

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Salem District Office
1717 Fabry Road, S.E.
Salem, Oregon 97306

Belly Twister Timber Sale
ORS04-TS-2016.0501
Date: September 30, 2015

PROSPECTUS

THIS IS A PROSPECTUS ONLY. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE SALEM DISTRICT OFFICE.

NOTICE IS HEREBY GIVEN that the Bureau of Land Management will offer for sale timber as described herein for oral auction, pursuant to Instructions to Bidders, as stated on Form No. 5440-9, attached. Written and oral bids will be received by the District Manager, or her representative, in the timber sale room at the District Office, 1717 Fabry Road, S.E., Salem, Oregon. Written bids and deposits will be accepted beginning at 8:30 a.m. and the timber sale oral auction will commence at 9:00 a.m., on Wednesday, October 28, 2015.

THIS TIMBER SALE NOTICE does not constitute the decision document for purposes of protest and appeal of a forest management decision. Consistent with 43 CFR Subpart 5003-Administrative Remedies, the notice of a timber sale, when published as a legal ad in a newspaper of general circulation shall constitute the decision document for purposes of protest and appeal. Protests may be filed with the Contracting Officer within 15 days of the publication of the aforementioned decision document in the newspaper. It is anticipated that the decision document will be published in the Albany Democrat Herald on or about September 30, 2015. BLM does not warrant publication on this exact date. All parties considering protest of the timber sale decision document are encouraged to review the aforementioned newspaper(s) to ensure accurate knowledge of the exact publication date.

AN ENVIRONMENTAL ASSESSMENT was prepared for each timber sale tract, and a Finding of No Significant Impact has been documented. These documents are available for inspection as background for each timber sale tract at the Salem District Office.

A WRITTEN BID on Form 5440-9 at not less than the advertised appraised price on a unit basis per species and the required minimum bid deposit shall be required to participate in oral bidding.

THE SUCCESSFUL BIDDER, as a condition of award, will be required to sign Form 5430-11, a certification that the bid was arrived at by the bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. Also, Form 5450-17, Export Determination must be completed by the successful bidder. To expedite procedure, this form should be completed and submitted with the written bid.

THE VOLUMES LISTED herein are estimates only. The sale volumes listed are based on 16-foot taper breaks which must be taken into consideration if comparisons are made with volume predictions based on other standards. The volumes based on 32-foot taper breaks are shown for comparison purposes. No sale shall be made for less than the advertised appraised price. The Purchaser shall be liable for the total purchase price, without regard to the amount bid per unit, even though the quantity of timber actually cut or removed or designated for taking is more or less than the estimated volume or quantity so listed.

THIS TIMBER SALE has been cruised based upon Eastside Scribner board foot measure. The minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

A PERFORMANCE BOND in an amount not less than 20 percent of the total purchase price will be required for all contracts of \$2,500 or more. A minimum performance bond of not less than \$500 will be required for all installment contracts less than \$2,500.

QUALIFIED SMALL BUSINESS concerns may apply to SBA for a loan to provide financing for access road construction required under the terms of qualifying timber sale contracts, and necessary contract changes will be made. Approval of loan applications rests with SBA and may be contingent on availability of funds. Applicants for such loans shall notify BLM of their intention to apply for a loan.

PRE-AWARD QUALIFICATIONS. The high bidder may be required to furnish information to determine the ability to perform the obligations of the contract. If the high bidder is determined not qualified, responsible or refuses to respond within fifteen (15) days of a request for information pertaining to qualifications, the contract may be offered and awarded for the amount of the high bid to the highest of the bidders who is qualified, responsible, and willing to accept the contract.

LOG EXPORT AND SUBSTITUTION: All timber sales, including timber from Federal rights-of-ways, shall be subject to the restrictions relating to the export and substitution of unprocessed timber from the United States in accordance with P.L. 94-165 and 43 CFR 5400 and 5420, as amended.

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: Excepting Port-Orford-cedar, all timber offered for sale hereunder 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. 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.

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 occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource Management Plan (RMP), or;
4. Protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines 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.

ADDITIONAL INFORMATION concerning this timber sale tract is available at the above District Office. A copy of the timber sale contract is also available for inspection at the District Office. The prospectus for this/these sale(s) is also available online at: <http://www.blm.gov/or/districts/salem/timbersales/index.php>. The prospectus includes maps and tables that cannot be made Section 508 compliant. For help with its data or information, please contact the Salem District Office at 503-375-5646.

Attachments:

Form 5450-17

Form 5430-11

Form 5440-9

TIMBER SALE NOTICE

SALEM DISTRICT
CASCADES RESOURCE AREA
SALEM DISTRICT MASTER UNIT

SALE DATE: October 28, 2015

CONTRACT NO. ORS04-TS-2016.0501, BELLY TWISTER TIMBER SALE
LINN COUNTY, OREGON: O&C: ORAL AUCTION: LUMP SUM: BID DEPOSIT REQUIRED: \$118,400.00

All timber designated for cutting on: N1/2NW1/4, SE1/4NW1/4, S1/2 Sec.35, T.10S, R.1E; Lot3, Lot4, SE1/4NE1/4, NW1/4SW1/4, S1/2SW1/4, SE1/4, Sec.1, T.11S, R.1E, W.M.

THIS TIMBER SALE HAS BEEN CRUISED BASED UPON EASTSIDE SCRIBNER MEASURE.

Minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

Approx. No. Merchantable Trees	Estimated Volume MBF 32' Log	Species	Estimated Volume MBF 16' Log	Appraised Price Per MBF	Estimated Volume Times Appraised Price
13,733	1,838	Douglas-fir	2,180	\$288.60	\$629,148.00
13,180	1,906	western hemlock	1,906	\$178.30	\$339,839.80
7,718	309	western red cedar	358	\$597.80	\$214,012.40
34,631	3,755	Totals	4,444		\$1,183,000.20

CRUISE INFORMATION: The timber volumes for the Partial Cut Area were based on a variable plot cruise for estimating the board foot volume of trees. Plots were measured with a 20 basal factor for Partial Cut Area. The Right-of-Way volume is based on 100% cruise for estimating the board foot volume of trees. Approximately 0% of the total sale volume is salvage material. With respect to merchantable trees of all species; the average tree is 12.7 inches DBHOB; the average log contains 41 bd. ft.; the total gross volume is approximately 4,710 MBF; and 94% recovery is expected.

CUTTING AREA: 5 units totaling approximately 285 acres shall be partial cut and approximately 2 acres of right-of-way shall be cut. Acres shown on Exhibit A have been computed using a Trimble Geo XT Global Positioning System receiver. Acreage was calculated based on Global Positioning System traverse procedures including differential correction.

DURATION OF CONTRACT: Will be 36 months for cutting and removal of timber.

LOCATION: All directions originating from the town of Scio, OR 97374

Access to all Units as follows:

- Head east on OR-226 for 6.7 miles.
- Turn right, heading East on Camp Morrison Dr. for 4.8 miles.
- Turn right, heading south on paved road 10-1E-23 (Neal Creek Access Rd) for 3.5 miles.
- Turn right, heading southwest on gravel road 10-1E-25. for 1.1 miles.
- Turn right, heading north on gravel road 10-1E-35.2 for 1.2 miles to access Unit 1.
- Continue west on the 10-1E-25 road from the 10-1E-35.2 jct. for 0.7 miles to access Unit 2.
- Turn left, heading east on the 10-1E-33 road for 0.3 miles to access Unit 3.
- Continue on the 10-1E-33 road for 0.2 miles.
- Stay straight, heading southeast on the 11-1E-1.3 road for 1.1 miles to access Unit 4.

- Turn right, heading west on the 11-1E-4.1 road for 0.6 miles to access Unit 5.

For overview of sale area please refer to the Timber Sale Contract Location Map.

ACCESS AND ROAD MAINTENANCE:

Gate key is optional and only needed for vehicle access to road 11-1E-1.10. Prospective bidders may obtain a key from the Salem District Office, Monday through Friday from 7:45 a.m. to 4:30 p.m. CREDIT CARD is required at the time of checking out a key. A \$50.00 charge will apply if key is not returned.

Purchaser maintenance shall include frequent blading and shaping of road surface, spot rocking, ditch, culvert, and catch basin cleaning; removal of minor slides and other debris. Roads shall be left in a condition to withstand adverse weather at the end of the seasonal operations.

Alternate access is available but will require a contract modification. Contact district personnel for more detailed information.

ROAD CONSTRUCTION, IMPROVEMENT AND RENOVATION: The purchaser will be required to do all work set forth below. The purchaser shall supply all materials unless otherwise indicated.

1. Road Construction:

Road P1 = 10-1E-35.8, 420 feet, 14-foot subgrade outsloped, Surfacing – dirt, usable width 12 feet.

2. Road Improvement:

Road 11-1E-1.6, 200 feet, 20-foot subgrade outsloped, Surfacing – dirt with 30 LCY crushed rock at junction.

Road 11-1E-1.6, 840 feet, 14-foot subgrade outsloped, Surfacing – dirt, usable width 12 feet.

Road P6 Ext. to 11-1E-1.2, 570 feet, 14-foot subgrade outsloped, Surfacing – dirt, usable width 12 feet.

3. Renovation:

Renovate 8.99 miles of BLM roads. Renovation will include but not be limited to reshaping of roadway, removing merchantable trees from right-of-way, roadside brushing, blading, spot rocking, compaction, spot ditch cleaning where needed, replace culverts, clean inlet and outlet of existing culverts as needed and slope protection (seeding, fertilizing and mulching).

4. Estimated Quantities:

a. Clearing:

0.20 acres of new construction

0.50 acres of road improvement

b. Excavation:

- c. 200 cubic yards of common
Culverts:

688 feet of 24 inch CPP
160 feet of 36 inch CMP
19 culvert markers – 6ft tall

5. Aggregate Material:

<u>Quantity</u>	<u>Description</u>
660 loose cubic yards	1½” minus crushed rock
500 loose cubic yards stockpiled	1½” minus crushed rock – BLM maintenance rock
90 loose cubic yards	¾” minus crushed rock – culvert bedding
200 loose cubic yards	1½” minus crushed rock – Purchaser maintenance rock
8 cubic yards	Riprap - for culvert on 10-1E-35.1

Rock Source: Commercial

Watering: As needed for compaction of road surfaces

Rolling: 6 stations per hour

6. Miscellaneous Items: (Indicate timing restrictions where appropriate).

- a. Right-of-way Debris Disposal:
Debris shall be disposed of by scattering except P1 and 11-1E-1.2 will have debris placed in a pile near entrance for use as a barricade at completion of contract.
- b. In-water work period: June 1 to October 15

OTHER:

- Construct 8 earth and debris barricades
- Waterbar 1.98 miles of roads
- Decommission 0.36 miles of roads
- Block and stabilize 1.81 miles of roads

DESIGNATION AND SALE OF ADDITIONAL TIMBER (Sec. 42.)

