re-establish ditch line.

0.17 End long term closure.

**Temp Road 13-3B NAT**

**MP** **Remarks**

0.00 Jct. w/ 34-3E-13.03. Begin full decommission. Mechanically de-compact road surface to a depth of 12 to 18 inches for the entire length of the temporary road. Camouflage road entrance with debris for 100'.

0.01 Construct earth barricade.

0.23 End full decommission.

**Temp Road 23-2 NAT**

**MP** **Remarks**

0.00 Jct. w/ 34-3E-23.00 B. Begin full decommission. Mechanically de-compact road surface to a depth of 12 to 18 inches for the entire length of the temporary road. Camouflage road entrance with debris for 100'.

0.01 Construct earth barricade.










0.16 End full decommission.

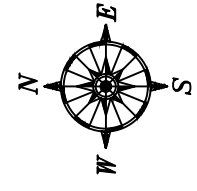
# EXHIBIT D-5

## SHEET 1 OF 3

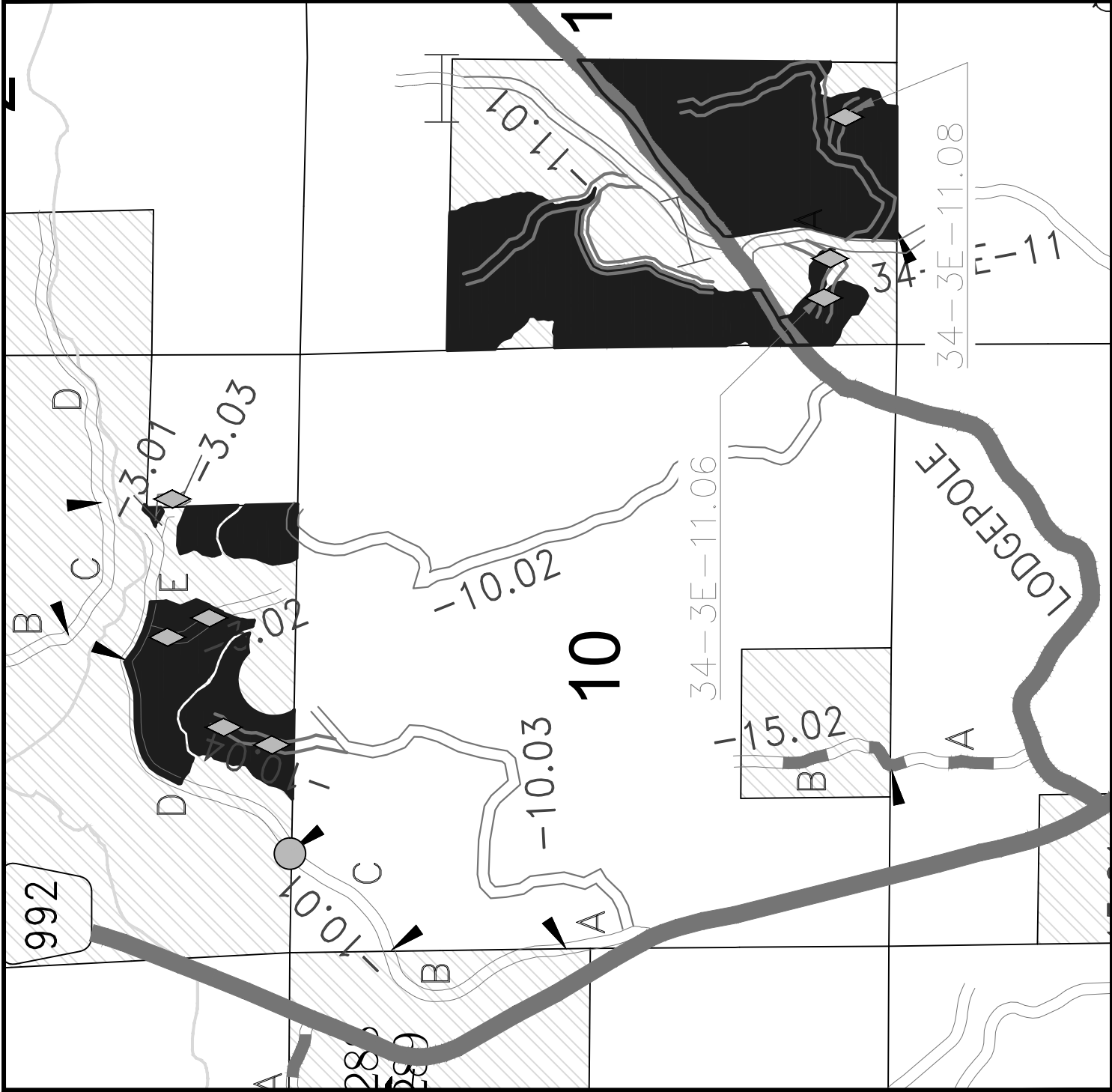
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROAD DECOMMISSIONING MAP

