P R O S P E C T U S
SBA Set-Aside

BUTTE FALLS AREA
JACKSON MASTER UNIT

Medford Sale # ORM05-TS15-12
July, 2015 (LM)

4 DOUBLE BOWEN, (6310) Jackson County, O&C

BID DEPOSIT REQUIRED: $66,700.00

All timber designated for cutting in N½ NE¼, SW¼ NE¼, NW¼ NW¼, SE¼ NW¼, SW¼ SE¼, Section 13, S½ NW¼, NE¼ SW¼, Section 15, SE¼ NE¼, NE¼ SE¼, Section 23, NW¼ NE¼, S½ NE¼, NW¼, SW¼, SE¼, Section 25, T.35 S., R.2E; SW¼, LOT 3, LOT 4., Section 7, NE¼ NE¼, SW¼ NW¼, W½ SW¼, SE¼ SW¼, SW¼ SE¼, Section 19, NW¼, LOT 1, LOT 2, SE¼, LOT 3, LOT 4, Section 31, T.35 S., R.3E; 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
20347	3633	Douglas-fir	4545	$120.50	$547,672.50
8554	1539	White fir	1910	$47.30	$90,343.00
1100	283	Ponderosa pine	355	$32.50	$11,537.50
1404	104	Incense-cedar	132	$127.30	$16,803.60
33	3	Sugar pine	4	$30.30	$121.20
31438	5562	**Totals**	6946		**$666,477.80**

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

**Minimum stumpage values were used to compute the appraised price (10% of pond value).

CRUISE INFORMATION - Douglas-fir, White fir, Ponderosa Pine, Incense Cedar and Sugar Pine have been cruised using the 3-P sampling methods to select sample trees. 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 15.2 inches DBHOB; the average gross merchantable log contains 63 bd. ft.; the total gross volume is approximately 8064 M bd. ft; and 86% recovery is expected(Average DF is 15.2 inches DBHOB; average gross merchantable log DF contains 61 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 – Forty (40) units containing seven hundred nineteen (714) acres must be thinned, and two (2) acres of new temporary spur road Right of Way acres must be clear-cut.

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 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 Indian Hill, LLC, via Right-of-Way and Road Use Agreement M-2000F with Plum Creek Timberlands, LP, and via agreement #837 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, a road use obligation of $4,149.04, road maintenance to be performed by the Purchaser or BLM, and payment of a surface replacement fee of $87.49. 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 payment of a surface replacement fee of $1,510.05. Among other conditions, agreement M-2000E with Indian Hill, LLC requires completion of a license agreement between the Purchaser and Indian Hill, LLC, road maintenance to be performed by the Purchaser or BLM, and payment of a surface replacement fee of $9.60. Among other conditions, agreement M-2000F with Plum Creek Timberlands, LP requires completion of a license agreement between the Purchaser and Plum Creek Timberlands, LP, road maintenance to be performed by the Purchaser or BLM, and payment of a surface replacement fee of $348.19. Among other conditions, agreement #837 with the Forest Service requires completion of a license agreement between the Purchaser and the Forest Service for the use and maintenance of the FS3015 (35-3E-29.00A) road.

ROAD MAINTENANCE – The Purchaser will be required to maintain all the temp routes and existing decommissioned roads he constructs/reconstructs plus 5.82 miles of existing BLM and private roads. The BLM will maintain the approximately 22.27 miles of existing BLM and private roads.

ROAD CONSTRUCTION – The contract will require the Purchaser to construct 20.34 stations of temporary roads and reconstruct 39.60 stations of previously decommissioned 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 nine (9) feet in track width, as measured from the outer edges of standard width shoes, equipped with both an integral arch and winch capable of lining logs at least seventy five (75) feet.

2. A skyline yarder capable of :
    a. One end suspension of logs during in-haul equipped with a carriage capable of lateral yarding a minimum distance of 75 feet while maintaining a fixed position along the skyline during in-haul.

3. A 200 flywheel horsepower tractor with mounted rippers having shanks and teeth consistent with drawings and specifications shown on Exhibit R of this contract, which is attached hereto and made a part hereof.

SLASH DISPOSAL - Slash disposal will consist of 190 acres of lop and scatter, and 50 acres of hand pile and burn.

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 Medford 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.

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

OTHER –

1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
2. Mechanized equipment (feller-bunchers) may be used in all tractor units off designated skid trails with certain restrictions see Section 42 L-7MC.
3. There is a 44 foot log length restriction for all trees over twenty one (21) inch D.B.H.O.B.
4. Various seasonal restrictions are placed on this sale.
   Directional falling is required.
5. Cleaning of equipment to eliminate noxious weed seeds is required prior to move-in of equipment onto federal lands.
6. Designated skid roads are required on all tractor units.
7. Ripping of temporary roads is required.
8. Dust abatement is required.
9. Purchaser should be aware that logging residue reduction costs listed under SD-5 are in addition to costs assessed under SD-4. Refer to the appraisal for total assessed costs of logging residue reduction.
10. No ripping across the Medford Aqueduct in unit 7-3.
11. Directional falling away from the Medford Aqueduct in unit 7-3 is required.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA – From the town of Butte Falls Oregon, proceed west on the Butte Falls Highway (821) approximately ¼ mile to the Hukill Creek road junction (35-2E-10) to access the units in Section 15. From the town of Butte Falls, proceed east on the Butte Falls-Fish Lake Highway (821) for approximately 2.5 miles to the Double Day road junction (35S-2E-13). Turn right to access units in sections 13, 23, and 25. To access units in sections 19 and 31, continue east after the Double Day road junction on the Butte Falls-Fish Lake Highway (821) approximately 2.5 miles to the Bowen Creek road junction (35S-2E-29). To access units in section 35S-3E-7 head east from Butte Falls on the Butte Falls-Fish Lake Highway for approximately 0.5 miles to the Butte Falls-Prospect Highway. Turn left and follow for approximately 2 miles to the junction of the Butte Falls/Prospect Hwy and Rancheria Rd (CTY 999 RD). Proceed right on Rancheria for approximately 1 mile and turn right onto the 35-3E-7.1 road.

ENVIRONMENTAL ASSESSMENT - An environmental assessment (DOI-BLM-OR-M050-2014-0001-EA) was prepared for this sale, and a Finding of No Significant Impact has been documented. This document is available for inspection as background for this sale at the Medford District Office.

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 thirty five thousand seven hundred (35,700) trees marked with orange/red paint in units 7-1, 7-2, 7-3, 13-3, 13-4, 13-5, 13-7, 15-1, 15-2, 15-2a, 15-3, 19-1, 19-2, 19-3, 19-4, 19-5, 19-6, 23-1, 25-1, 25-2, 25-3, 25-4, 25-4A, 25-5, 25-6, 25-7, 25-8, 25-9, 25-10, 25-11, 31-1, 31-2, 31-3, 31-4, 31-5, 31-6, 31-7, 31-8 as shown on exhibit A.

(C) IR-2 All timber except approximately seven hundred forty six (746) trees marked for cutting heretofore by the Government with blue paint above and below stump height in units 13-1 and 13-2 as shown on Exhibit A.

(D) 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.

(E) IR-6 All hardwood and Yew trees in all units as shown on Exhibit A.

(F) IR-6 All non-hazardous snags in all units as shown on Exhibit A. Any felled hazard snags must remain where felled of as directed by the Authorized Officer.

(G) IR-6 All pre-existing dead and down wood in all units as shown on Exhibit A.

(H) IR-8 All standing timber except trees located within painted and posted road or landing right-of-way clearing limit boundaries as shown on Exhibit A.

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(n).

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

(a) Date of last export sale.

(b) Volume of timber contained in last export sale.

(c) Volume of timber exported in the past twelve (12) months from the date of last export sale.

(d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.

(e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.

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

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

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

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

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

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

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

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

(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-3 In Unit 19-6 as shown on Exhibit A, all trees designated for cutting within 100 feet of the centerline of Butte Falls-Fish Lake Highway (HWY 821) shall be cut so that the resulting stumps shall not be higher than six (6) inches measured from the ground on the uphill side of the tree with the angle of the cut facing away from the road.

(3) L-6 In all tractor 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 yarded to approved landing locations either whole tree, or as log segments. If excessive stand damage occurs from whole tree yarding as determined by the authorized officer, bucking and/or limbing will be required.

(4) L-6 In all tractor units as shown on Exhibit A, all trees over twenty one (21) inch D.B.H.O.B. designated for cutting shall be felled and cut into log lengths not to exceed forty-four (44) feet and be completely limbed prior to being yarded

(5) L-6 In all skyline units as shown on Exhibit A, all trees designated for cutting shall be felled and cut into log lengths not to exceed forty-four (44) feet and be completely limbed prior to being yarded.