This contract contains provisions for the sale and removal of additional timber necessary to facilitate safe and efficient purchaser operations. These provisions include:

-The designation and sale of additional timber, such as corridor and guyline trees, at contract price, as necessary to facilitate safe and efficient logging. Such trees may be felled and removed when they are painted by the Authorized Officer;

-Sale of additional timber volume at current fair market value where the species and/or size of trees are not representative of the forest stand(s) being thinned;

-Government reservation of trees previously marked for cutting (replacement) when the Authorized Officer determines that it is necessary in order to maintain stand densities consistent with objectives set forth in management prescriptions;

-The use of unilateral modifications executed by BLM for such additional timber and replacement timber;

-Revocation of the purchaser's right to cut additional timber if the Authorized Officer determines that trees have been cut and removed that were not previously marked and approved for cutting and removal by the Authorized Officer; and,

-It is estimated that approximately (10% of Net Volume) 444 MBF of such additional timber may be removed under the contract, but is not included in the advertised sale volume nor was it included in the timber sale appraisal.

Seasonal Restriction Matrix

Seasonal Restriction	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All activities in Unit 1 (42.j.1)												
Mechanical felling skidding and site preparation operations (42.j.2)**												
In-Stream work period (42.j.3)												
Road construction, decommissioning, hauling on natural surface roads (42.j.4)**												

	Operations Restricted
	No Restrictions

Restricted Times are Shaded

Shaded areas in the left side of individual cells indicate effective dates from the 1st to the 14th of each month. Shaded areas in the right side of individual cells indicate effective dates from the 15th to the end of each month.

**Seasonal restrictions may be shortened or extended as determined by Authorized Officer.

SPECIAL ATTENTION ITEMS:

Sec.41.a.-e. Reserve Timber

Sec.42.e.-f. Yarding Specifications

Sec.42.j.1-4 Seasonal Restrictions

Sec. 42.t. Written approval required to haul equipment over Neal Creek Bridge.

Sec.42.aa. Contributed Funds

CONTRACT SPECIAL PROVISIONS

Sec. 41.

RESERVED

- a. All timber within the Reserve Area shown on Exhibit A and all painted orange trees which mark the boundaries of the Reserve Area and/or Rights-of-Way for Roads to be Constructed shown on Exhibit A.
- b. All trees marked with orange paint above and below stump height within the boundary of the Partial Cut Area shown on Exhibit A.
- c. All existing snags greater than fifteen (15) inches DBH and greater than fifteen (15) feet tall.
- d. All existing down logs greater than twenty (20) inches diameter on the large end and greater than twenty (20) feet long.
- e. All hardwood tree species seven (7) inches DBH and greater within the boundary of the Partial Cut Area shown on Exhibit A.

Sec. 42. Special Provisions –

LOGGING

a. Periodic Payment and First Installment Adjustment

1. Notwithstanding the provisions of Sec. 3(b), the amount of the first installment may be reduced by the Government when the Contracting Officer requests the Purchaser to interrupt or delay operations for a period expected to last more than thirty (30) days during the operating season. Such interruption or delay must be beyond the Purchaser's control. Operating Season shall be defined, for this purpose, as the time of year in which operations of the type required are normally conducted and not specifically restricted under the contract. The first installment may be reduced to five (5) percent of the installment amount listed in Sec. 3(b), during the delay period. The Purchaser must request such a reduction in writing. When the Contracting Officer notifies the Purchaser that operations may proceed, the Purchaser shall have fifteen (15) days after such notification to return the first installment to the full value specified in Sec. 3(b). Failure to return the first installment to the full value within the allotted time will be considered a material breach of contract. No timber shall be cut or removed from the Contract Area until the first installment is restored to the full amount.

2. Notwithstanding the provisions of Sec. 3(b), adjustments in the due dates for periodic payments may be made by the Government if the Contracting Officer interrupts or delays contract operations for a period expected to last at least thirty (30) days and the interruption or delay is beyond the Purchaser's control. Any adjustment made shall provide the Purchaser with an equal amount of operating time as would have been available without the delay. The Purchaser shall request such adjustment in writing before the due date for a periodic payment contained in Sec. 3(b).

b. 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. The Purchaser shall provide a minimum of seven (7) days notice when requesting the scheduling of a pre-work conference. Before beginning operations on the Contract Area for the first time or after a shutdown of seven (7) or more days, the Purchaser shall notify the Authorized Officer in writing of the date the Purchaser plans to begin operations.

c. Before cutting and removing any trees necessary to facilitate logging in the Partial Cut Areas shown on Exhibit A, the Purchaser shall identify the location of skid trail, skyline corridors; tail-hold, tieback, guy-line, lift, intermediate support and danger trees; and the clearing limits of landings on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the logging plan required in Sec. 42.b. 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:

1. All skid trails upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the safe and expeditious removal of timber sold under this contract and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Authorized Officer, the width of each skid trail and/or skyline corridor shall be limited to twelve (12) feet.

2. The Purchaser may immediately cut and remove additional timber to clear skid trails, skyline corridors and landings and cut danger trees when the trees have been marked with a paint color to be designated by the Authorized Officer 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.(d) of the contract.

3. 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 the trees otherwise reserved in Sec. 41 of the contract or any tree that exceeds thirty-five (35) 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.

4. 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 Sec. 10 of the contract constitutes a violation of the contract and under Sec. 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.

5. If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with 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.

d. In the Partial Cut Area shown on Exhibit A, all trees designated for cutting and removal shall be felled and cut into log lengths not to exceed forty (40) feet plus trim before being yarded unless otherwise approved in writing by the Authorized Officer.

e. In the Partial Cut Area – Ground-Based Yarding, shown on Exhibit A, skidding shall be done by a skidder equipped with a winch capable of winching logs seventy-five (75) feet unless otherwise approved by the Authorized Officer. The minimum distance between skid trails shall be one hundred fifty (150) feet unless otherwise approved by the Authorized Officer. Such skid trails shall be limited to twelve (12) feet for skidding of logs with minimum damage to reserve trees. All trees that must be removed to facilitate construction of these skid trails shall be felled and skidded prior to falling operations in the remainder of these areas unless otherwise approved by the Authorized Officer. The Purchaser shall directionally fall trees into lead with the winching or skidding direction and winch to these skid trails. The leading end of all logs shall be transported free of the ground during skidding. No skidding equipment shall be permitted to operate off these skid trails.

f. In the Partial Cut Area – Skyline Yarding, shown on Exhibit A, uphill yarding shall be done with a skyline type cable system and carriage capable of lateral yarding up to seventy five (75) feet from a fixed position on the skyline unless otherwise approved by the Authorized Officer. The leading end of all logs shall be transported free of the ground during in-haul yarding. The rigging of tail or lift trees shall be required outside the Partial Cut Area shown on Exhibit A where necessary to meet this requirement. The minimum distance between skyline corridors shall be one hundred fifty (150) feet unless otherwise approved by the Authorized Officer. The Purchaser shall directionally fall trees into lead with the lateral yarding or yarding in-haul directions.

g. Excessive damage to the reserve timber, as determined by the Authorized Officer, will result in suspension of operation until mitigation measures are in place to prevent further damage as directed by the Authorized Officer.

h. Prior to attaching any logging equipment to a Reserve Tree, the Purchaser shall obtain written approval from the Authorized Officer and shall take precautions to protect the tree from damage as directed in writing by the Authorized Officer.

i. No winching, skidding or yarding is permitted across Reserve Area or streams shown on Exhibit A unless approved by Authorized Officer.

- j. The following seasonal restrictions shall be observed:
1. All activities in Unit 1, as shown on Exhibit A, from March 1st to July 15th both days inclusive due to Northern Spotted Owl critical nesting period.
 2. No mechanized felling, skidding, or site preparation operations shall be conducted between November 1st of one calendar year and May 31st of the following calendar year both days inclusive, or during other periods of wet soil conditions as determined by the Authorized Officer.
 3. No in-Stream work shall be conducted on the contract area shown on Exhibit A between October 16th of one calendar year and May 31st of the following calendar year both days inclusive, or during other periods of high stream flow as determined by the Authorized Officer.
 4. No road construction, decommissioning, or hauling on natural surface roads, as shown on Exhibit A and C between October 1st of one calendar year and May 31st of the following calendar year both days inclusive or during other periods of wet soil conditions as determined by the Authorized Officer.

ROAD CONSTRUCTION, IMPROVEMENT, RENOVATION, MAINTENANCE AND USE

k. The Purchaser shall construct, renovate and improve roads in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof.

l. Any required construction, renovation or improvement of roads shall be completed and accepted prior to the removal of any timber, except right-of-way timber, over that road.

m. The Purchaser shall not commence work until receipt of written notice to do so from the Authorized Officer.

n. The Purchaser is authorized to use the roads listed below and shown on Exhibit E which are under the jurisdiction of the Bureau of Land Management, 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 obligations described in Section 42.o. 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
10-1E-23 A-D1	3.53	BLM	BST
10-1E-25 A-D	1.83	BLM	Aggregate
10-1E-33 D2 & F	0.51	BLM	Aggregate
11-1E-1.3	1.13	BLM	Aggregate
11-1E-4.1 D1	0.87	BLM	Aggregate

o. Provided, that the Purchaser shall pay the Government a road maintenance obligation of Nineteen-thousand four-hundred twelve and 41/100 dollars (\$19,412.41) for the transportation of any timber included in this contract price over said road.

The above maintenance amount is for the use of 7.87 miles of road or less. Unless the total maintenance amount is paid prior to commencement of operations on the contract area, payments shall be made in installments payable in the same manner as and together with payments required by Sec. 3 of this contract.

p. The Purchaser is authorized to use the roads listed below and shown on Exhibit E which are under the jurisdiction of the Bureau of Land Management, 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 comply with the conditions set forth in Section 42.r. and pay the required rockwear obligation described in Section 42.q. The Purchaser shall pay current Bureau of Land Management rockwear fees for the sale of additional timber under modification of the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
P1 = 10-1E-35.8	0.08	BLM	Natural
P6 = 11-1E-1.2 Ext.	0.11	BLM	Natural
10-1E-33 D1	0.95	BLM	Aggregate
10-1E-35.1 A-B	0.70	BLM	Aggregate
10-1E-35.2 A-C2 Part	1.45	BLM	Aggregate
10-1E-35.3	0.19	BLM	Aggregate
11-1E-1.2	0.21	BLM	Aggregate
11-1E-1.5	0.21	BLM	Aggregate
11-1E-1.6	0.48	BLM	Aggregate
11-1E-1.9 Part	0.15	BLM	Aggregate
11-1E-4.1 D2 Part	0.47	BLM	Aggregate
11-1E-11.1	0.07	BLM	Aggregate

q. The Purchaser shall also pay to the Government a road maintenance obligation for rockwear in the amount of Six-thousand four -hundred and 47 /100 dollars (\$6,400.47) for the transportation of timber included in the contract price over road or roads listed in Section 42.p. The amount of the rockwear shown above shall be paid prior to removal of timber from the contract area; provided, however, that if the total of such amount exceeds five hundred dollars (\$500.00), the Purchaser may elect to make the payment in installments in the same manner as and together with payments required in Section 3 of this contract.

r. The Purchaser shall perform any road repair and maintenance work on roads used by him, under the terms of Exhibit D, "Purchaser Road Maintenance Specifications," of this contract which is attached hereto and made a part hereof.

s. In the use of roads listed below and shown on Exhibit E, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. S-975 (OR045540) dated November 2, 1987 between the United States of America and Weyerhaeuser Company. These conditions include: Payment to Weyerhaeuser Company, a road use obligation of Three-thousand five-hundred seventy-four and 00/100 dollars (\$3,574.00) and a road maintenance and rockwear obligation of Three-hundred twenty-two and 65/100 dollars (\$322.65) payable at the time indicated in the license agreement. This document is available for inspection at the office of the Authorized Officer. Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a copy of the executed license agreement. 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. The Purchaser will be required to carry liability insurance with limits of \$1,000,000/\$1,000,000/\$1,000,000 and a performance bond of \$1,000.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
10-1E-33 E	0.12	Weyerhaeuser	Aggregate
11-1E-1.10	0.21	Weyerhaeuser	Aggregate

t. The Purchaser shall be required to secure written approval to use vehicles or haul equipment over Government-owned or controlled bridge on 10-1E-23 (Neal Creek Road) when such vehicles or equipment exceed the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

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.