- BLM OWNERSHIP 
- T.S. UNITS 
- BST ROAD 
- ROCKED ROAD 
- NATURAL SURFACE ROAD 
- PRIMITIVE ROUTE 
- CONSTRUCT BARRICADE ONLY 
- ROAD TO BE WATER BARRED and BARRICADED 
- ROAD TO BE DECOMMISSIONED and BARRICADED 



ALWAYS  
**THINK**  
SAFETY










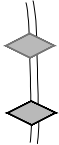



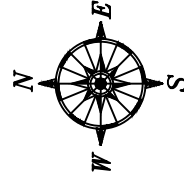
# EXHIBIT D-5

## SHEET 2 OF 3

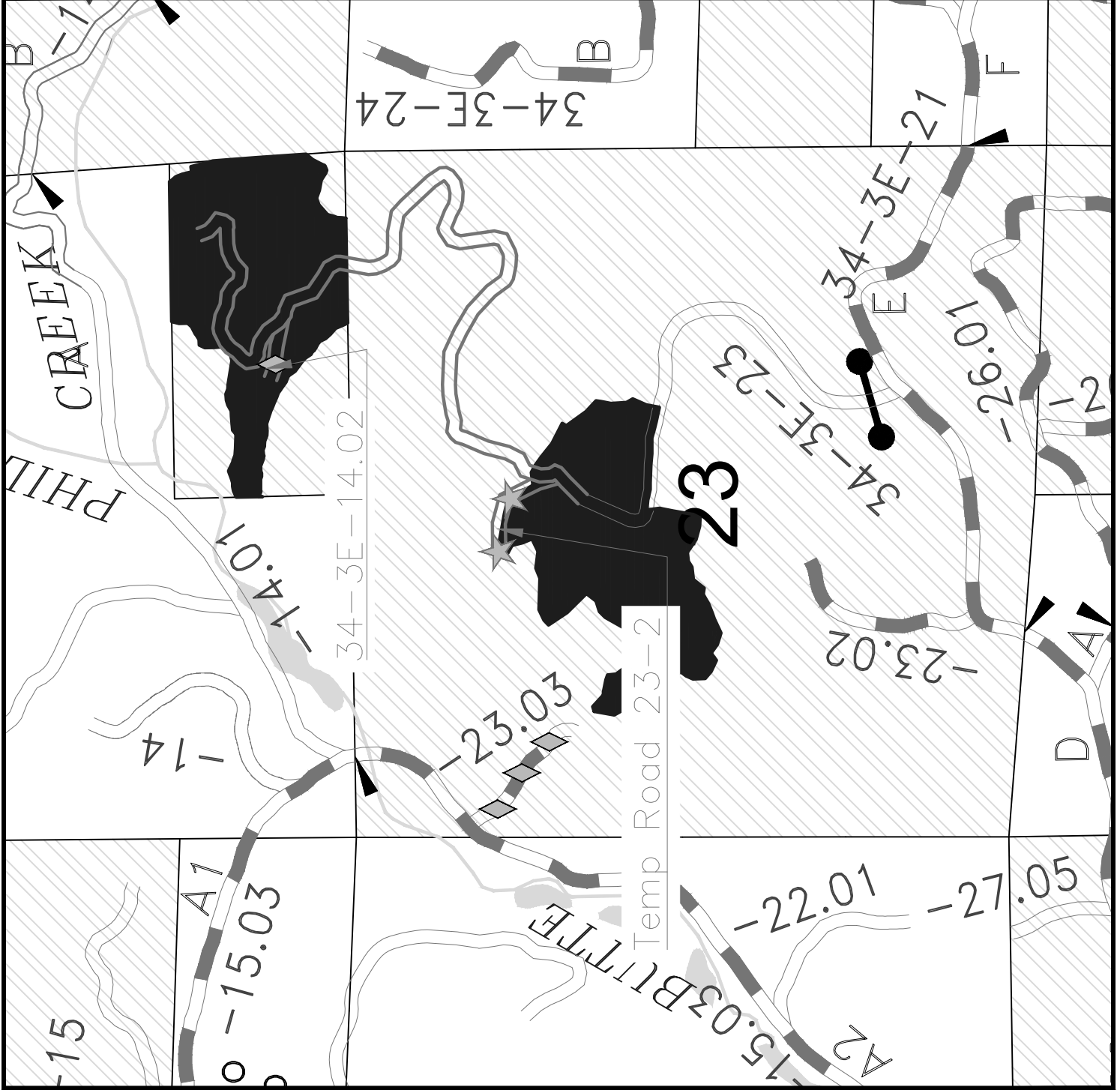
LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROAD DECOMMISSIONING MAP