(6) L-7MC 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
Tractor Units 7-1, 7-2, 7-3, 13-1, 13-2, 13-3, 13-4, 13-5, 13-7, 15-1, 15-2a, 15-3, 19-1, 19-2, 19-3, 19-	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. Yarding tractors will be equipped with integral arches and winch systems capable of lining logs at least seventy five (75) feet.

4, 19-5, 19-6, 23-1, 25-1, 25-2, 25-4A, 25-5, 25-7, 25-8, 25-9, 25-10, 25-11, 31-1, 31-2, 31-3, 31-4, 31-5, 31-6, 31-7, 31-8	Mechanized equipment (feller-bunchers) may be used off designated skid trails during the dry season (soil moisture content less than fifteen (15) percent) for one (1) to two (2) passes only (one round-trip). These one (1) to two (2) pass trails must be spaced a minimum of fifty (50) feet apart off of designated skid trails. Equipment must be eight (8) psi or less. All other use of ground based equipment must be restricted to designated skid trails. Mechanized equipment capable of creating and walking on slash (cut-to-length system) may be used off designated skid trails with at least eight (8) inches of slash during the dry season (soil moisture content less than twenty five (25) percent) for one (1) to two (2) passes only (one round-trip). These one (1) to two (2) pass trails must be spaced a minimum of fifty (50) feet apart off of designated skid trails. Equipment must be eight (8) psi or less. All other use of ground based equipment must be restricted to designated skid trails. Mechanized felling equipment must have an arm capable of reaching at least twenty (20) feet. No front-end loaders are permitted. No yarding up or down draw bottoms is permitted Designate skid trails at an average of one hundred and fifty (150) foot spacing in order to minimize ground disturbance. The location of the tractor skid roads must be clearly designated on the ground, at locations approved by the Authorized Officer. Use existing skid trails to the extent possible. Where new skid trails are necessary, limit the extent to minimize the impact. No tractor yarding is permitted when soil moisture content at six (6) inch depth exceeds twenty five (25) percent by weight as determined by the oven dry method. Yarding will be further limited in accordance with Section 26 if detrimental soil damage is occurring, as determined by the authorized officer. Ground-based equipment operations may be executed in winter conditions when snow depth is at least eighteen (18) inches or if snow is present and soil moistures are below twenty five (25) percent if approved by the Authorized Officer. No logging would be allowed once the snow depth deteriorates below eighteen (18) inches and soil moistures exceed twenty five (25) percent as determined by the authorized officer.

	Where skid trails encounter course woody debris (CWD) sixteen (16) inches and larger at the small end, a section of the CWD is to be bucked out for equipment access. The bucked out portion shall be as narrow as operationally feasible, (maximum of fourteen (14) feet). The remainder of the CWD shall be left in place and not disturbed. Restrict tractor operations to slopes generally less than thirty five (35) percent. In areas where it is necessary to exceed these gradients to access adjacent tractor area, use ridge tops where possible. Restrict ripping operations across the Medford Aqueduct line in unit 7-3. No mechanized equipment is allowed in riparian areas; all logs felled for riparian thinning purposes within riparian reserves will be cable winched to adjacent matrix land or existing roads. Trees felled for safety or operational reasons would be left in place. Log landing size shall not exceed one-half (1/2) acre. Approximately three (3) acres of unit 25-7 contains slopes greater than thirty five (35) percent. Machinery in this portion of the unit would stay on pre-designated skid trails located by the BLM with white and red flagging as shown on Exhibit A. A one-way skidding pattern will be established traveling downhill on the steepest portion of the designated skid trails. Operations would be stopped if soil rutting or excessive erosion occurs. Water bars should be spaced no greater than fifty (50) feet. Cover the skid trail with slash and down woody debris the same season of use. Block the skid trail with an earthen barrier, boulders, or large woody debris.
<u>Skyline Yarding Units</u> 15-2, 25-3, 25-4, 25-6	Yarding will be done with a cable yarding system which will suspend one end of the log clear of the ground during inhaul on the yarding corridor. A carriage is required which will maintain a fixed position on the skyline during lateral yarding and has a minimum lateral yarding capability of seventy-five (75) feet. Prior to falling any timber in the unit, all tail/lift trees and/or intermediate support trees shall be identified by the purchase and approved by the authorized officer.

	Existing cable corridors shall be used whenever possible. Corridors shall be spaced approximately one hundred fifty (150) feet apart, measured at the tailholds. The width of the skyline corridors shall be as narrow as operationally feasible (maximum of fifteen [15] feet). Yarding corridors will be perpendicular to the contours. No downhill yarding is allowed

(8) L-9 No yarding or loading is permitted in or through plant sites, mollusk sites, or protected areas shown on Exhibit A.

(9) L-11 No new temporary spur roads or landings shall be located within riparian reserves or wet areas as shown on Exhibit A with the exception of unit 23-1 where a short temporary route and landing would be constructed off of existing road 35-2E-23.3. The existing road where the temporary route construction would occur is near the outer edge of a two site potential tree riparian reserve.

(10) L-18 No tractor yarding operations shall be conducted between October 15 of one calendar year and May 15 of the following calendar year both days inclusive unless soil moisture is less than 25 percent when sampled at a 6 inch depth as determined by Authorized Officer.

(11) L-18 Restrict soil ripping operations from October 15 of one calendar year and May 15 of the following calendar year both days inclusive unless soil moisture is less than 25 percent when sampled at a 6 inch depth as determined by Authorized Officer.

(12) L-18 Restrict all timber hauling, rock hauling, and landing operations, on all rocked roads whenever soil moisture conditions or rain events could result in road damage or the transport of sediment to nearby stream channels (generally October 15 of one calendar year to May 15 of the following calendar year, both days inclusive). If the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions or rain events, the Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause unacceptable impacts to roads or stream water quality, as determined by the Authorized Officer, the waiver will be revoked.

(13) L-18 Restrict all timber hauling, rock hauling, and landing operations, on all natural surfaced roads whenever soil moisture conditions or rain events could

result in road damage or the transport of sediment to nearby stream channels (generally October 15 of one calendar year to May 15 of the following calendar year, both days inclusive).

(14) L-18 No road construction, landing construction, road re-construction or renovation, culvert removal culvert replacement, road decommissioning, or road closure work, shall be conducted within the contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive.

(15) L-18 No quarry work, and/or rock crushing operations whenever soil moisture conditions or rainstorms could cause the transport of sediment resulting from quarry operations to nearby streams (generally October 15 to May 15).

(16) L-18a No operations shall be conducted in units 13-4 and13-5 between March 1 and September 30, both days inclusive. This restriction will not apply if it can be shown from spotted owl surveys conducted in accordance with accepted standards that spotted owl nesting and/or fledgling activities are not occurring during the year of harvest.

(17) L-18a No heavy equipment operations or roadside brushing shall be conducted in units 13-4 and 13-5 within 200 feet of known northern spotted owl nests between March 1 and June 30, both days inclusive. This restriction will not apply if it can be shown from spotted owl surveys conducted in accordance with accepted standards that spotted owl nesting and/or fledgling activities are not occurring during the year of harvest.

(18) L-18a No prescribed burning shall be conducted in units 13-4 and 13-5 between March 1 and July 15, both days inclusive. This restriction will not apply if it can be shown from spotted owl surveys conducted in accordance with accepted standards that spotted owl nesting and/or fledgling activities are not occurring during the year of harvest.

(19) L-18a No operations within units 25-2, 25-7, and 25-8 shall be conducted between March 1 and July 15, both days inclusive. This restriction will not apply if it can be shown from Great Gray Owl surveys conducted in accordance with accepted standards that Great Gray Owl and/or fledging activities are not occurring during the year of harvest.

(20) L-20 During logging operations, the purchaser shall keep Butte Falls-Fish Lake Highway (HWY 821), where it passes through the contract area, clear of trees, rock, dirt, and other debris (so far as practicable) to allow for vehicle traffic. These roads shall not be blocked for more than twenty (20) minutes. In addition, to these requirements, these roads shall have warning signs displayed a minimum of 300 feet in advance of the logging operation along all roads which pass through the logging operation. Warning Signs must be worded to describe the hazard,

type of operation, or action to be taken which will alert oncoming traffic to the logging operation and/or dangers ahead. Warning sign size, color, and shape must comply with OR-OSHA applicable rules and guidelines.

(21) L-24 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 developed by this provision.

(22) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) feet of the unit boundary shall be felled away from the unit boundary. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).

(23) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) 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).

(24) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) 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).

(25) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) feet of any plant site, reserve area, or protected 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).