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 vehicles.
- 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 overdimension or tracked vehicles or equipment: (1) without written approval, or (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 technical inspection and evaluation.

ENVIRONMENTAL PROTECTION

u. In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall clean all plant parts and soil from all earth disturbing equipment and logging equipment prior to entry onto lands managed by the BLM unless otherwise agreed by the Authorized Officer to reduce or prevent the spread of noxious weeds to the Contract Area shown on Exhibit A. Equipment shall be inspected by the Authorized Officer at a site approved by the Authorized Officer to verify that the equipment had been reasonably cleaned prior to entry onto lands managed by the BLM.

v. The Purchaser shall cover skid trails with logging slash and debris, install water bars or comparable erosion control measures, and block entrances or other created access points on the contract areas shown on Exhibit A as directed by the Authorized Officer. This work shall be completed within fifteen (15) days after completion of log hauling from each landing.

w. 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 reinitiating consultation will be required concerning the species prior to continuing operation, or;
- (2) when, in order to comply with the Endangered Species Act (or to protect occupied Marbled Murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource 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) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;
- (5) 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;
- (6) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract.
- (7) species have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operation would affect the species or its habitat, or;

- (8) when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standard and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

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

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

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five 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.h. of the contract. The Purchaser shall not resume contract operations until the First Installment amount is fully restored.

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

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

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

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

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

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

FIRE PROTECTION

x. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions when operating at Oregon Department of Forestry Industrial Fire Precaution Level (IFPL) I (Closed Fire Season). At IFPL II and III, additional fire prevention and control provisions may be added as determined by the Authorized Officer and specified in written instructions to the Purchaser to mitigate dry fuel and weather conditions.

(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, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer.

(2) Provide and maintain in good working order, and immediately available on the contract area, the following equipment for use during closed fire season or periods of fire danger:

(a) Fire fighting tools shall be kept at each landing or at such other place at the Authorized Officer shall designate whenever people are working on the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters "For Fire Only." The box shall have a hinged lid and a hasp by which the lid can be sealed. One (1) box may serve two landings, not over six hundred (600) feet apart. When filled, the box shall not weigh over two hundred (200) pounds. The fire tools shall be in good condition, be tight on strong handles, and have sharp

cutting edges. There shall be not less than four (4) tools in each box or less than one (1) tool for each man working on the contract area. Three-fourths (3/4) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

(b) At each landing or such other place as the Authorized Officer shall designate during periods of operation, one (1) fire engine or tank truck of one thousand (1000) gallons or more capacity, or multiple engines equal to 1000 gallons capacity, with five hundred (500) feet of 1 ½ inch hose, one thousand (1000) feet of 1 inch hose, one (1) 1 ½ inch gated wye, one (1) 1 inch gated wye, two (2) 1 ½ to 1 inch reducers, and three (3) 1 inch nozzles. The fire engine, tank truck or smaller engines shall be equipped with a pump capable of delivering a minimum of forty (40) pounds per square inch (psi) engine pressure through fifty (50) feet of 1 ½ inch hose. The pump may be either a power take off (PTO), or a truck-mounted auxiliary engine. All equipment shall be acceptable to the Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670 and any rule promulgated pursuant to these statutes. All hose couplings shall have the standard thread adopted by the BLM (1 ½ inch National Hose Thread (NH), 1 inch National Pipe Straight Hose Thread (NPSH) or be provided with suitable adapters. At the close of each working day, all bulldozers, tank trucks, and/or engines shall be filled with fuel and made ready for immediate use. All tank trucks, and /or engines and portable tanks shall be filled with water and made available for immediate use.

(c) Two (2) backpack pumps at each landing and one (1) at each tail block, or any other block, all to be kept full of water and in good operating condition.

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

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

(f) During Oregon Department of Forestry Closed Fire Season, no smoking shall be permitted outside of closed vehicles.

LOGGING RESIDUE REDUCTION

y. The Purchaser shall perform logging residue reduction within the Fuel Reduction Areas as shown on Exhibit F, which is attached hereto and made a part hereof. All work shall be done as

directed by the Authorized Officer in accordance with the specifications described on Exhibit G which is attached hereto and made a part hereof. This logging residue work will occur upon completion of logging operations on any individual unit where it is required within thirty (30) days after completion of skidding or yarding on each Fuel Reduction Area unless otherwise agreed by the Authorized Officer. This work shall not be conducted during periods of wet soil conditions

z. Notwithstanding the provisions of Section 15 of this contract, the Government shall assume all obligations for the disposal or reduction of the fire hazards caused by slash created by the Purchaser's operations on Government lands, except for logging residue reduction operations listed above, and burning and fire control assistance as required herein. Upon phone notification by the Authorized Officer of required performance prior to ignition, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in landing pile, machine pile, and hand pile burning, and fire control on the day (or days) of ignition by furnishing, at his own expense, the services of personnel and equipment on the Belly Twister Timber Sale as shown below:

- (1) One (1) work leader (Firefighter Type 1 (FFT1)) to supervise crew and to serve as Purchaser's representative.
- (2) A ten (10) person crew (Firefighter Type 2 (FFT2)) for ignition of landing, machine, and hand piles.
- (3) Twelve (12) drip torches with eighty-five (85) gallons of slash fuel. (4:1 ratio of diesel to gasoline).
- (4) Aluma-gel or other incendiary device.
- (5) One (1) chain saw with fuel.
- (6) One (1) hand tool per above listed personnel on the day of ignition.

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.

In the event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer or his designated representative, take action to control and mop-up the escaped fire until released from such service by the Government. If it becomes necessary to suppress a fire which escapes from the prescribed fire area for a period beyond midnight of ignition day, then the Government shall, at its option: (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 case of injury to personnel or damage to equipment furnished 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 cost 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 a deferral of burning and new conditions necessitate additional site preparation work and/or the use of additional personnel and equipment to accomplish the planned burn, the Purchaser also shall be responsible for such additional costs.

CONTRIBUTED FUNDS

aa. The Purchaser shall assist the Government in the pile burning in accordance with Sec. 42.z. pertaining to Prescribed Burning. The Purchaser shall have the option of completing this work, or in lieu thereof, may make a contribution to the Bureau of Land Management in the amount of Five thousand nine hundred eighty-three and 61/100 dollars (\$5,983.61). Upon making such contribution, the Purchaser shall be relieved of the obligations set out in Sec. 42.z. The Purchaser shall notify the Authorized Officer in writing of his intention to make this contribution prior to approval of this contract. If the Purchaser elects to make a contribution, the Authorized Officer shall establish an installment schedule of payments of the contribution.

LOG EXPORT RESTRICTIONS

bb. All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export under the United States in the form of unprocessed timber and is prohibited from 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 (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards or specifications or suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American 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 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 remanufacturing of eight and three-quarters (8-3/4) inches in thickness or less; (6) shakes and shingles.

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

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

1. Date of last export sale.
2. Volume of timber contained in last export sale.
3. Volume of timber exported in the past twelve (12) months from the date of last export sale.
4. Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.

5. Volume of timber exported in succeeding twelve (12) months from date of last export sale.
6. Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

In the event the Purchaser elects to sell any or all of the timber sold under this contract in the form of unprocessed timber, the Purchaser shall require each party buying, exchanging or receiving such timber to execute a "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 purchaser or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in the form specified by the Authorized Officer and furnish the information to the Authorized Officer.

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber Removed Report) which shall be executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract, to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

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

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

At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. Any increased cost 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 Sec. 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.

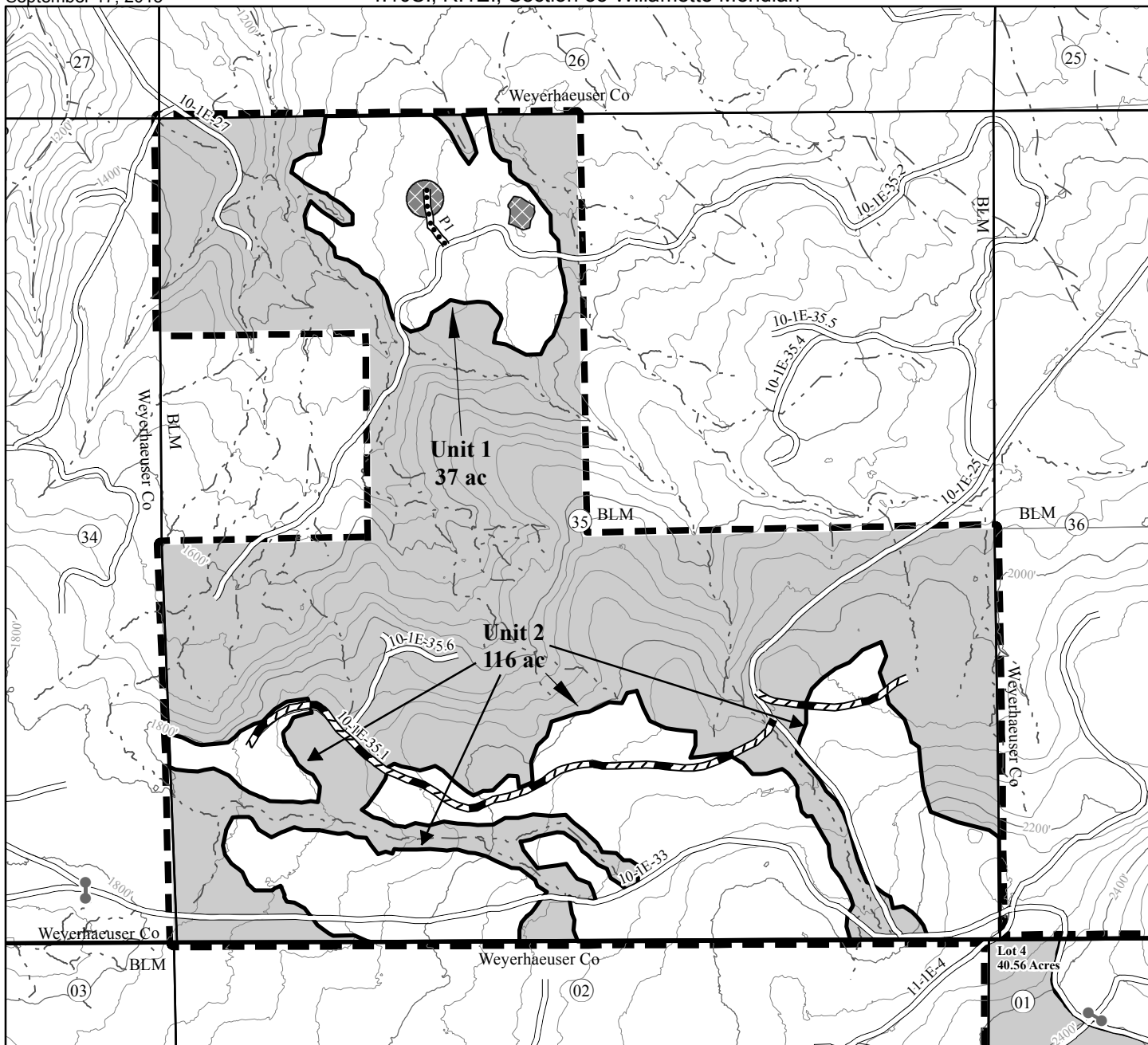
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

Belly Twister
Timber Sale
Exhibit A
Page 1 of 2

TIMBER SALE CONTRACT MAP - Contract No. ORS04-TS-2016.0501

September 17, 2015

T.10S., R.1E., Section 35 Willamette Meridian



Partial Cut Area	285 Acres
Road Right-of-Way	2 Acres
Reserve Area	553.96 Acres
Contract Area	840.96 Acres

Contour Interval : 40'



Note: Boundaries of Partial Cut Area are painted orange and posted.