- BLM OWNERSHIP 
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ALWAYS  
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SAFETY












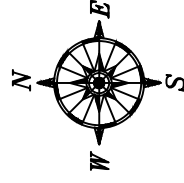
# EXHIBIT D-5

## SHEET 3 OF 3

LOGEPOLE TIMBER SALE  
TRACT NO. ORM05-TS-2020.0012

### ROAD DECOMMISSIONING MAP

- BLM OWNERSHIP 
- T.S. UNITS 
- BST ROAD 
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- PRIMITIVE ROUTE 
- CONSTRUCT BARRICADE ONLY 
- ROAD TO BE WATER BARRED and BARRICADED 
- ROAD TO BE DECOMMISSIONED and BARRICADED 



ALWAYS  
**THINK**  
SAFETY



ROAD NUMBER	MP/STA	TO	LENGTH	MAINTENANCE RESPONSIBILITY			WATERING	SPOT ROCKING**	ROAD CLOSURE AND DECOMMISSIONING					SOIL STABILIZATION (SEED & MULCH)	
				BLM MAINTENANCE	PURCHASER MAINTENANCE	THIRD PARTY MAINTENANCE			INSTALL EARTH OR BOULDER BARRICADE	INSTALL MEGA GATE	INSTALL WATER BARS	REMOVE CULVERTS	RIPPING		ACRE
ROAD NUMBER	MP/STA	MP/STA	MILE/STA	MILE	MILE	MILE	MILE	C.Y.	EACH	EACH	EACH	EACH	EACH	STATION	ACRE
34-3E-03.01	0.00	0.06	0.06		0.06										
34-3E-03.02	0.00	0.15	0.15		0.15				1		6				0.35
34-3E-03.03	0.00	0.06	0.06		0.06				1		2				
34-3E-10.01 A-E1	0.00	1.42	1.42		1.42		1.42		1						
34-3E-10.02	0.00	1.16	1.16		1.16										
34-3E-10.03 A-B	0.00	0.92	0.92		0.92										
34-3E-10.04	0+00	11+82	0.22		0.22				1		10	2			0.60
34-3E-11.00 A	0.00	0.30	0.30		0.30		0.30								
34-3E-11.01 A	0.00	0.18	0.18		0.18		0.18								
34-3E-11.04	0+00	21+44	0.41		0.41										
34-3E-11.05	0+00	18+70	0.35		0.35				1		9				0.50
34-3E-11.06	0+00	10+13	0.19		0.19										
34-3E-11.07	0+00	33+50	0.63		0.63				1		5				0.30
34-3E-11.08	0+00	6+10	0.12		0.12										
34-3E-13.03	0.00	0.34	0.34		0.34										
34-3E-13.04 A	0.00	0.36	0.36		0.36										
34-3E-13.04 B	0+00	5+39	0.10		0.10										
34-3E-14.01 D	0.00	0.13	0.13		0.13										
34-3E-14.02	0+00	3+00	0.06		0.06				1		2				0.15
34-3E-15.03 A1-A4	0.00	1.22	1.22		1.22		1.22								
34-3E-21.00 A-F	0.00	3.35	3.35		3.35		3.35								
34-3E-23.00 A	0.00	0.78	0.78		0.78		0.78								
34-3E-23.00 B	0+00	75+75	1.43		1.43										
PAGE 1 TOTALS			13.94		4.57		6.47		7		34	2			1.90

**\* FOR INFORMATIONAL USE ONLY, QUANTITIES SHOWN ARE NOT PAY ITEMS.**

**\*\* 500 CY of spot rock shall be placed on roads after use. Rock shall conform to gradation C-1 from Table 1204 in Exhibit C-31.**