(26) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) feet of the Butte Falls-Fish Lake Highway (HWY 821), as shown on Exhibit A shall be felled away from the road. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).

(27) L-27 In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred ninety (190) feet of the Medford Aqueduct must be

fell away from the Medford Aqueduct. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).

(28) L-29 In skyline units 15-2, 25-3, 25-4 and 25-6 as shown on Exhibit A, the Purchaser shall make cable yarding road changes by completely spooling the cables and restringing the layout from the head spar to the new tail hold to protect advance reproduction and/or reserve trees and snags present on these areas.

(29) L-33 In accordance with the requirements of Sec. 8 of the contract it has been determined that it is in the best interest of the Government and within the provisions of 43 CFR 5402.0-6 to sell additional timber located in or adjacent to all units as shown on Exhibit A, which is obstructing needed cable yarding roads, ground based yarding skid roads, hazardous to workers, needed for guyline, tailhold, and/or tieback trees, or severely damaged from the normal conduct of felling or yarding operations to meet all applicable State safety laws, codes or regulations. This timber must be cut or removed so that the Purchaser can continue active falling and yarding operations. The Purchaser is, therefore, authorized to cut and remove such additional timber in accordance with the provisions of Section 8 of the contract: provided, however, that:

(a) Trees reserved for the tree improvement program and trees reserved for the wildlife habitat objectives under Sec. 41 of the contract are not included in the authorization.

(b) The Purchaser shall identify each tree sold and cut in accordance with the provision by marking the cut surface of the stump immediately after falling with a large "X". The "X" shall be cut with a chain saw. The stump shall be marked by hanging red fluorescent flagging near the stump so that the stump can be visually located from a distance of not less than one hundred (100) feet.

(c) The volume and price for such timber shall be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and paid for by the Purchaser in accordance with Sec. 3(a) or 3(c) of the contract as required by Sec. 8 of the contract.

(d) No timber may be cut or removed under the terms of this provision if all contract payments required by Sec. 3(a) or 3(c) of the contract have been made.

(e) The permission to cut and remove additional timber contained in this provision may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser:

1. Failed to properly mark any stump with the "X" cut.
2. Failed to identify the location of any stump.

3. Cut any tree that was reserved for tree improvement and/or wildlife habitat.
4. Cut any tree in or adjacent to cable yarding corridors that was not necessary to facilitate cable yarding.
5. Cut any reserve tree in or adjacent to tractor skid roads that was not necessary to facilitate ground based yarding.
6. Failed to properly segregate any pulled over tree that was yarded to the landing.
7. Cut any reserve tree that was not severely (as defined during the prework conference and documented in the approved logging plan) damaged from felling and yarding operations.
8. Cut more than the minimum number of trees necessary to properly serve as guyline anchor stumps.
9. Cut or topped more than the minimum number of trees necessary to properly serve as tailhold trees.
10. Cut more than the minimum number of trees necessary to properly serve as tie-backs for topped tailhold trees.
11. Failed to maintain accurate and current (no more than 24 hours old) documentation of cut and removed timber.

If the permission to cut and remove additional timber provision is withdrawn, the Authorized Officer shall deliver to the Purchaser a written notice that additional sale of timber under this special provision is no longer approved.

If the permission to cut and remove additional timber provision is withdrawn, the Purchaser shall inform the Authorized Officer at least two working days prior to the need for cutting and yarding any guyline tree, tailhold tree, tie-back tree, danger tree, corridor tree, pulled over tree, and severely damaged tree. All sales of additional timber shall comply with Section 8 of the contract.

The Contracting Officer may order the Purchaser, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the Government to safely measure and mark additional timber.

All cable-yarding and ground based equipment skid roads upon which timber may be cut and removed in accordance with this special provision must be needed for the removal of timber sold under this contact and shall be limited to the narrowest width necessary for the yarding of logs with minimum damage to reserved trees.
The Purchaser shall be liable for damages in accordance with Sec. 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

The Purchaser shall be liable for damages in accordance with Sec. 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

(C) Road Construction - Maintenance – Use

(1) RC-1a The Purchaser shall construct, improve and/or renovate all roads and other structures in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof.

(2) RC-1b Prior to removal of any timber, except right-of-way timber from temporary route construction or landing construction, the Purchaser shall complete all construction, improvement, or renovation of structures and roads as specified in Exhibit C.

(3) RC-1f Upon completion of logging activities, the Purchaser shall scarify the entire roadway of all temporary routes and system roads to be decommissioned identified in Exhibit C-3 in strips of not less than twenty-four (24) inches or more than twenty-eight (28) inches in width to a minimum depth of twelve (12) inches, provided that no scarification shall be required where the road traverses rock outcroppings. All natural water courses shall be opened to prevent erosion of the roadways. Barriers shall be constructed so as to prevent further use of the road by vehicles.

(4) RC-2 The Purchaser is authorized to use the roads listed below and shown on Exhibit C-2 which are under the jurisdiction of the Bureau of Land Management, Juniper Properties, LLC, Silver Butte Timber Company, or the Forest Service, 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(C)(7). Any road listed below and requiring improvement or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the improvement or renovation from the Authorized Officer. The Purchaser shall pay current Bureau of Land Management maintenance fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
35-2E-13.00 A	1.52	BLM	ASC
35-2E-13.00 B	0.14	Juniper Properties	ASC
35-2E-13.00 C	2.09	Juniper Properties	ASC
35-2E-13.00 D	0.74	BLM	ASC
35-2E-13.02 A-B	0.68	BLM	ASC
35-2E-13.03 A	0.29	BLM	ASC

35-2E-13.03 B	0.10	BLM	NAT
35-2E-13.06	0.25	BLM	ASC
35-2E-13.08	0.12	BLM	ASC
35-2E-13.09	0.31	BLM	ASC
35-2E-24.00 A	1.04	Juniper Properties	ASC
35-2E-24.00 B	1.04	BLM	ASC
35-2E-24.01 A	1.40	Juniper Properties	ASC
35-2E-25.00	1.44	BLM	ASC
35-2E-25.01 A	0.25	BLM	ASC
35-2E-25.01 B	0.35	BLM	NAT
35-3E-29.00 A	0.59	Forest Service	ASC
35-3E-29.00 B	1.02	BLM	ASC
35-3E-29.00 C	0.13	BLM	ASC
35-3E-29.00 D1	0.98	BLM	ASC
35-3E-29.00 D2	0.72	BLM	ASC
35-3E-29.00 D3	0.46	BLM	ASC
35-3E-29.01	1.83	BLM	ASC
35-3E-31.00 A	0.33	BLM	PRR
35-3E-31.00 B	0.61	Silver Butte	ASC
35-3E-31.00 C	0.83	Silver Butte	ASC
35-3E-31.01	0.22	BLM	ASC
35-3E-31.03	1.47	BLM	ASC
35-3E-31.04	0.97	BLM	ASC
35-3E-31.06	0.35	BLM	ASC

(5) RC-2a The Purchaser is authorized to use the roads listed below and shown on Exhibit C-2 which are under the jurisdiction of the Bureau of Land Management, Plum Creek Timberlands LP, Indian Hill LLC, and Juniper Properties LLC, 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(C)(11) and pay the required rockwear obligation described in Section 42(C)(10). The Purchaser shall pay current Bureau of Land Management 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
35-2E-10.00 A	0.21	Plum Creek	ASC
35-2E-10.00 B	0.59	Plum Creek	ASC
35-2E-10.00 C	0.33	Juniper Properties	ASC
35-2E-10.01 A	0.50	Juniper Properties	ASC
35-2E-11.01	0.28	Indian Hill	PRR
35-2E-13.04	0.09	BLM	ASC
35-2E-13.05	0.21	BLM	NAT
35-2E-15.00	1.03	BLM	PRR
35-2E-15.01	0.27	BLM	PRR
35-2E-23.03	0.34	BLM	NAT
35-3E-19.00	0.26	BLM	ASC
35-3E-7.01 A1	0.50	Plum Creek	PRR
35-3E-7.01 A2	0.62	BLM	PRR
35-3E-7.02	0.35	BLM	NAT
35-3E-7.03	0.05	BLM	NAT
35-3E-31.07	0.16	BLM	NAT

(6) RC-2b With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users on roads included in Section 42(C)(5) 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.

(7) RC-2c The Purchaser shall pay the Government a road maintenance obligation in the amount of **twenty three thousand sixty one and 29/100 dollars ($23,061.29)** for the transportation of timber included in the contract price and for the transportation of any mineral material required under the terms of the contract over road or roads listed in Section 42(C)(4).

The above road maintenance amount is for use of 22.27 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 of not less than five hundred and no/100 dollars ($500.00); payable in the same manner as and together with payments required in Sec. 3 of this contract.