- | | | | |
|-------------------------------------|----------------------------------|---|----------------|
| Gate | Right-of-Way Road to be Improved | Low Density Thinning Area | Land Ownership |
| Streams | Lot | Partial Cut Area - Ground-Based Yarding | |
| Roads | Partial Cut Area Boundary | Reserve Area | |
| Right-of-Way Road to be Constructed | | Contract Area | |

Note: Unit acres include existing roads, but not new ROW. Acres shown on Exhibit A have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

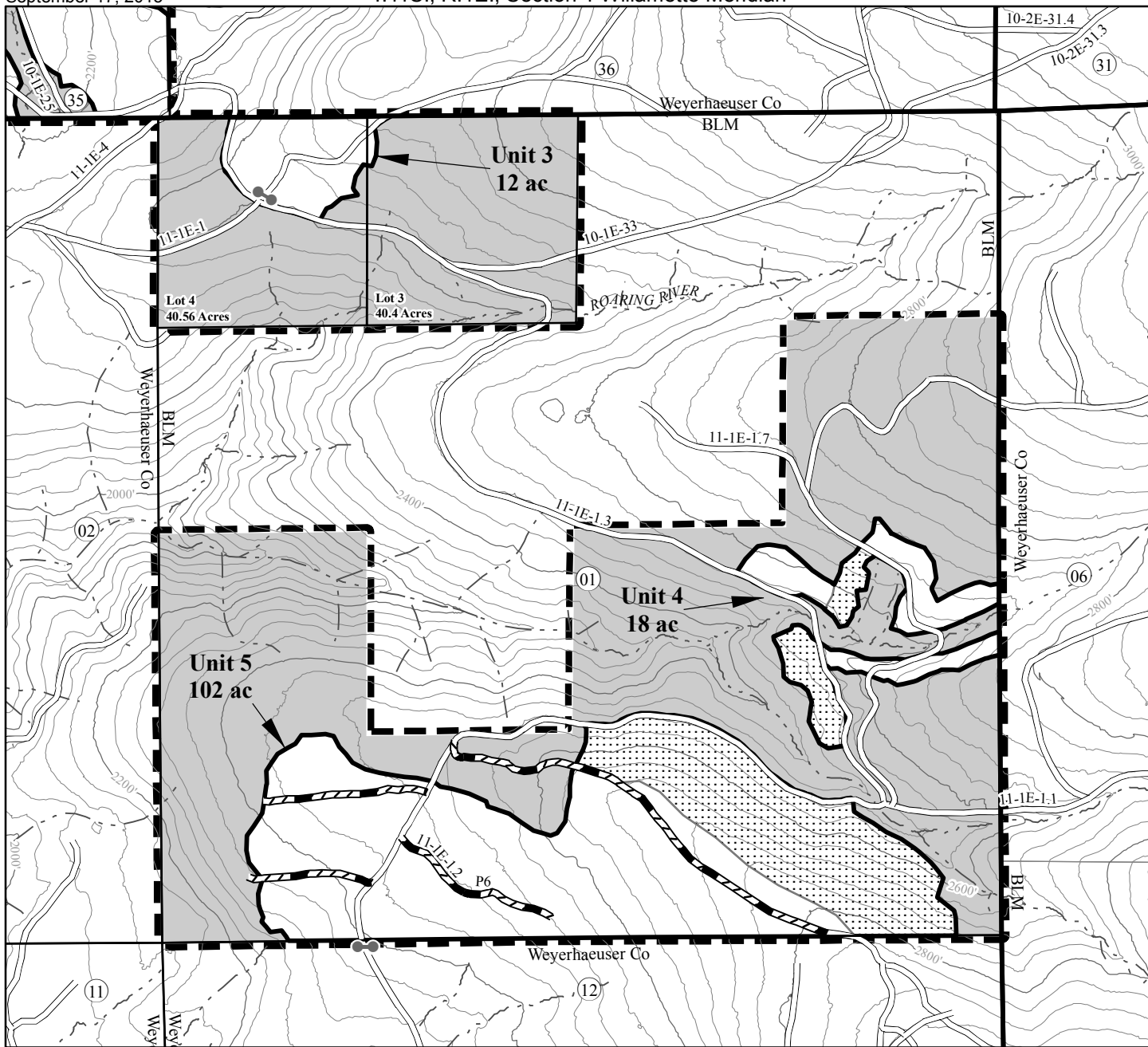
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

Belly Twister
Timber Sale
Exhibit A
Page 2 of 2

TIMBER SALE CONTRACT MAP - Contract No. ORS04-TS-2016.0501

September 17, 2015

T.11S., R.1E., Section 1 Willamette Meridian



Partial Cut Area	285 Acres
Road Right-of-Way	2 Acres
Reserve Area	553.96 Acres
Contract Area	840.96 Acres

Contour Interval : 40'



Note: Boundaries of Partial Cut Area are painted orange and posted.

- | | | | |
|----------------------------------|-----------------------------------|---|----------------|
| Gate | Right-of-Way Road to be Renovated | Partial Cut Area - Ground-Based Yarding | Land Ownership |
| Streams | Lot | Partial Cut Area - Skyline Yarding | |
| Roads | Partial Cut Area Boundary | Reserve Area | |
| Right-of-Way Road to be Improved | | Contract Area | |

Note: Unit acres include existing roads, but not new ROW. Acres shown on Exhibit A have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORS04-TS-2016.0501

Belly Twister

The following estimates and calculations of value of timber sold are made solely as an administrative aid for determining: (1) adjustments made or credits given in accordance with Secs. 6, 9, or 11; (2) when payments are due; and (3) value of timber subject to any special bonding provisions. The value of timber will be determined by multiplying the value per acre as shown below, times the amount of acreage as determined by the Authorized Officer, which has been cut or removed or designated for taking. Except as provided in Sec. 2, Purchaser shall be liable for total purchase price even though quantity of timber actually cut or removed or designated for taking is less than the estimated volume or quantity shown. Cutting areas are shown on **Exhibit A**.

SPECIES	ESTIMATED VOLUME OR QUANTITY (Units Specified)		PRICE PER UNIT	ESTIMATED VOLUME OR QUANTITY X UNIT PRICE
Douglas Fir	2,180.0	MBF	\$288.60	\$629,148.00
Western Hemlock	1,906.0	MBF	\$178.30	\$339,839.80
Western Redcedar	358.0	MBF	\$597.80	\$214,012.40
TOTALS	4,444.0	MBF		\$1,183,000.20

The apportionment of the total purchase price is as follows:

Unit 1

Douglas Fir	301.0 MBF	X	\$288.60	=	\$86,868.60
Western Hemlock	316.0 MBF	X	\$178.30	=	\$56,342.80
Western Redcedar	22.0 MBF	X	\$597.80	=	\$13,151.60
Total	639.0 Mbf				\$156,363.00 ÷ 37.0 acres = \$4,226.03/Acre

Unit 2

Douglas Fir	943.0 MBF	X	\$288.60	=	\$272,149.80
Western Hemlock	992.0 MBF	X	\$178.30	=	\$176,873.60
Western Redcedar	69.0 MBF	X	\$597.80	=	\$41,248.20
Total	2004.0 Mbf				\$490,271.60 ÷ 116.0 acres = \$4,226.48/Acre

Unit 3

Douglas Fir	98.0 MBF	X	\$288.60	=	\$28,282.80
Western Hemlock	103.0 MBF	X	\$178.30	=	\$18,364.90
Western Redcedar	7.0 MBF	X	\$597.80	=	\$4,184.60
Total	208.0 Mbf				\$50,832.30 ÷ 12.0 acres = \$4,236.03/Acre

Unit 4

Douglas Fir	146.0 MBF	X	\$288.60	=	\$42,135.60
Western Hemlock	154.0 MBF	X	\$178.30	=	\$27,458.20
Western Redcedar	11.0 MBF	X	\$597.80	=	\$6,575.80
Total	311.0 Mbf				\$76,169.60 ÷ 18.0 acres = \$4,231.64/Acre

Unit 5

Douglas Fir	663.0 MBF	X	\$288.60	=	\$191,341.80
Western Hemlock	331.0 MBF	X	\$178.30	=	\$59,017.30
Western Redcedar	249.0 MBF	X	\$597.80	=	\$148,852.20
Total	1243.0 Mbf				\$399,211.30 ÷ 102.0 acres = \$3,913.84/Acre

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORS04-TS-2016.0501

Belly Twister

The following estimates and calculations of value of timber sold are made solely as an administrative aid for determining: (1) adjustments made or credits given in accordance with Secs. 6, 9, or 11; (2) when payments are due; and (3) value of timber subject to any special bonding provisions. The value of timber will be determined by multiplying the value per acre as shown below, times the amount of acreage as determined by the Authorized Officer, which has been cut or removed or designated for taking. Except as provided in Sec. 2, Purchaser shall be liable for total purchase price even though quantity of timber actually cut or removed or designated for taking is less than the estimated volume or quantity shown. Cutting areas are shown on **Exhibit A**.

Unit RW1

Douglas Fir	4.0 MBF	X	\$288.60	=	\$1,154.40
Western Hemlock	10.0 MBF	X	\$178.30	=	\$1,783.00
Total	14.0 Mbf				\$2,937.40 ÷ 1.0 acres = \$2,937.40/Acre

Unit RW5

Douglas Fir	25.0 MBF	X	\$288.60	=	\$7,215.00
Total	25.0 Mbf				\$7,215.00 ÷ 1.0 acres = \$7,215.00/Acre

150: ROAD PLAN AND DETAIL SHEET

EXHIBIT C

Sheet 9 of 31

Figure 1: Typical Roadway Cross Sections. The figure includes six cross-section diagrams (Type 1 to Type 6) and two plan views of a typical turnout.

NOTE: TYPE 1 through 4 TYPICAL SECTIONS not to be used where grade exceeds 6%

Typical Turnout Plan Views:

- Turnout length: 50 feet
- Turnout width: 25 ft. taper, 25 ft. min.