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

**ESTIMATE OF QUANTITIES\***

ROAD NUMBER	FROM MP/STA	TO MP/STA	LENGTH MILE/STA	MAINTENANCE RESPONSIBILITY			WATERING MILE	SPOT ROCKING* C.Y.	ROAD CLOSURE AND DECOMMISSIONING						
				BLM MAINTENANCE MILE	PURCHASER MAINTENANCE MILE	THIRD PARTY MAINTENANCE MILE			INSTALL EARTH BARRICADE EACH	INSTALL MEGA GATE EACH	INSTALL WATER BARS EACH	REMOVE CULVERTS EACH	RIPPING STATION	SOIL STABILIZATION (SEED & MULCH) ACRE	
34-3E-23.03	0.00	0.21	0.21		0.21				1		10				0.25
34-3E-24.00 A	0.00	0.60	0.60	0.60											
34-3E-24.01 A	0.00	0.94	0.94	0.94											
34-3E-24.01 B	0+00	16+17	0.31		0.31				1		15				0.75
34-3E-24.02	0.00	0.53	0.53	0.53											
34-3E-24.03 A-B	0.00	0.54	0.54		0.54										
34-3E-24.05	0+00	8+82	0.17		0.17				1		6	1			0.40
FS 34	0.00	1.40	1.40			1.40									
Temp Road 13-3B	0+00	12+14	0.23		0.23				1		11		12.14		0.40
Temp Road 23-2	0+00	8+45	0.16		0.16				1		7		8.45		0.30
PAGE 1 TOTALS			13.94	4.57	9.37	0.00	6.47		7		34	2	0.00		1.90
PAGE 2 TOTALS			5.09	2.07	1.62	1.40	0.00		5		49	1	20.59		2.10
PROJECT TOTALS			19.03	6.64	10.99	1.40	6.47	500	12		83	3	20.59		4.00