(8) RC-2d The Purchaser shall be authorized to use other roads not included in Section 42(C)(4) and/or Section 42(C)(5); provided, that in the use of such road(s), the Purchaser shall pay the Government current Bureau of Land Management road maintenance and/or rockwear fees for the particular surface type of the road(s) used.

For administrative purposes the total maintenance and rockwear obligation due shall be based upon the estimated volume set forth in Exhibit B of this contract and mileage of roads used as determined by the Authorized Officer.

In the event logs are hauled over more than one route, the estimated volume set forth in Exhibit B shall be proportioned on the basis of actual volume removed. Prior to the use of such roads, the Purchaser shall give written notice to the Authorized Officer of the roads intended for use in the removal of the timber purchased under this contract, together with an estimate of the volume to be hauled over such roads.

Section 42(C)(7) and Section 42(C)(10) of this contract shall be amended to include adjustments of fee obligations.

(9) RC-2f The Authorized 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 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 to be transported over road or roads listed in Section 42(C)(5). The Purchaser shall pay the total maintenance amount for said road(s) within thirty (30) days following receipt of written notice; provided, however, that if the total amount exceeds five hundred and no/100 dollars ($500.00), the Purchaser may elect to make payment in installments in the same manner as and together with payments required in Section 3 of this contract.

(10) RC-2g The Purchaser shall also pay to the Government a road maintenance obligation for rockwear in the amount of **three hundred thirty six and 29/100 dollars ($336.29)** for the transportation of timber included in the contract price and for transportation of any mineral material required under terms of the contract over road or roads listed in Section 42(C)(5). 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 and no/100 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.

(11) RC-2h Except for road maintenance in accordance with Section 42(C)(12), (C)(13), (C)(14), (C)(15), and (C)(16), the Purchaser shall perform any required road repair and maintenance work on roads used by him, under the terms of Exhibit D, "Road Maintenance Specifications," of this contract, which is attached hereto and made a part hereof.

(12) RC-3 In the use of road No.s 35-3E-31.00B and 35-3E-31.00C, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000C dated between the United States of America and Silver Butte Timber Company. These conditions include Payment to Silver Butte Timber Company, a road use obligation of **four thousand one hundred forty nine and 04/100 dollars ($4,149.04)** and a rockwear obligation of **eighty seven and 49/100 dollars ($87.49),** payable at the time indicated in the license agreement. This document is available for inspection at the Bureau of Land Management, Medford Interagency Office, 3040 Biddle Road, Medford, Oregon 97504. 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.

(13) RC-3 In the use of road No.s 35-2E-10.00C, 35-2E-10.01A, 35-2E-13.00B, 35-2E-13.00 C, 35-2E-15.02, 35-2E-24.00A, and 35-2E-24.01A, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000D dated between the United States of America and Juniper Properties LLC. These conditions include Payment to Juniper Properties LLC, a rockwear obligation of **one thousand five hundred nine and 31/100 dollars ($1,509.31),** payable at the time indicated in the license agreement. This document is available for inspection at the Bureau of Land Management, Medford Interagency Office, 3040 Biddle Road, Medford, Oregon 97504. 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.

(14) RC-3 In the use of road No. 35-2E-11.01, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000E dated between the United States of America and Indian Hill LLC. These conditions include Payment to Indian Hill LLC, a rockwear obligation of **nine and 60/100 dollars ($9.60),** payable at the time indicated in the license agreement. This document is available for inspection at the Bureau of Land Management, Medford Interagency Office, 3040 Biddle Road, Medford, Oregon 97504. 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.

(15) RC-3 In the use of road No.s 35-2E-10.00A, 35-2E-10.00B, and 35-3E-7.01A1, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000F dated between the United States of America and Plum Creek Timberlands LP. These conditions include Payment to Plum Creek Timberlands LP, a rockwear obligation of **three hundred forty eight and 19/100 dollars ($348.19),** payable at the time indicated in the license agreement. This document is available for inspection at the Bureau of Land Management, Medford Interagency Office, 3040 Biddle Road, Medford, Oregon 97504. 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.

(16) RC-3a In the use of road No. FS3015 (35-3E-29.00A), the Purchaser shall comply with the conditions of the Bureau of Land Management and Forest Service Interagency Right-of-Way and Road Use Agreement dated May 20, l980, Exhibit A, Agreement No. 837.

(17) RC-3d The Purchaser agrees that if they elect to use any other private road which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, the Purchaser shall 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.

(18) RC-4 No logging or hauling operations on the contract area shall be undertaken until the Purchaser has secured from the appropriate official of the Forest Service, permission for the use of the existing Bowen Creek Road road No. FS3015 (35-3E-29.00A) as shown on Exhibit C-2.

(19) RC-7 Prior to cutting or removing any timber from the landing construction at the end of the 35-2E-15.02 road, the Purchaser shall pay to Juniper Properties, 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 Government's contract as set forth in Exhibit B.

Species	Estimated Volume – M bd. ft.	Price per Unit	Estimated Volume Times Unit Price
Douglas Fir	0.80		
Incense Cedar	0.20		
Total	1.00		

(20) RC-7 Prior to cutting or removing any timber from the designated skid trails and landing construction off of the 35-3E-31.00 C road, the Purchaser shall pay to Silver Butte Timber Company, 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 Government's contract as set forth in Exhibit B.

Species	Estimated Volume – M bd. ft.	Price per Unit	Estimated Volume Times Unit Price
Douglas Fir	0.20		
White Fir	0.20		
Incense Cedar	0.10		
Total	0.50		

(21) RC-8 The Purchaser shall be required to secure written approval to use vehicles or haul equipment over Government owned or controlled roads and/or structures when that vehicle or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

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 (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.

(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).

(2) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not store, or cause to have stored, any fuel or other petroleum products inside any riparian reserve area. All petroleum products shall be stored in durable containers and located so that any accidental release will be contained and not drain into any stream system. Refueling of equipment shall be done outside of riparian reserve areas and the purchaser shall store fuel outside the Ginger Springs Municipal Watershed during nonworking hours.

(3) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall furnish and require use of approved chemical toilets by all persons engaged in road construction, timber falling, and/or timber yarding, loading, and hauling under this contract while within the boundaries of the Ginger Springs Recharge Area in units 25-1, 25-2, 25-6, 25-7, and 25-8. Such facilities shall be furnished in quantities and at locations agreed to by the Purchaser and Authorized Officer.

(4) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall only be allowed to use logging, construction, rock crushing, brushing chipping, shredding or grinding and/or transportation equipment that is free of noxious weed seeds prior to entering federal lands in the contract area as shown on Exhibit A.

If equipment is not considered free of noxious weed seeds by the Government, it shall be cleaned prior to entering federal lands. Cleaning shall be defined as removal from all surfaces including the under carriage any dirt, grease, plant parts, and material that may carry noxious weed seeds onto federal lands. Cleaning prior to entering federal lands may be accomplished by using a pressure hose.

Equipment shall be subject to visual inspection by the Government to certify that the equipment is free of noxious weed seeds. Only equipment inspected by the government shall be allowed to operate on federal lands within the contract area.

The purchaser shall make equipment available for government inspection at an agreed upon location off federal lands prior to any move-in of equipment.

Requirements as outlined above may be waived by the Government if move-in is from one "weed free area" to another "weed free area", as determined by the Government, or as conditions warrant.

(4) E-1 In addition to the requirement set forth in Sec. 26 of this contract and as directed by the Authorized Officer, the Purchaser shall construct skid trail barricades in all tractor units as shown on Exhibit A. Barricades shall be located where skid trails take off of system roads, temp spurs or landing areas and continue for the first one hundred (100) feet of skid trail length. Barricades shall be constructed by placing woody debris or other appropriate barriers (e.g. rocks, logs, and slash) on them to effectively inhibit access by all terrain vehicles. Barricades shall be in place by October 15 of each calendar year or when soil moisture exceeds twenty five (25) percent.

(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 shown on Exhibit A, and wherever an existing barricade has been removed to provide for harvest access. Barricades shall be in place by October 15 of each calendar year or when soil moisture exceeds twenty five (25) percent.

(6) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall;

(a) Use a minimum 200 flywheel horsepower tractor with mounted rippers having shanks and teeth consistent with drawings and specifications shown on Exhibit R of this contract, which is attached hereto and made a part hereof.

(b) Rip to a depth of eighteen (18) inches.

(c) Ripping will not occur unless soil moisture content is twenty-five (25) percent or less (at a six (6) inch depth) as determined by the oven-dry method.