1. Extra subgrade widths
Add to each shoulder: 1 ft. for fills of 1-6 ft. and 2 ft. for fills over 6 ft. Widen the inside shoulder of curves as follow:
(See Road Plan Map, Exhibit C)
2. Backslopes

<u>Materials</u>	<u>Cut slopes</u>	<u>Fill slopes</u>
Solid rock	1/4:1	Angle of repose
Soft rock and shale	1/2:1	
Common		
Slopes under 55%	1:1	1-1/2:1
Slopes over 55%	3/4:1	1-1/2:1

Note:
Full bench construction is required on side slopes exceeding 60%.
3. Surface type

	<u>Grading</u>
PRR - Pit run rock	A - 3"
GRR - Grid rolled rock	B - 2" (base course)
SRN - Screened rock	C - 3" jaw run
JRR - Jaw run rock	
ABC - Aggr. base course	C - 1-1/2"
ASC - Aggr. surface course	D - 1" (surface course)
WC - Wood chips	E - 3/4"
4. Turnouts
Width - 10 ft. in addition to subgrade width, or as shown on the plans.
Located approximately as shown on the plans.
Intervisible and not more than 750 ft. apart.
5. Surfacing
Turnouts, curve widening and road approach aprons shall be surfaced.
6. Clearing width 200
See Section
7. As posted and painted for Right-of-Way: otherwise _____
8. Grading (Renovation)
See Section 500
9. Drainage
See Culvert Summary, Sheet 17 of 31.
10. Compaction 300 and 500
See Sections

CULVERT LIST

NOTE:

1. DESIGNED CULVERT LENGTHS AND LOCATIONS ARE APPROXIMATE.

2. ALL CULVERTS HAVE 2 2/3" X 1/2" CORRUGATIONS UNLESS OTHERWISE NOTED.

3. SEE CULVERT INSTALLATION SHEET.

4. DOWN SPOUT TYPES;

1. FULL ROUND
2. HALF ROUND
3. RECTANGULAR FLUME

5. ELBOW TYPES;

1. CONVENTIONAL OR FABRICATED
2. TURNER TYPE
3. SLIP JOINT.

6. INCLUDE SPECIAL SECTIONS, STRUCTURES, HEADWALLS, FOOTINGS, AND OTHER DATA.

GAGE CHART STEEL & ALUM.		
GAGE	DEC. EQUIV. INCHES	
	STEEL	ALUM.
10	.138	.135
12	.109	.105
14	.079	.075
16	.064	.060

ALWAYS THINK SAFETY

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
SALEM DISTRICT - OREGON

CULVERT SUMMARY

DRAWN J. REMO ENGINEERING, SCALE not to scale
DATE 1990 SHEET 1 OF 1

U.S. DEPT. OF THE INTERIOR
Bureau of Land Management
SALEM DISTRICT - OREGON

Contract No.
ORS040-TS-2016.0501

Sole
Belly Twister

Sheet 17 of 31

CULVERT LOCATIONS										DOWNSPOUT				REMARKS	
DESIGNED						AS BUILT									
ROAD NO. STATION OR M.P.	SIZE	MATL	LENGTH	SKEW ANGLE	INSTAL- LATION TYPE	ROAD NO. STATION OR M.P.	SIZE	GAGE	LENGTH	TYPE	SIZE	LENGTH	TYPE OF ELBOW	CULVERT MARKERS	
10-1E-25															
0.87	24	CPP	50	30	1									1	Live - Realign inlet
1.37	24	CPP	30	30	3									1	
10-1E-33															
0.15	24	CPP	30	30	3									1	
0.96	24	CPP	40	30	3									1	Add Culvert
10-1E-35.1															
0.01	36	CMP	56	30	1										Live
10-1E-35.2															
0.30	24	CPP	34	30	3									1	
0.42	36	CMP	44	30	1									1	Live
0.50	24	CPP	40	30	1									1	
0.69	36	CMP	60	30	1									1	Live
0.73	24	CPP	50	30	1									1	
0.79	24	CPP	40	30	3									1	
0.81	24	CPP	50	30	1									1	Live
0.93	24	CPP	40	30	3									1	
1.01	24	CPP	46	30	3									1	Live - Realign inlet
1.09	24	CPP	40	30	3									1	Live
1.10	24	CPP	40	30	3									1	Live
11-1E-1.9															
0.04	24	CPP	40	30	3									1	Add Culvert
0.07	24	CPP	50	30	3									1	
11-1E-4.1															
0.69	24	CPP	34	30	3									1	
0.88	24	CPP	34	30	3									1	

PIPE ARCH CULVERT				
MATL	SIZE	GAGE	CORRUG- ATIONS	LENGTH

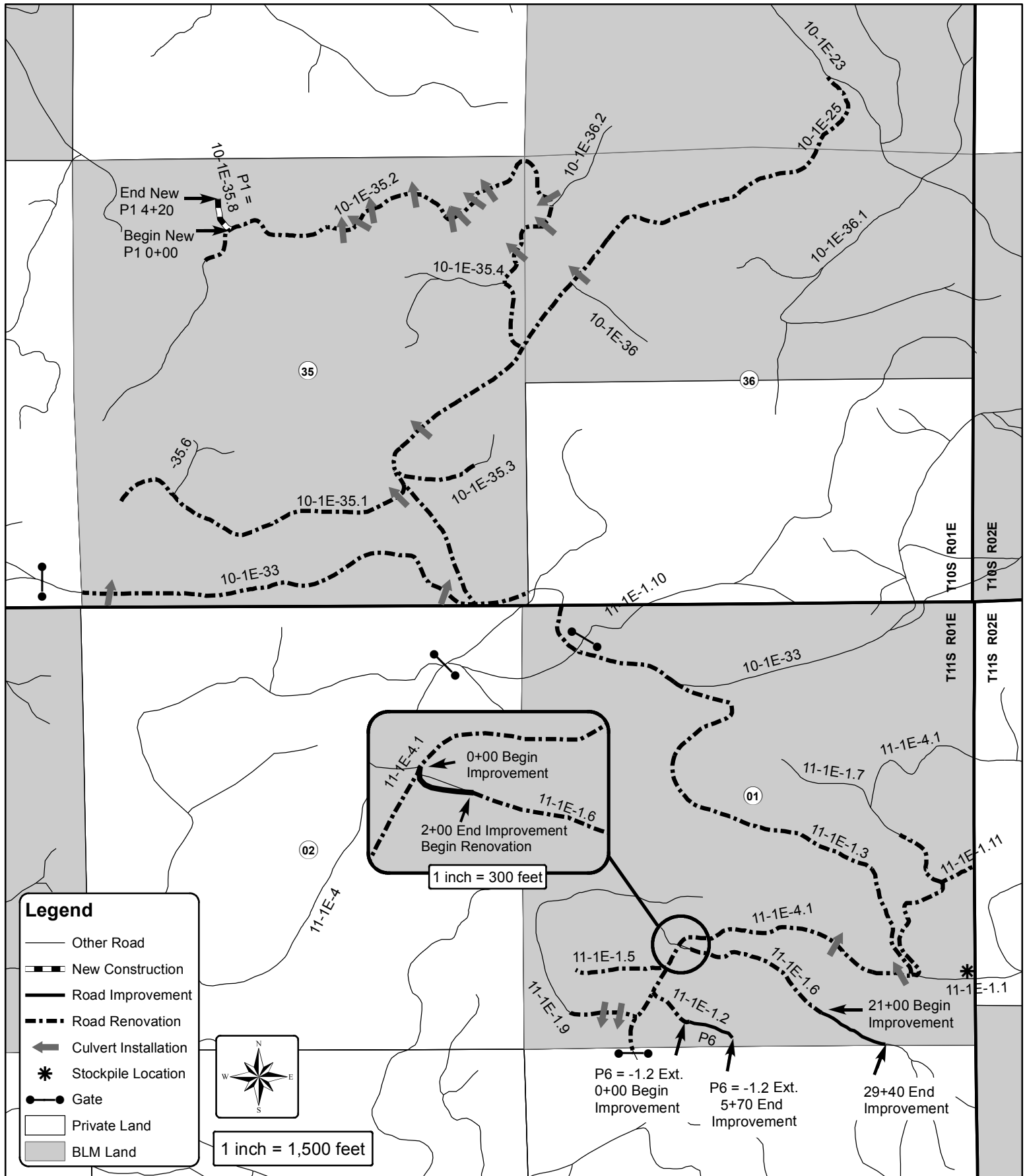
STRUCTURAL PLATE CULVERT				
MATL	SIZE	GAGE	CORRUG- ATIONS	LENGTH

ROUND PIPE CULVERT				
MATL	SIZE	GAGE	CORRUG- ATIONS	LENGTH
CPP	24			688
CMP	36	14		160

DOWN SPOUTS		
TYPE	SIZE	LENGTH

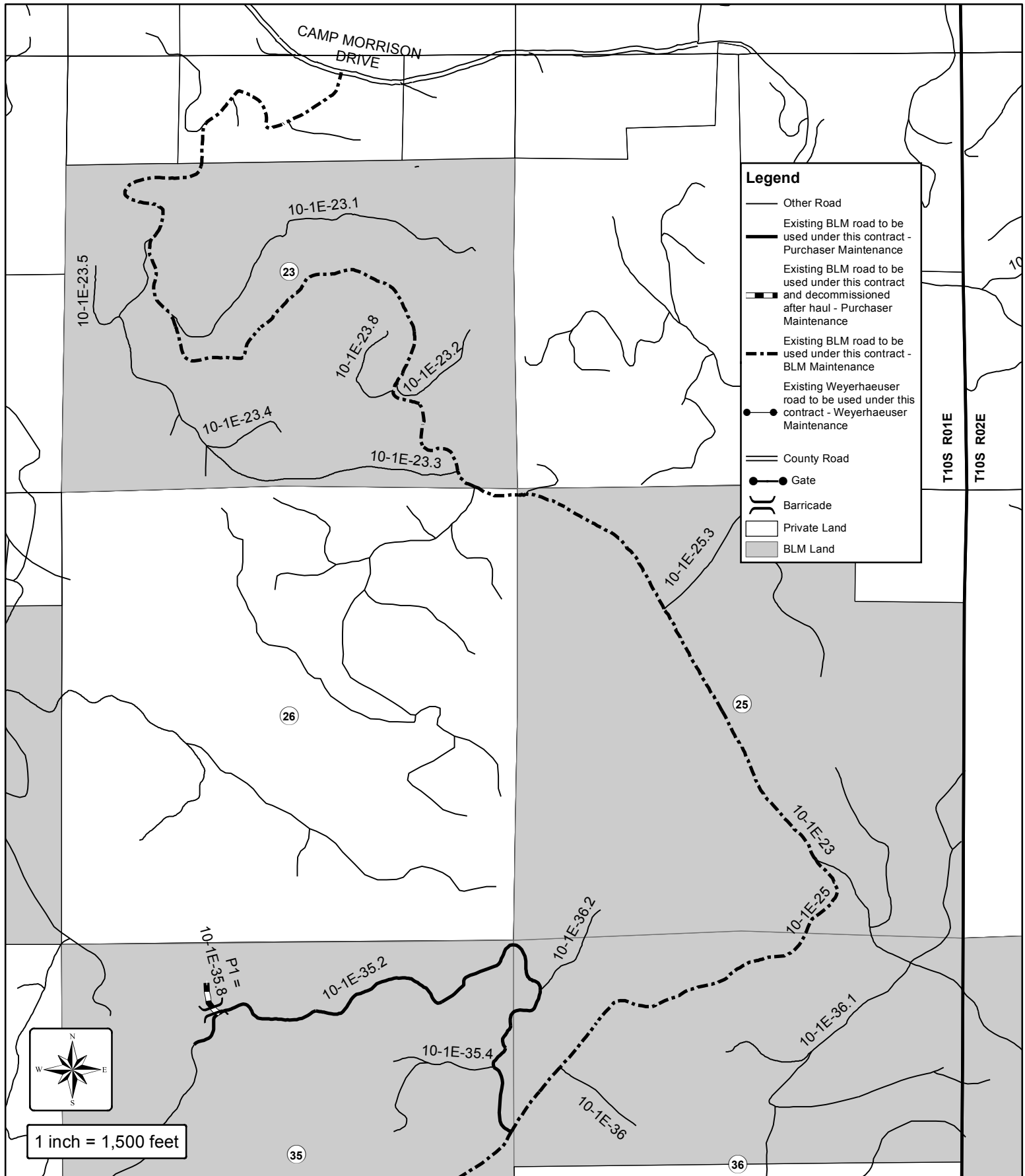
UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
ROAD PLAN MAP
Sections 35 and 36, T. 10 S., R. 1 E.,
Sections 1 and 2, T. 11 S., R. 1 E., W. M.