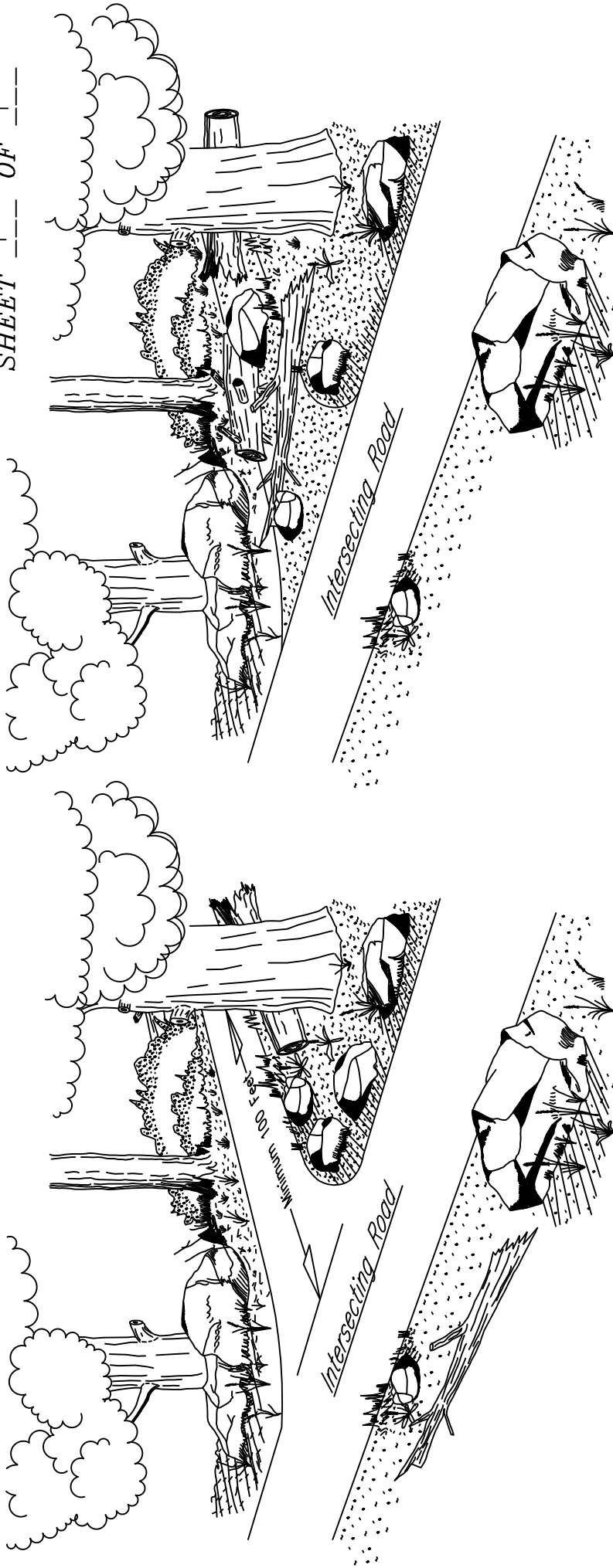


\* FOR INFORMATIONAL USE ONLY,  
QUANTITIES SHOWN ARE NOT PAY ITEMS.

\*\* 500 CY of spot rock shall be placed on roads after use. Rock shall conform to gradation C-1 from Table 1204 in Exhibit C-31.

REV. NO.	DESCRIPTION	DATE	APPROV.
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON		

**ESTIMATE OF QUANTITIES\***



Typical Entrance - Before

Typical Entrance - After

Notes:

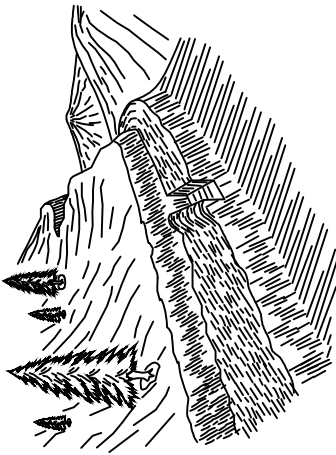
1. The Purchaser shall barricade and Camouflage the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. Camouflaged entrances shall consist of logs, slash, boulders and other debris placed along road entrances for a minimum of 100 feet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

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

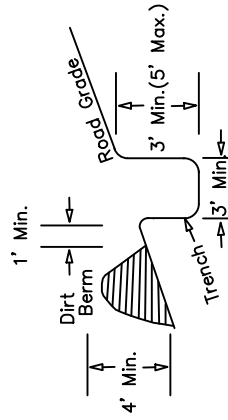
Typical Road  
 Camouflage

DRAWN	JWR	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1
DRAWING NO. ORM05-TS-2020.0012-D7			

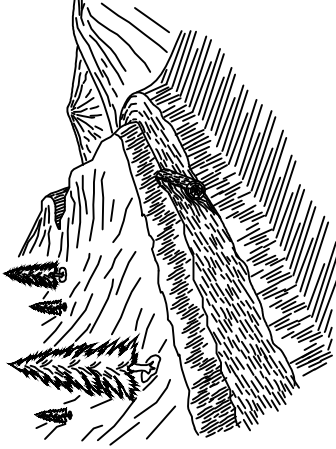
**EXHIBIT D-8**  
**SHEET 1 OF 2**  
**LODGEPOLE T.S.**



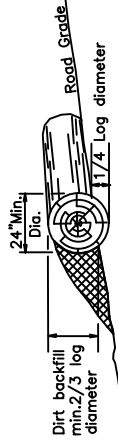
TRENCH BARRICADE



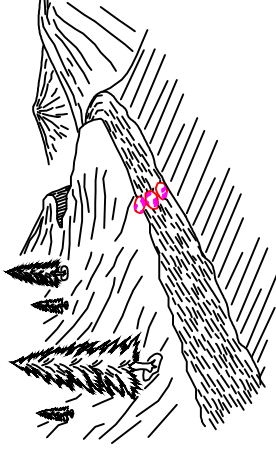
1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.
4. A MINIMUM OF 1' IS OF LEVEL GROUND IS NEEDED BETWEEN TOE OF THE DIRT BERM AND THE EDGE OF THE TRENCH.