(d) Rip all temporary roads (and associated landings) by October 15 of the year operations are completed as shown on Exhibit A. If hauling on a temporary spur road is not completed in the same year the road is constructed, the road will be storm-proofed and blocked by October 15 or when soil moisture exceeds twenty five (25) percent.

(e) Seed and mulch entire length of all temporary roads (and associated landings) as shown on Exhibit A. by October 15 of the year logging operations are completed. If hauling on a temporary spur road is not completed in the same year the road is constructed, the road will be storm-

proofed and blocked by October 15 or when soil moisture exceeds twenty five (25) percent. The Purchaser shall apply the seed at a rate of fifteen (15) lbs./acre and the straw at a rate of two thousand (2,000) lbs./acre.

(f) If skyline yarding in units 15-2, 25-3, 25-4 and 25-6 result in extended soil exposure, as determined by the authorized offer, seed and mulch the top twenty (20) feet of the skyline yarding corridors by October 15 of the year logging operations are completed. The Purchaser shall apply the seed at a rate of fifteen (15) lbs./acre and the straw at a rate of two thousand (2,000) lbs./acre.

(g) Water-bar all skid roads, used for logging activities by October 15 or when soil moisture exceeds twenty five (25) percent in all units as shown on Exhibit A.

(h) The seed mix and straw shall be provided by the purchaser from an approved commercial source, or may be provided by the BLM if the purchaser is unable to locate and buy the certified seed and straw. The purchaser shall reimburse the government for the cost of seed and straw if provided by the government.
The Purchaser shall furnish and apply to acres designated for treatment as directed by the Authorized Officer, a mixture of grass seed and mulch material at the following rate of application:
Grass seed 20 lbs./acre
Straw mulch 1000 lbs./acre (approx. 2 inches in depth)

The Purchaser shall furnish the following species of grass seed meeting corresponding germination, purity, and weed content requirements:

	Germination	Purity	Weed Content
Species	Min. %	Min. %	Max. %
California Brome	85	95	0.2
Blue Wild Rye	85	95	0.2

The grass seed furnished shall meet the minimum requirement for Blue Tag Seed as set forth in the latest edition of Oregon Certification Standards published by Oregon State University. Seed source shall be approved by the Authorized Officer and shall be from the general region where the project occurs. Straw mulch shall be from native grass or other approved grain crops which are certified weed free, and free of mold or other objectionable materials. Straw mulch shall be in an air-dry condition and suitable for placing in a uniform manner.
The Purchaser shall mix grass seed in the following proportions:

Species	Percent of Total by Wt.	Lbs. per Acre
California Brome	50%	10

Blue Wild Rye	50%	10
TOTALS	100%	20 lbs./ac.

The Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (i.e. Oregon State University), which shall include: date of test; lot number of each kind of seed; seed source; and results of tests as to name, percentages of purity and of germination, weed species and percentage of weed content, for each kind of seed furnished and, in case of mixture, the proportions of each kind of seed. The seed must have been tested within the last year to be accepted for use on this contract. The seed and straw mulch shall be applied between August 1 and October 15. The Purchaser shall notify the Authorized Officer at least 5 days in advance of the date he intends to commence the specified soil stabilization work.

(7) 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-8, which is attached hereto and made a part hereof.

(8) E-4 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 protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Medford District Record of Decision (ROD) and Resource Management Plan (RMP), 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, or;

(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 operations 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 standards and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

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

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

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five (5) percent of the First Installment amount listed in Section 3.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, *et seq.*). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Section 3.b. of the contract within 15 days after the bill for collection is issued, subject to Section 3.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.

The 30 days can be the sum of days accruing during more than one operating season. Reappraisal may result in a decrease to the unit price bid per species. Reappraisal will be based on the loss of net volume due to the deterioration of logs during the period of delay and any associated changes in the amortization of logging costs per unit of volume, as determined by the Authorized Officer. Amortization of road construction cost over a reduced net volume will be considered as well as any additional move-in or logging costs caused by the delay, as determined by the Authorized Officer. Reappraisal will adjust Exhibit B volume and values, and will not consider changes in the market price of timber.

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 occupied marbled murrelet sites in accordance with the ROD and RMP, 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, marbled murrelet occupied site protection in accordance with the ROD and RMP, 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.

(9) E-5 The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Authorized Officer that a spotted owl has been located in the sale area. Discontinued operations may be resumed upon receipt of written instructions and authorizations by the Authorized Officer.

(10) E-6 The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting owls may not be allowed during this time period.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys in unit 13-4 and 13-5 to determine whether spotted owls are nesting within 0.25 miles of the harvest units to be logged using ground based logging systems. If it is determined that spotted owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations in writing. Without this written approval, such operations are prohibited from March 1 through September 30 of each year.

(E) Miscellaneous

(1) M-2 The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows: If the entire sale is check scaled, the purchase price of this contract shall be reduced by three thousand three hundred seventy seven and 50/100 dollars ($3,897.00) In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of three thousand three hundred seventy seven and 50/100 dollars ($3,897.00) 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. Scaling shall be conducted in accordance with the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale, by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

(2) M-4 Notwithstanding the provisions of Section 5(c), when the Purchaser elects to furnish and operate under a payment bond as provided in Section 39(d), the value of right-of-way timber included in a billing shall be based on the value of timber removed from the right-of-way.

(2) M-5 The Purchaser shall, without expense to the Government, be responsible for obtaining any necessary licenses and permits and for complying with any and all Federal, State, County, and municipal laws, codes, regulations, and administrative rules applicable to the performance of this contract. The Purchaser shall also be responsible for all damages to persons or property that arise out of any operations under this contract and result from any breach of contract or wrongful or negligent act or omission of the Purchaser, its contractors, subcontractors, or employees of any of them.

(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:

   (a) 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 State of Oregon, Department of Forestry.

   (b) Provide and maintain in good repair, on the contract area, the following equipment for use during closed fire season or periods of fire danger:

      i. F-2a Fire fighting tools shall be kept at each landing or at such other place as 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 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 not be less than four (4) tools in each box nor less than one (1) tool for each person working on the contract area. Three-fourths (¾) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

      ii. F-2b A round pointed size zero (0) or larger shovel in good condition, shall be within fifty (50) feet of any power saw when in operation.

      iii. F-2c At each landing during periods of operation one (1) tank truck. Each truck shall have three hundred (300) gallons minimum capacity with five hundred (500) feet minimum of hose and a nozzle acceptable to the Authorized Officer and a mounted or portable pump conforming to the standards set forth in Oregon Revised Statute (ORS) 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.410 as amended or be provided with suitable adapters. At the close of each working day, all bulldozers and tank trucks shall be filled with fuel and made ready for immediate use. All tank trucks and portable tanks shall be filled with water and made available for immediate use.

      iv. F-2d Serviceable radio or radio-telephone equipment able to provide prompt and reliable communication between the contract

area and Medford, Oregon. Such communication shall be available during periods of operation including the time watch-service is required.

v. F-2e A pair of headlights capable of being quickly attached to each bulldozer used on the contract area. The headlights shall be adequate to provide illumination sufficient to allow use of the bulldozers for fire fighting and construction of fire trails at night.

vi. F-2f A headlight for each person in the woods crew adequate to provide sufficient illumination for night fire fighting. A headlight shall be of the type that can be fastened to the head so as to allow independent use of the hands. It shall be equipped with a battery case so designed that it can be either carried in the hip pocket or fastened to the belt. The head of the light and the battery case shall be connected by insulated wires. At least one extra set of batteries shall be provided for each such headlight.

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

viii. F-2h A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Oregon State Forester shall be carried during the closed fire season or periods of fire danger by each saw operator 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. A size "0" or larger shovel shall be available with each gas can when refueling. 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.

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

(3) F-8 Blasting caps and fuses shall not be used during closed fire season or any period of fire danger on any land administered by the Government. Blasting with electric detonators during the closed fire season or periods of fire danger is permitted only between the hours of 4:00 a.m. and 10:00 a.m.

(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:

(a) 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.

(b) 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.

(c) 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.

(2) SD-1f 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.

(3) SD-4a SLASHING DAMAGED RESIDUALS. Slash all sprung or otherwise severely damaged trees greater than one (1) inch and less than six (6) inches D.B.H.O.B. concurrently with logging as designated by the Authorized Officer. All slashing is to be completed prior to any required piling of slash.

(4) SD-1h HANDPILE Handpile all slash as directed by the Authorized Officer in accordance with the following specifications:

(a) Piling shall be accomplished by hand. Finished piles shall be tight and free of earth.

(b) 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.

(c) 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 (⅓) 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 (½) inch in diameter and free of dirt. Piles shall be constructed by aligning individual pieces in the same 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.