EXHIBIT C
BELLY TWISTER
ORS04-TS-2016.0501
Sheet 31 of 31



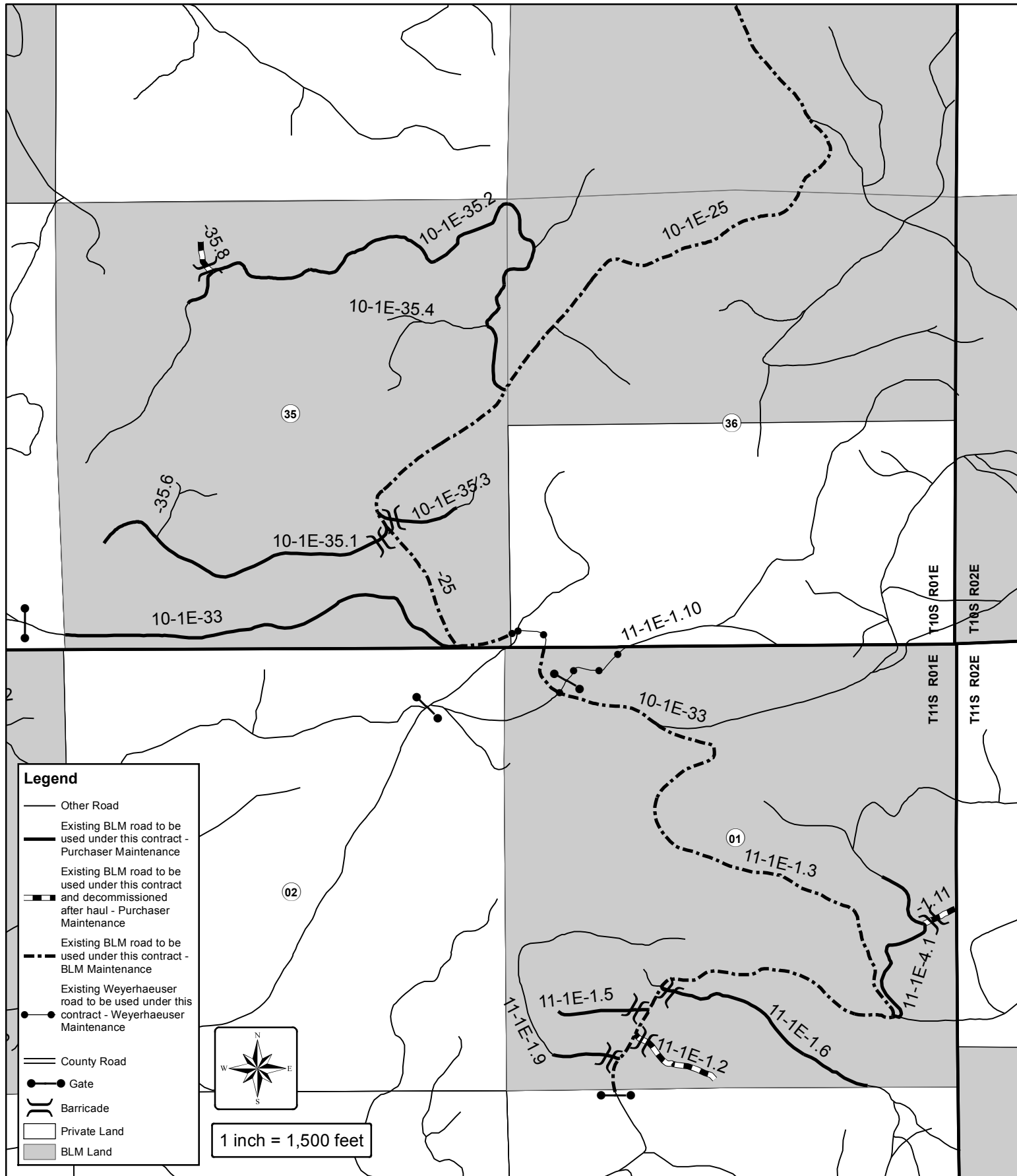
UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
ROAD USE AND MAINTENANCE MAP
Sections 23, 24, 25 and 26, T. 10 S., R. 1 E., W.M.

EXHIBIT E
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ORS04-TS-2016.0501
Sheet 1 of 2



UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
ROAD USE AND MAINTENANCE MAP
Sections 35 and 36, T. 10 S., R. 1 E.
Section 1, T. 11 S., R. 1 E., W.M.

EXHIBIT E
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ORS04-TS-2016.0501
Sheet 2 of 2



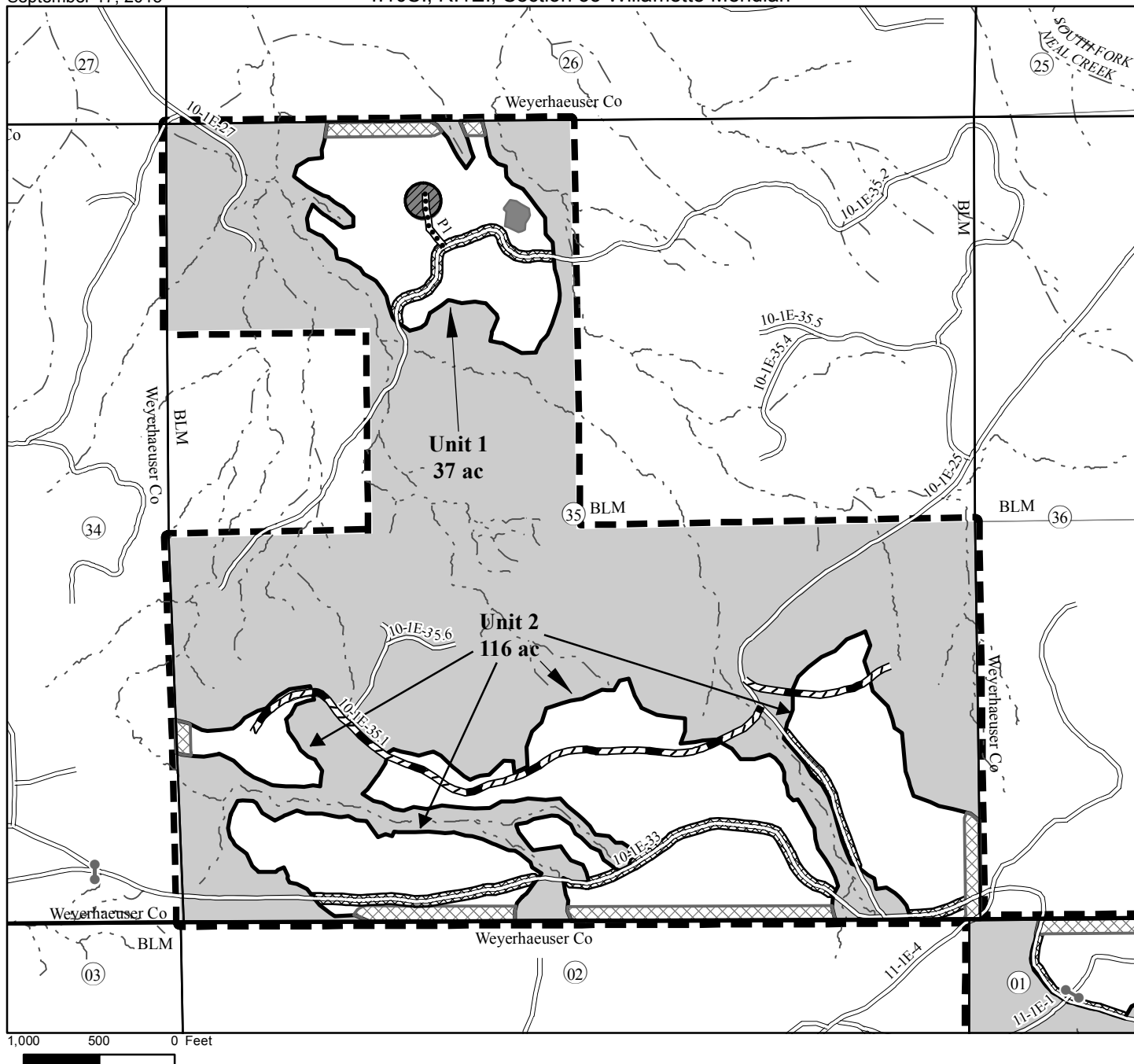
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

Belly Twister
Timber Sale
Exhibit F
Page 1 of 2

TIMBER SALE CONTRACT MAP - Contract No. ORS04-TS-2016.0501

September 17, 2015

T.10S., R.1E., Section 35 Willamette Meridian



Fuels Treatments

- Machine Pile / No pullback
- Machine Pile / 100ft

- Machine Pile / 35ft
- Gate
- Streams
- Roads

- Right-of-Way Road to be Constructed
- Right-of-Way Road to be Improved
- Partial Cut Area Boundary

- Low Density Thinning Area
- Reserve Area
- Contract Area
- Land Ownership selection

Note: Boundaries of Partial Cut Area are painted orange and posted.