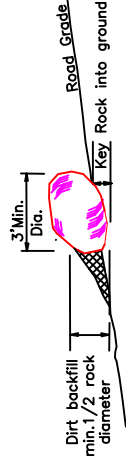
LOG BARRICADE



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

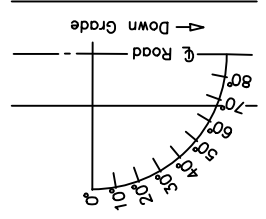


ROCK BARRICADE



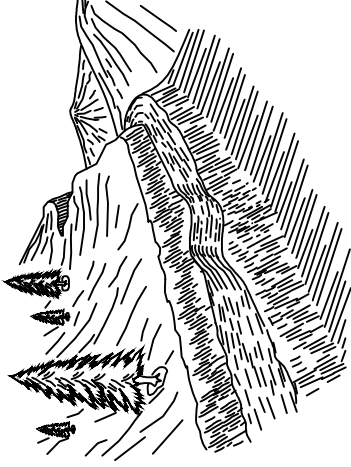
1. ROCK BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. THE LENGTH SHALL BE SUFFICIENT TO BLOCK ROAD FROM VEHICLE USE.
4. THE MINIMUM DIAMETER OF ROCK SHALL BE 3 FEET.
5. THE MAXIMUM SPACE BETWEEN ROCKS SHALL BE 36" OR AS APPROVED BY THE AUTHORIZED OFFICER.

SKREW DIAGRAM

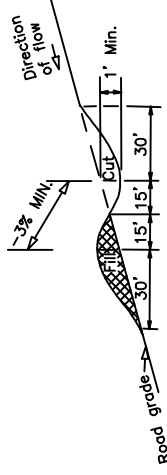


REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
<b>DRAINAGE &amp; EROSION CONTROL DETAILS</b>			
DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 2
DRAWING NO.	ORM05-TS-2020.0012-D8		

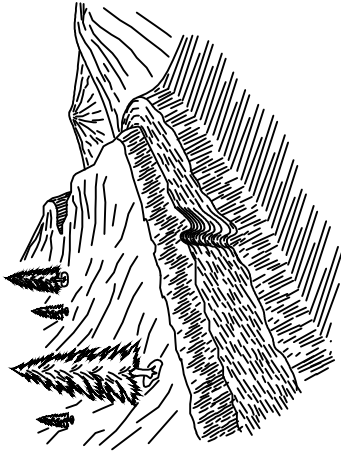
EXHIBIT D-8  
SHEET 2 OF 2  
LODGEPOLE T.S.



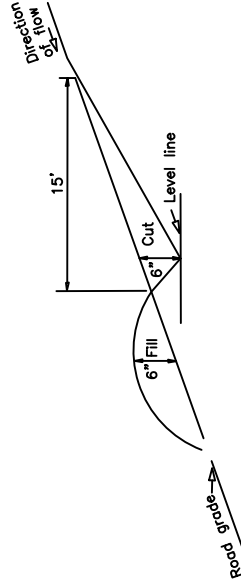
WATER DIP



1. WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.

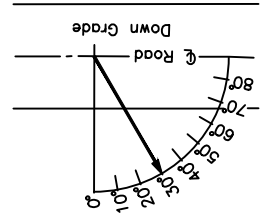


WATER BAR



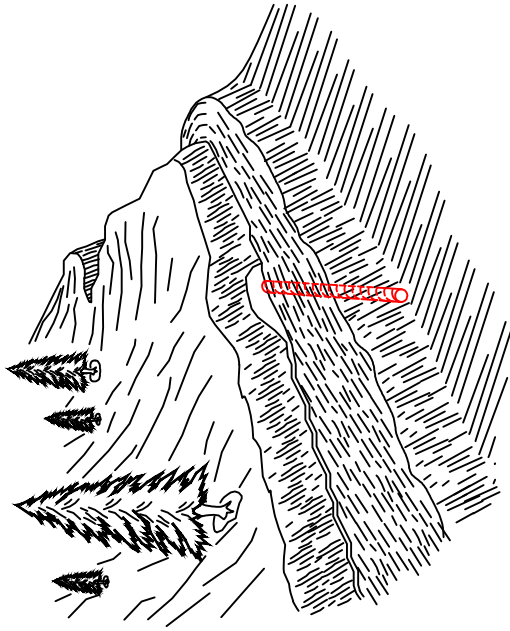
1. CROSS-DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.
4. THE CROSS-DRAINS INVERT SHALL BE SMOOTH AND FREE DRAINING.