(d) Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:

i. 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.

(5) SD-1i EXCAVATOR PILING Pile all slash in units as designated by the Authorized officer in accordance with the following specifications:

(a) Piling shall be accomplished with a track-mounted excavator with track shoes producing less then (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.

(b) Pile all slash, brush and downed hardwoods which are greater than one (2) inch and less than sixteen (12) 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.

(c) Prior to the commencement of piling work, all equipment shall meet the approval of the Authorized Officer.

(d) Excavators are limited to designated skid roads approved by the Authorized Officer.

(e) 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.

(f) A ten (10) foot by twenty (20) foot cover of six (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.

(6) SD-1j 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.

(a) 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. 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.

(7) SD-5 Perform logging residue reduction and site preparation work on approximately Three hundred (300) 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 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
Excavator pile and cover	$488.00	100	$48,800.00
Excavator pile Burn	$45.00	100	$4,500.00
Slash Damage	$45.00	100	$4,500.00
Lop and Scatter	$48.00	200	$9,600.00

Treatment/Level	Cost Per Acre	Number of Acres	Total Cost Per Treatment Type
Total Appraised Cost			$67,400.00

(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 Sixty seven thousand four hundred dollars ($67,400.00) 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.

(H) Quarry Development

(1) Q-1 The Purchaser shall develop a rock quarry in strict accordance with the plans and specifications shown on Exhibit C-11 which is attached hereto and made a part hereof. Exhibit C-11 contains 1 sheet.

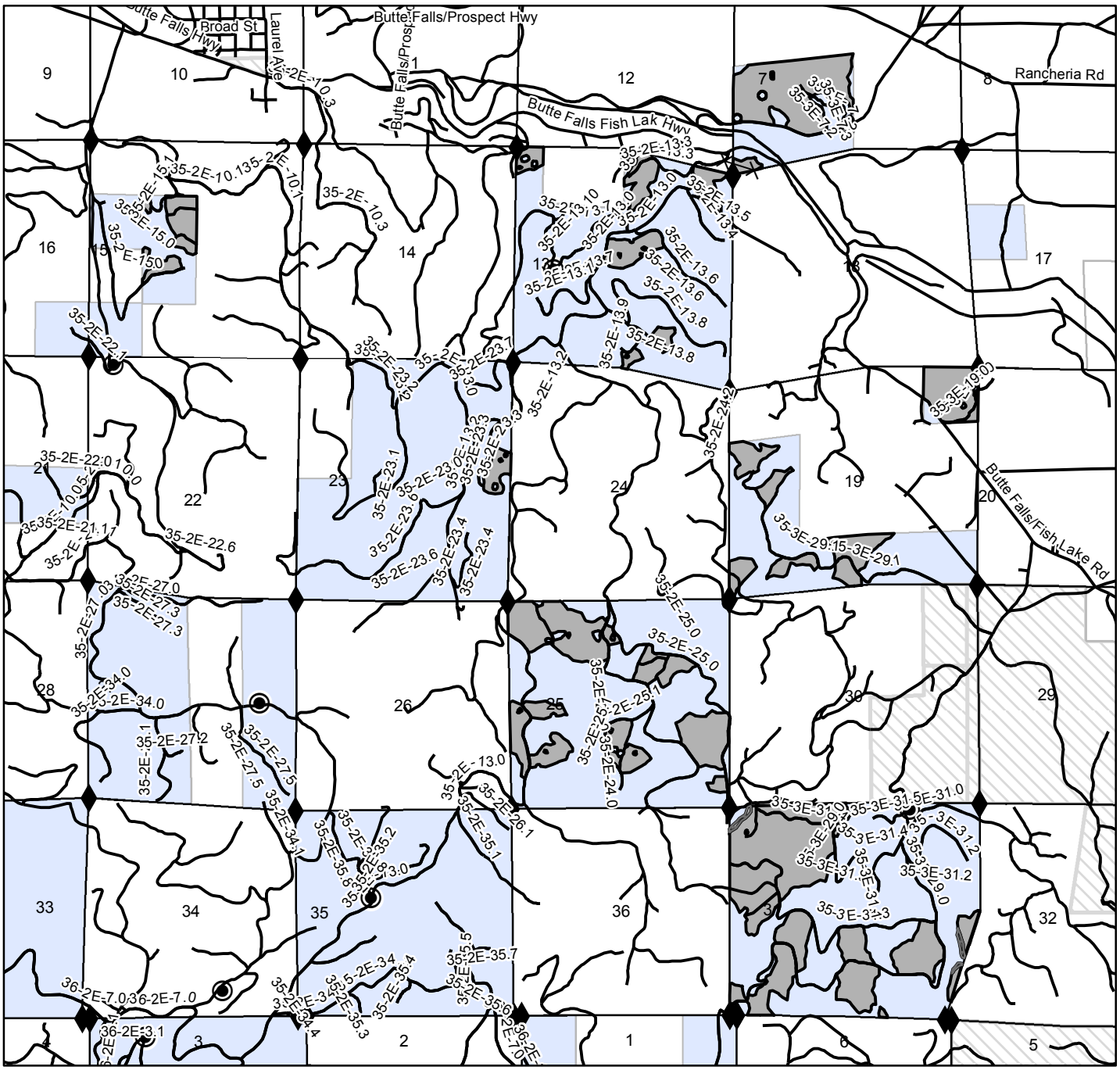
(a) Q-1b Any quarry access road construction and site preparation shown on exhibit C-11 shall be completed at each quarry location shown on Exhibit C-11 prior to removal of any rock from such area.

(I) Equal Opportunity in Employment

(1) Certification of Nonsegregated Facilities attached hereto and made a part hereof.

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 2E., SECS 13, 15, 23, 25, T. 35S. R. 3E.,
SECS 7, 19, 31 WILL. MER.

TIMBER SALE LOCATION MAP
DOUBLE BOWEN TIMBER SALE
CONTRACT NO. ORM05 -TS15-12
BUTTE FALLS RESOURCE AREA



TS UNIT
RIPARIAN THIN
Road
Medford Aqueduct
BLM
Forest Service
Private
Water Source