Note: Unit acres include existing roads, but not new ROW. Acres shown on Exhibit A have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

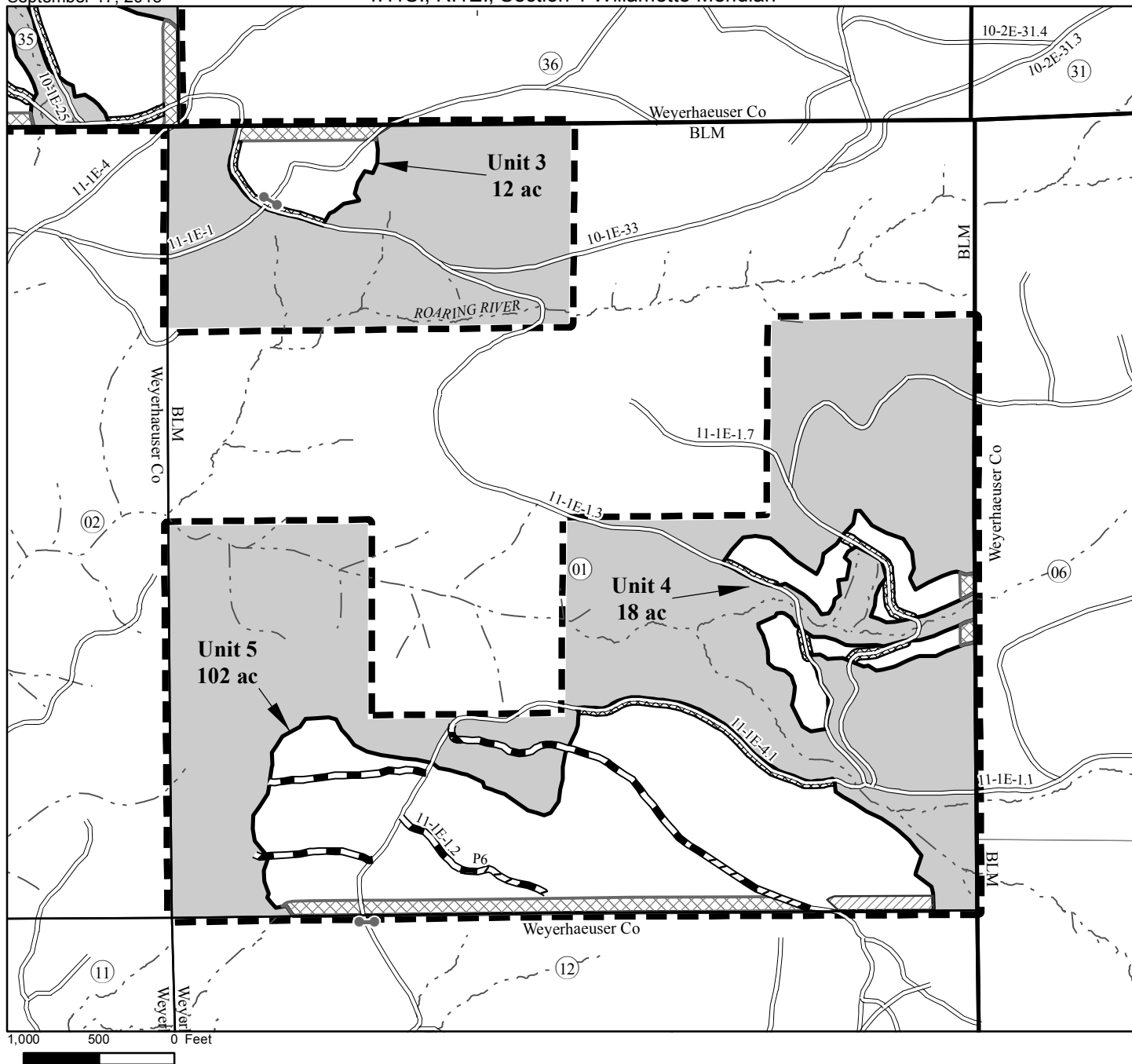
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

Belly Twister
Timber Sale
Exhibit F
Page 2 of 2

TIMBER SALE CONTRACT MAP - Contract No. ORS04-TS-2016.0501

September 17, 2015

T.11S., R.1E., Section 1 Willamette Meridian



Fuels Treatments

- Hand Pile / 100ft
- Machine Pile / 100ft
- Machine Pile / 35ft
- Gate

- Streams
- Roads
- Right-of-Way Road to be Improved
- Right-of-Way Road to be Renovated

- Partial Cut Area Boundary
- Reserve Area
- Contract Area
- Land Ownership selection

Note: Boundaries of Partial Cut Area are painted orange and posted.

Note: Unit acres include existing roads, but not new ROW. Acres shown on Exhibit A have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

LOGGING RESIDUE REDUCTION

Immediately upon completion of harvest, activity generated logging slash at all landings, along specified unit boundaries, and in specified units as shown on Exhibit F will be treated as follows:

CONSTRUCTION AND COVERING OF LANDING PILES

1. Within twenty-five (25) feet (horizontal distance) of the edge of each landing, all tops, broken pieces, limbs, and other activity generated woody debris greater than one (1) inch in diameter at the large end and longer than three (3) feet in length shall be piled and covered for burning within fifteen (15) days of the removal of logs from the landing area.
2. Landing piles shall be located as far as possible from green trees, snags, or unit boundaries to minimize damage.
3. Landing piles shall be kept free of dirt and other non-wood debris and constructed as compactly as possible. There shall be an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels, and the completed piles shall be free of projecting limbs or slash which would interfere with the adequate covering of the piles. To the maximum extent possible, hardwood slash shall be mixed with conifer slash to create piles that are more burnable.
4. The landing piles shall be adequately covered with four (4) mil. (0.004) inch thick black polyethylene plastic not to exceed 100 square feet to ensure ignition. The plastic shall be furnished by the Purchaser. The plastic shall be oriented southwest (SW) to northeast (NE) and over the top of the pile. Plastic shall be held in place with woody debris or tied with rope or twine. The plastic must be secured so that it is held in place during strong wind conditions. Covering shall be completed as directed by the Authorized Officer.
5. No landing debris shall be dozed off the landing and covered with dirt. Debris which has been buried and is determined to be the source of holdover fire shall be excavated by the Purchaser, at the Purchaser's expense, with a tractor and/or hydraulic excavator as directed by the Authorized Officer.
6. If landing debris is minimal and determined by the Authorized Officer to not be a major fire hazard, the debris shall be removed from the landing area and scattered on yarding corridors or skid trails to a depth not to exceed six (6) inches, as directed by the Authorized Officer.
7. If the construction of the landing piles will not permit adequate consumption of the piled debris, the Purchaser shall be required to re-pile the debris at the direction of the Authorized Officer.

MACHINE PILE CONSTRUCTION AND COVERING

1. Activity generated woody debris shall be piled and covered for burning within thirty (30) days after completion of skidding or yarding on each Fuel Reduction Area, during periods of low soil moisture, or as determined by the Authorized Officer. Specified areas and approximate acres are listed below:

- Unit No. 1: Within one hundred (100) feet (horizontal distance)
 of the north property boundary adjacent to private plantation. 1 acre
- Within thirty five (35) feet (horizontal distance) of each side of road
 10-1E-35.2 1 acre
- Within low density thinning area at the end of the P1 spur. 1 acre
- Unit No. 2: Machine pile slash within 100 feet of the east property line adjacent to
 private land. 2 acres
- Machine pile slash within 100 feet of the west property line north of river
 adjacent to private land. 1 acre
- Machine pile slash (the entire ground based yarding area) south of the
 Lulay Mainline on the south property line in the SE ¼ and the SW ¼ of
 the SW ¼ adjacent to private land. 5 acres
- Machine pile slash north of the Lulay Mainline within 35 feet of the road
 in the SE ¼ of the SW ¼. 2 acres
- Machine pile slash within 100 feet of the south property line in the SE ¼
 of the SE ¼. 4 acres
- Machine pile slash north and south of the Lulay Mainline within 35 feet of
 the road in the SW ¼ of the SE ¼. 7 acres
- Machine pile slash north and south of the Lulay Mainline within 35 feet of
 the road in the SE ¼ of the SE ¼. 1 acre
- Machine pile slash east of the 10-1E-25 (Adverse spur) road within 35 feet
 of the road. 1 acre
- Unit No. 3: Machine pile slash within 100 feet of north property line adjacent to
 private land. 1 acre

Machine pile slash north of the Lulay Mainline Road (10-1E-33) within 35 feet of the road. 1 acre

Unit No. 4: Machine pile slash along the east property line in the ground based yarding area. 1 acre

Machine pile slash within 35 feet on both sides of the road where road goes through the unit, and on one side of the road where it is the boundary of the unit along the Roaring River Rd. 11-1E-1.3. 2 acres

Unit No. 5: Machine pile slash within 100 feet of the south property line in the ground based yarding area. 9 acres

Machine pile slash within 35 feet of both sides of BLM Road 11-1E-4.1. 2 acres

2. A track mounted hydraulic excavator shall be used to pile woody debris.
3. All equipment shall meet the approval of the Authorized Officer.
3. Prior to piling; the excavator shall be cleaned in accordance with section 42.cc.
4. The excavator shall be equipped with a hydraulic thumb or a rotating controllable grapple head. The machine shall have a minimum reach of twenty-five (25) feet. The excavator shall not operate on slopes greater than thirty-five (35) percent.
5. Along roads, the excavator shall be limited to construction of machine piles from the roadbed to avoid compaction within the harvest area.
6. In ground based harvest areas away from roads, the excavator shall be required to work on a slash mat in order to reduce compaction. No more than one pass over the same ground shall be permitted.
7. Machine piles shall be located as far as possible from green trees, snags, or unit boundaries to minimize damage.
8. Machine piles shall be kept free of dirt and other non-wood debris and constructed as compactly as possible. There should be an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels, and the completed piles shall be free of projecting limbs or slash which would interfere with the adequate covering of the piles. To the maximum extent possible, hardwood slash shall be mixed with conifer slash to create piles that are more burnable. Logging debris greater than six (6) inches in diameter at the small end shall not be piled.

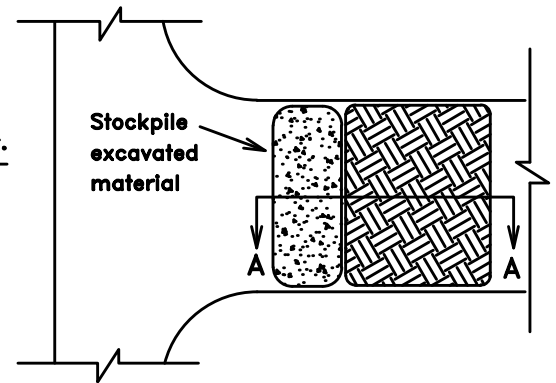
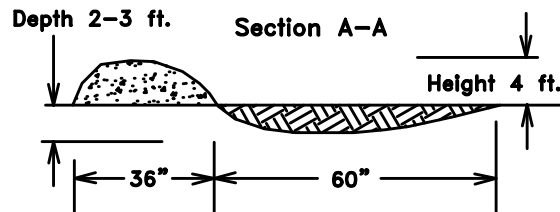
9. The machine piles shall be adequately covered with four (4) mil. (0.004) inch thick black polyethylene plastic not to exceed 100 square feet to ensure ignition. The plastic shall be furnished by the Purchaser. The plastic shall be oriented southwest (SW) to northeast (NE) and over the top of the pile. Plastic shall be held in place with woody debris or tied with rope or twine. The plastic must be secured so that it is held in place during strong wind conditions. Covering shall be completed as directed by the Authorized Officer.

6. The Purchaser shall provide all tools, materials, equipment, personnel and incidentals necessary to satisfactorily perform and complete the work at the Purchasers expense.