SKREW DIAGRAM

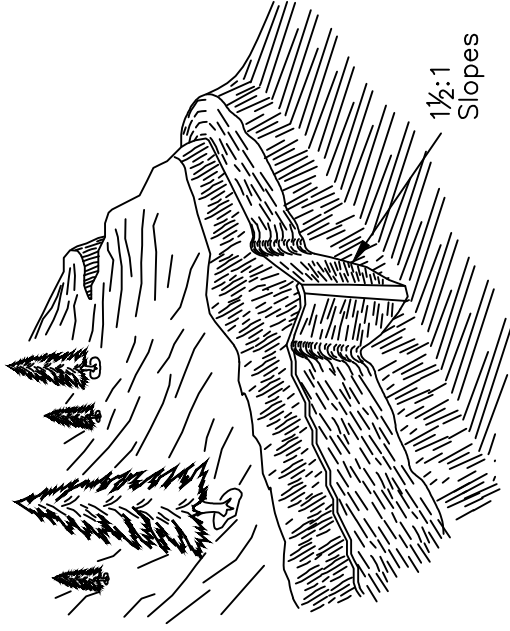


REV. NO.	DESCRIPTION	DATE	APPROV.
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON		
<b>DRAINAGE &amp; EROSION CONTROL DETAILS</b>			
DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	2 OF 2
DRAWING NO. ORM05-TS-2020.0012-DB			

EXHIBIT D-9  
 LODGEPOLE T.S.  
 SHEET 1 OF 1



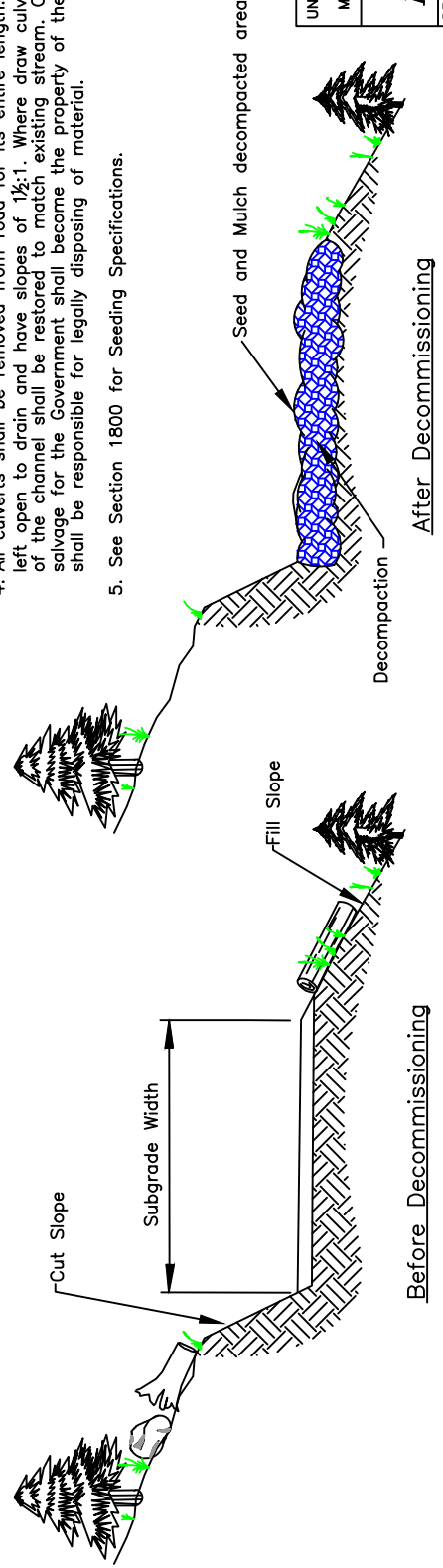
Typical Culvert Removal – Before



Typical Culvert Removal – After

Notes:

1. The Purchaser shall barricade, and decompact the road prism. Barricades shall be constructed as shown for each road.
2. Ditchlines at intersecting roads will be restored as indicated on plan view.
3. Road surface shall be decompact for its entire length using mechanical equipment. Decompact road surface to a depth of 12 to 18 inches or to a point where 10 inch diameter stones are the dominant substrate (whichever is shallower). Where it is determined by the Authorized Officer that decompaction may cause unacceptable damage to the root systems of residual trees along a majority of the road, decompaction may be intermittent, or scarification may be used instead. Decompacted areas shall be seed and mulched after completion.
4. All culverts shall be removed from road for its entire length. Excavated culverts shall be left open to drain and have slopes of 1 1/2:1. Where draw culverts are removed the grade of the channel shall be restored to match existing stream. Culverts not designated as salvage for the Government shall become the property of the Contractor. The Contractor shall be responsible for legally disposing of material.
5. See Section 1800 for Seeding Specifications.