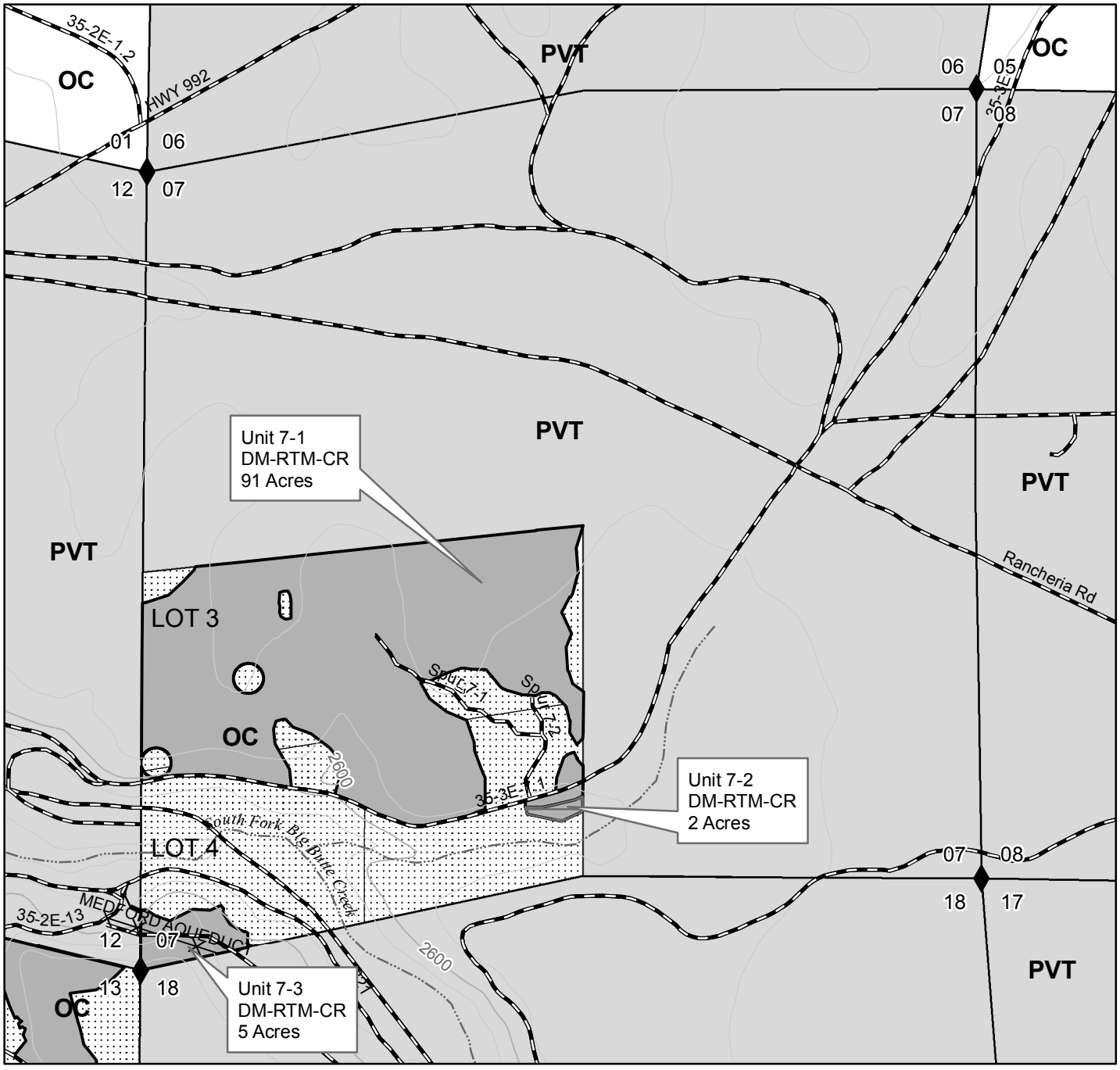
0 0.25 0.5 1
Miles

N
W E
S

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 3E., SEC 07, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

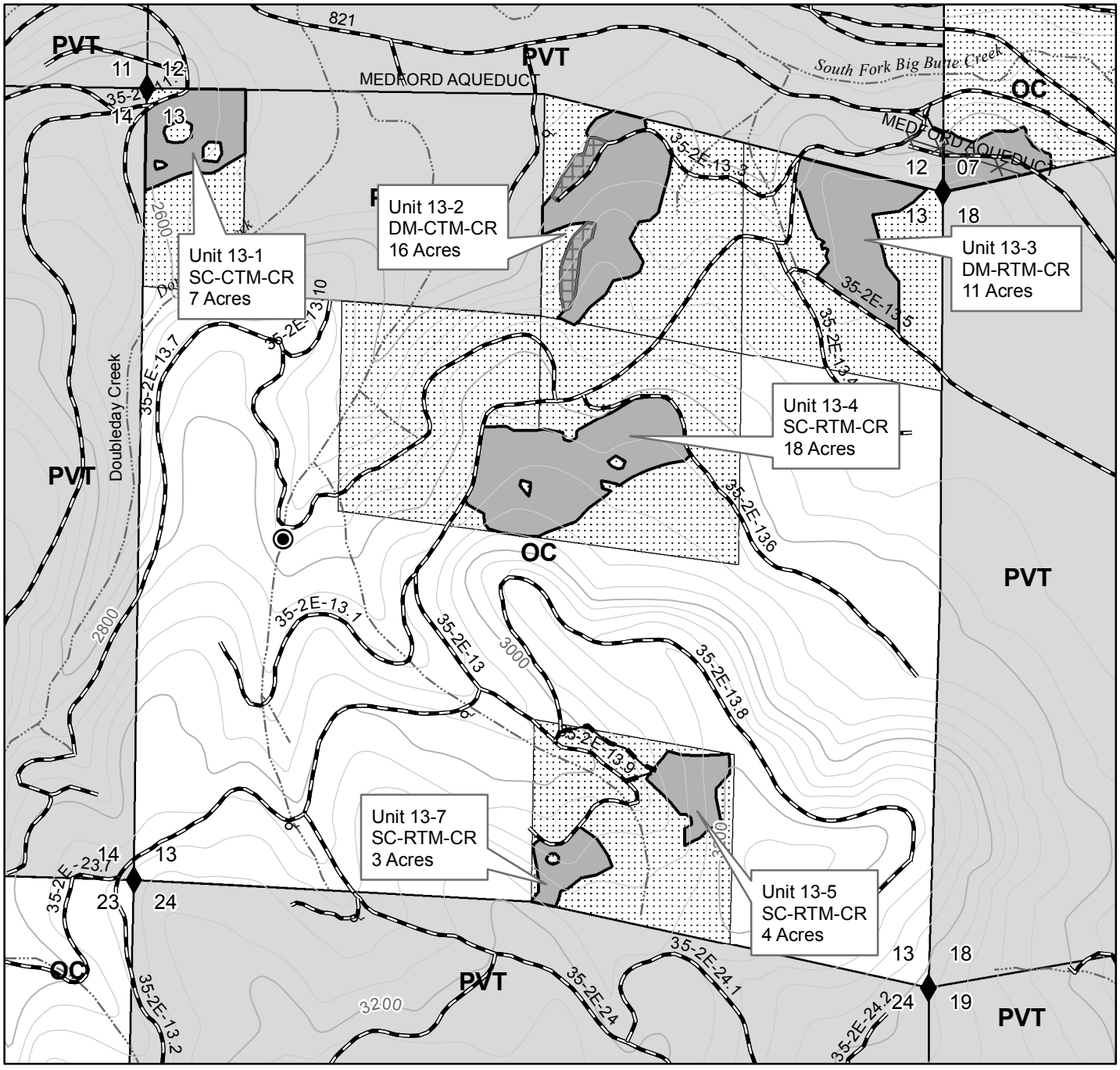
N
W E
S

0 0.25 0.5
Miles
1 inch = 1,000 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 2E., SEC 13, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

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W E
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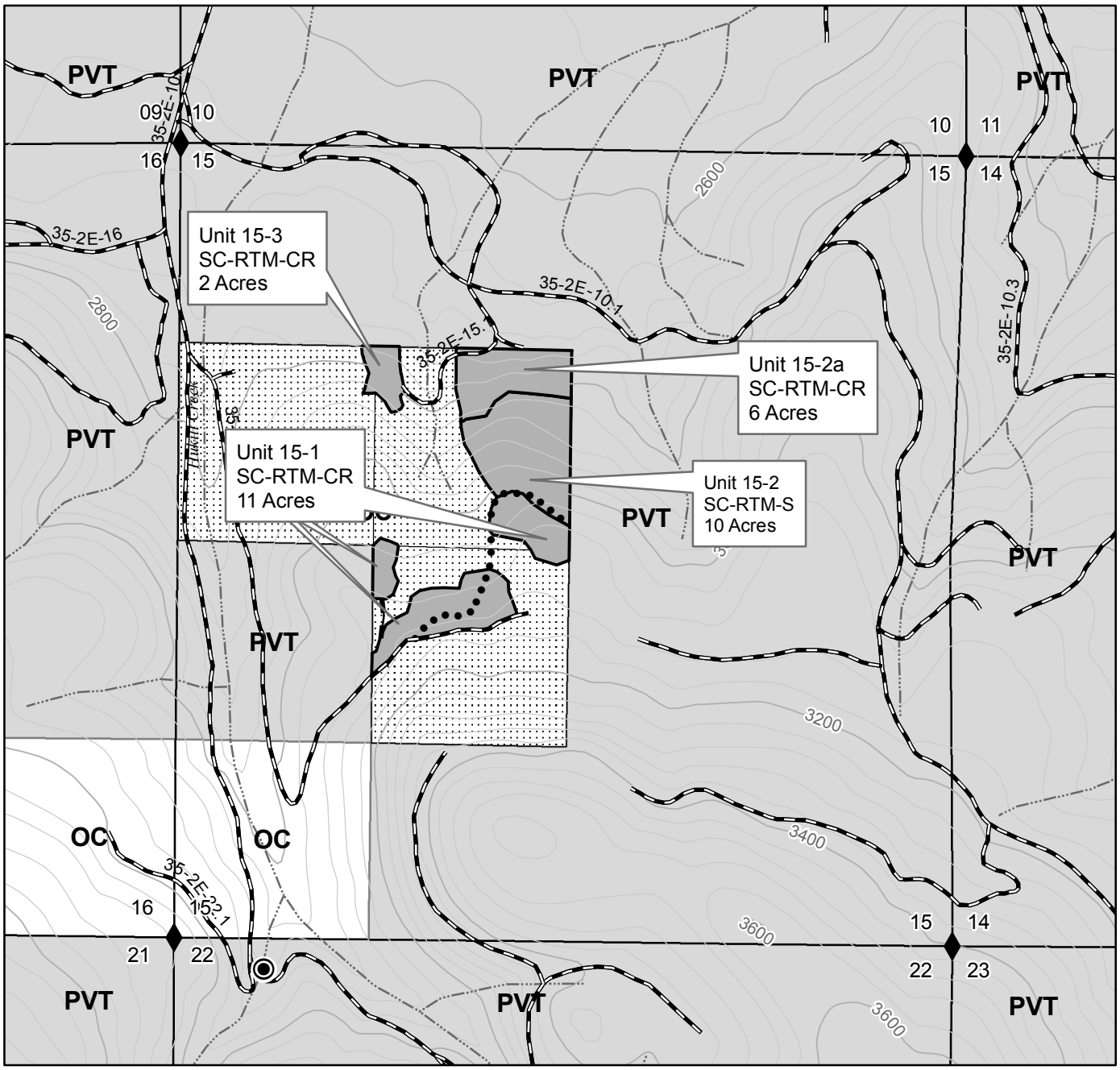
0 0.25 0.5
Miles
1 inch = 1,000 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 2E., SEC 15, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