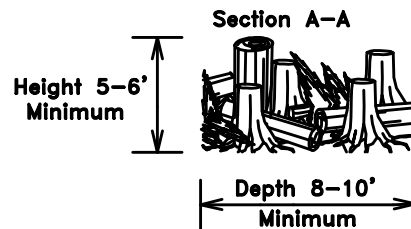
**U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Salem District**

EXHIBIT H
Belly Twister
ORS04-TS-2016.0501
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1. Roads shall be blocked as shown and could be combined with the Debris Barricade below.
2. All excavated material shall be stockpiled at the entrance of the road to be blocked
3. Exact locations will be flagged by the Authorized Officer prior to construction
4. The barricade shall span the entire width of the roadway and shall sufficiently block all vehicular access to the road



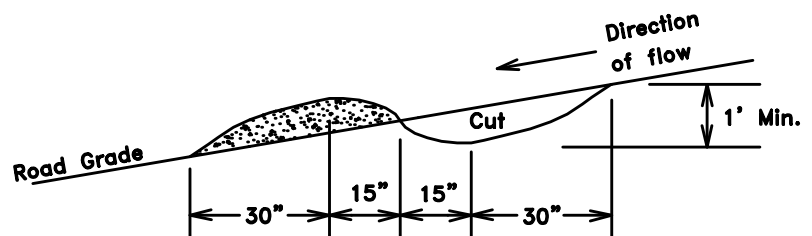
Typical Earth Barricade Details
(Not to Scale)



Typical Debris Barricade Details
(Not to Scale)

1. Roads shall be blocked as shown using available debris and could be combined with the Earth Barricade above
2. All barricade material shall be stock piled in a large configuration of stumps, logs, large rocks, woody material and earth. Earth will be used to aid debris from being cut, stolen or moved from site.
3. Barricade locations will be flagged by the Authorized Officer prior to construction
4. The barricade shall span the entire width of the roadway and shall sufficiently block all vehicular access to the road

1. Waterbars shall be constructed as shown.
2. Exact locations will be flagged by the Authorized Officer prior to construction.
3. All waterbars shall be skewed 30 degrees.
4. Waterbars shall extend from the cut bank to the fill slope and be readily crossed by passenger type vehicles.



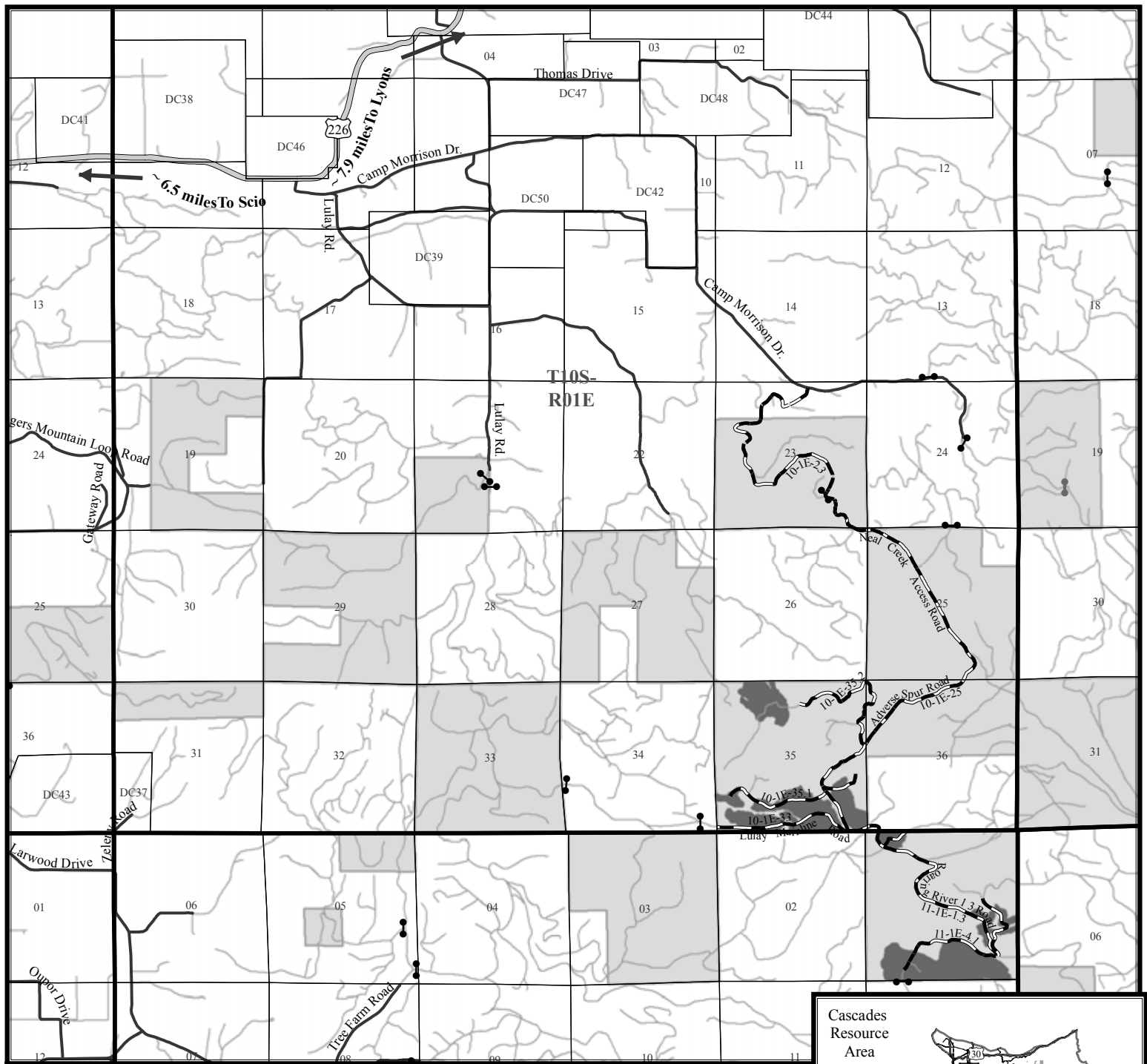
Typical Waterbar Details
(Not to scale)

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
TIMBER SALE CONTRACT LOCATION MAP

Contract No. ORS04-TS-2016.0501

9/14/2015

T.10S, R.1E, Section 35 & T.11S, R.1E Section 1 W. M. - SALEM DISTRICT - OREGON



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



Gate

- Open
- Closed

Roads

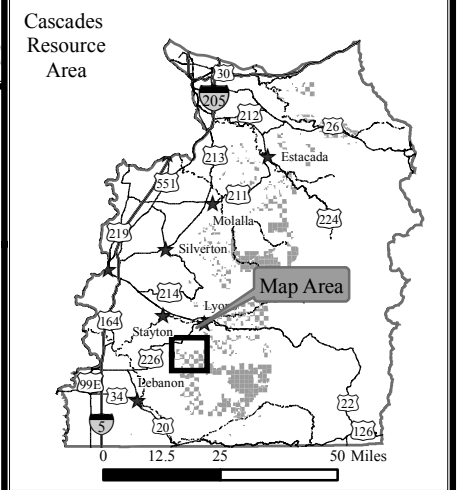
- Haul Route
- County Road

Other Roads

State Hwys

Partial Cut Unit Boundary

Bureau of Land Management



**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Timber - Sale - Summary**

Salem
Belly Twister
ORS04-TS-2016-0501

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	10S	1E	35	N1/2NW1/4,SE1/4NW1/4,S1/2W.M.
O&C	11S	1E	01	Lot3,Lot4,SE1/4NE1/4,NW1/4SW1/4,S1/2SW1/4,SE1/4W.M.

Cutting Volume (16' MBF)

Unit	DF	WH	WRC						Total	Regen	Partial	ROW
1	301	316	22						639	0	37	0
RW1	4	10							14	0	0	1
2	943	992	69						2,004	0	116	0
3	98	103	7						208	0	12	0
4	146	154	11						311	0	18	0
5	663	331	249						1,243	0	102	0
RW5	25	0	0						25	0	0	1
Totals	2,180	1,906	358						4,444	0	285	2

Logging Costs per 16' MBF

Stump to Truck	\$	98.73
Transportation	\$	59.47
Road Construction	\$	24.79
Road Amortization	\$	0.80
Road Maintenance	\$	3.50
Other Allowances :		

Equipment Washing	\$ 0.17
Misc	\$ 9.06
Total Other Allowances :	\$ 9.23

Profit & Risk

Total Profit & Risk	11 %
Basic Profit & Risk	11 % + Additional Risk 0 %
Back Off	0 %

Tract Features

Avg Log	Douglas-fir : 41 bf	All : 41 bf
Recovery	Douglas-fir : 97 %	All : 94 %
Salvage	Douglas-fir : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		15
Avg Yarding Slope		20 %
Avg Yarding Distance (feet)		271
Avg Age		63
Volume Cable		13 %
Volume Ground		87 %
Volume Aerial		0 %
Road Construction Stations		4.20
Road Improvement Stations		16.10
Road Renovation Stations		12.52
Road Decommission Stations		18.87

Cruise

Cruised By	J.Poteet
Date	08/04/2014
Type of Cruise	PCMTRE, 100%
County, State	Linn, OR

Net Volume

Green (16' MBF)	4,444
Salvage (16' MBF)	0
Douglas-fir Peeler	0
Export Volume	0
Scaling Allowance (\$0.00 per 16' MBF)	\$0.00

Total Logging Costs per 16' MBF

\$ 196.52

Utilization Centers

Center #1 : Lyons Oregon	30 Miles
Center #2	0 Miles
Weighted distance to Utilization Centers	30

Length of Contract

Cutting and Removal Time	36 Months
Personal Property Removal Time	1 Months

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Salem
Belly Twister
ORS04-TS-2016-0501

Stumpage Summary

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
DF	13,733	2,180	\$ 545.11	\$ 59.96	\$ 196.52			\$ 288.60	\$ 629,148.00
WH	13,180	1,906	\$ 421.20	\$ 46.33	\$ 196.52			\$ 178.30	\$ 339,839.80
WRC	7,718	358	\$ 892.45	\$ 98.17	\$ 196.52			\$ 597.80	\$ 214,012.40
Totals	34,631	4,444							\$ 1,183,000.20

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Douglas-fir				25.0	64.0	11.0
Western red-cedar				100.0		
Western Hemlock				30.0	59.0	11.0

Marginal Log Volume

Species	Grade #7	Grade #8
Douglas-fir	7,380	
Western red-cedar		
Western Hemlock		

Appraised By : Poteet, Jeremy

Date : 06/17/2015

Area Approval By :

Date :

District Approval By :

Date :

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Salem
Belly Twister
ORS04-TS-2016-0501

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Douglas-fir	13,733	2,180	1,838	
Western Hemlock	13,180	1,906	1,608	
Western red-cedar	7,718	358	309	
Total	34,631	4,444	3,755	

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
4,710	34,631	136	12.7	4,698	113,428	41

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
113,428	364	113,792	3.3	4,444	4,710	94 %

Douglas-fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
2,242	13,733	163	13.3	2,242	54,424	41

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
54,424	0	54,424	4.0	2,180	2,242	97 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1		37		37
RW1			1	1
2		116		116
3		12		12
4		18		18
5		102		102
RW5			1	1
Totals :		285	2	287