Before Decommissioning

After Decommissioning

Typical Full Decommission

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

Typical Full  
 Decommission Detail

DRAWN	JAB	SCALE	NONE
DATE	JULY 2020	SHEET	1 OF 1
DRAWING NO.	ORM05-TS20.0012-D9		



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Name of Bidder
Tract Number
Sale Name
Sale Notice <i>(dated)</i>
BLM District

**DEPOSIT AND BID FOR: (Check One):**

- Timber and/or Other Wood Products or**  
(Examples of Other Wood Products: biomass, firewood, posts, poles, etc...)
- Vegetative Resources**  
(Examples of Vegetative Resources: boughs, pinyon nuts, cones, plants, etc...)

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input type="checkbox"/> Written Bid for Oral Auction Sale
Time for opening sealed bids <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Sale commences <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
On <i>(date)</i> Place	On <i>(date)</i> Place

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated Timber and/or Other Wood Products or Vegetative Resources on the tract specified above.

Required bid deposit is \$ \_\_\_\_\_ and is enclosed in the form of:

- cash     money order     cashier's check     certified check     bank draft
- bid bond of corporate surety on approved list of the United States Treasury     guaranteed remittance approved by the authorized officer.

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

**BID SCHEDULE – TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES**

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

BID SUBMITTED					ORAL BID MADE	
PRODUCT & SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

If sale contract is executed, undersigned is liable for total purchase price including all modifications executed under the terms of the contract. Timber and/or Other Wood Products or Vegetative Resources designated for taking may be less or more than total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

Bid submitted on *(date)*

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

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

### NOTICES

The Privacy Act and the regulations in 43 CFR 2.223(d) require that you be furnished with the following information:

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

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

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

**EFFECT OF NOT PROVIDING INFORMATION:** Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for Timber and/or Other Wood Products or Vegetative Resources.

## **INSTRUCTIONS TO BIDDERS**

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

2. **QUALIFICATIONS OF BIDDERS** – A bidder for sale of Timber and/or Other Wood Products or Vegetative Resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the Timber and/or Other Wood Products or Vegetative Resources are located.

3. **INSPECTION OF TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES** – Bidder is invited, urged, and cautioned to inspect the Timber and/or Other Wood Products or Vegetative Resources prior to submitting a bid. By executing the Timber and/or Other Wood Products or Vegetative Resources sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the Timber and/or Other Wood Products or Vegetative Resources and his opinion of its value.

4. **DISCLAIMER OF WARRANTY** – Government expressly disclaims any warranty of the fitness of the designated Timber and/or Other Wood Products or Vegetative Resources for any purpose of the bidder; all Timber and/or Other Wood Products or Vegetative Resources are to be sold “As Is” without any warranty of merchantability by Government. Any warranty as to the quantity or quality of Timber and/or Other Wood Products or Vegetative Resources to be sold is expressly disclaimed by Government.

5. **BIDS** – Sealed or written bids for not less than the advertised appraised price, per Timber and/or Other Wood Products or Vegetative Resources must be submitted in duplicate to the District Manager who issued *Timber and/or Other Wood Products or Vegetative Resources Sale Notice*.

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

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

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

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

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

(a) **Timber and/or Other Wood Products or Vegetative Resources Sales** – For each product and species, bids shall specify (1) Bureau of Land Management estimated unit volume or quantity, (2) bidder’s price per unit and total value, and (3) bidder’s total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, the high bidder agrees to pay the Government for the Timber and/or Other Wood Products or Vegetative Resources designated for removal in accordance with the terms of the contract. Timber and/or Other Wood Products or Vegetative designated for taking may be less or more than total estimated volume or quantity shown above.

7. **BID DEPOSIT** – All bidders must make a deposit of not less than the amount specified in the *Timber and/or Other Wood Products or Vegetative Resources*

*Notice*. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior – BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department (*Applies To Timber Only*), or any approved guaranteed remittance approved by the Contracting Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.

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

9. **TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES SALE CONTRACTS** – To be executed by purchaser, has been prepared by Government, and may be examined in the District or Field Manager’s office.

10. **PERFORMANCE BOND** – (*Primarily Used For Timber Sales*)

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

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

11. **PAYMENT BOND**— (*Primarily Used For Timber Sales*)

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

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

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

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

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

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

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

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

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