N
W E
S

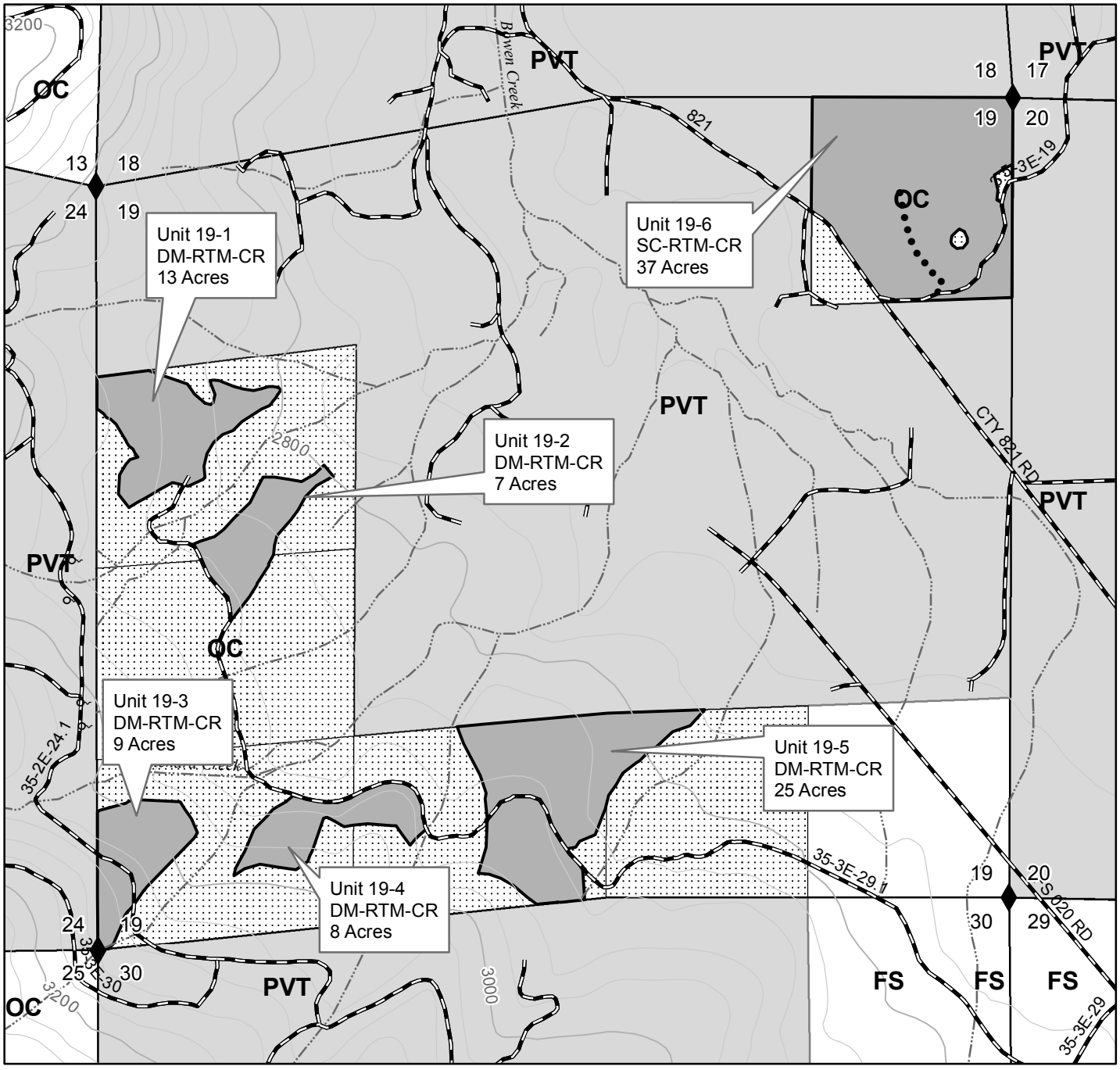
0 0.25 0.5
Miles

1 inch = 1,032.767097 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 3E., SEC 19, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

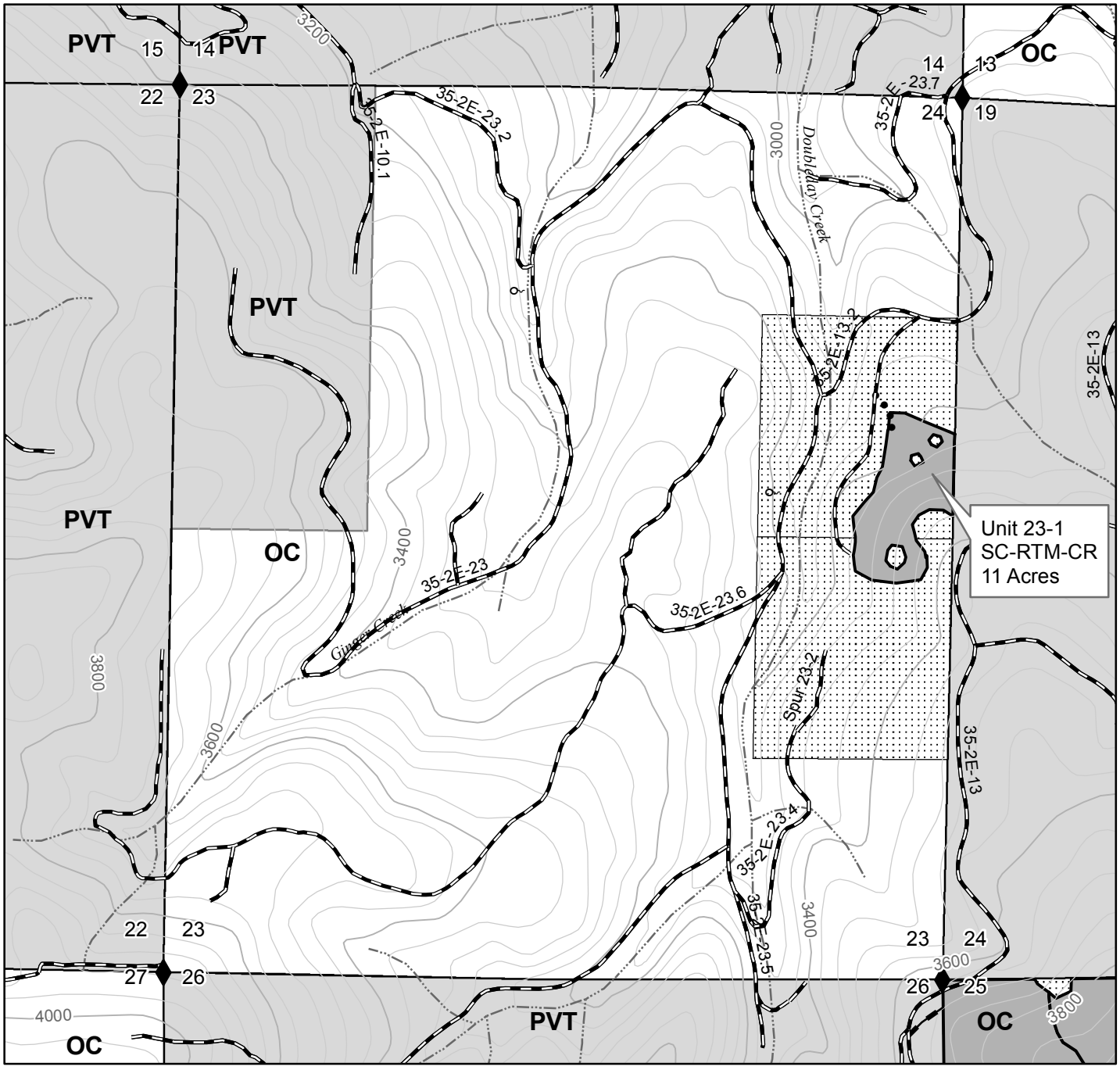
N
W E
S

0 0.25 0.5
Miles
1 inch = 1,000 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 2E., SEC 23, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

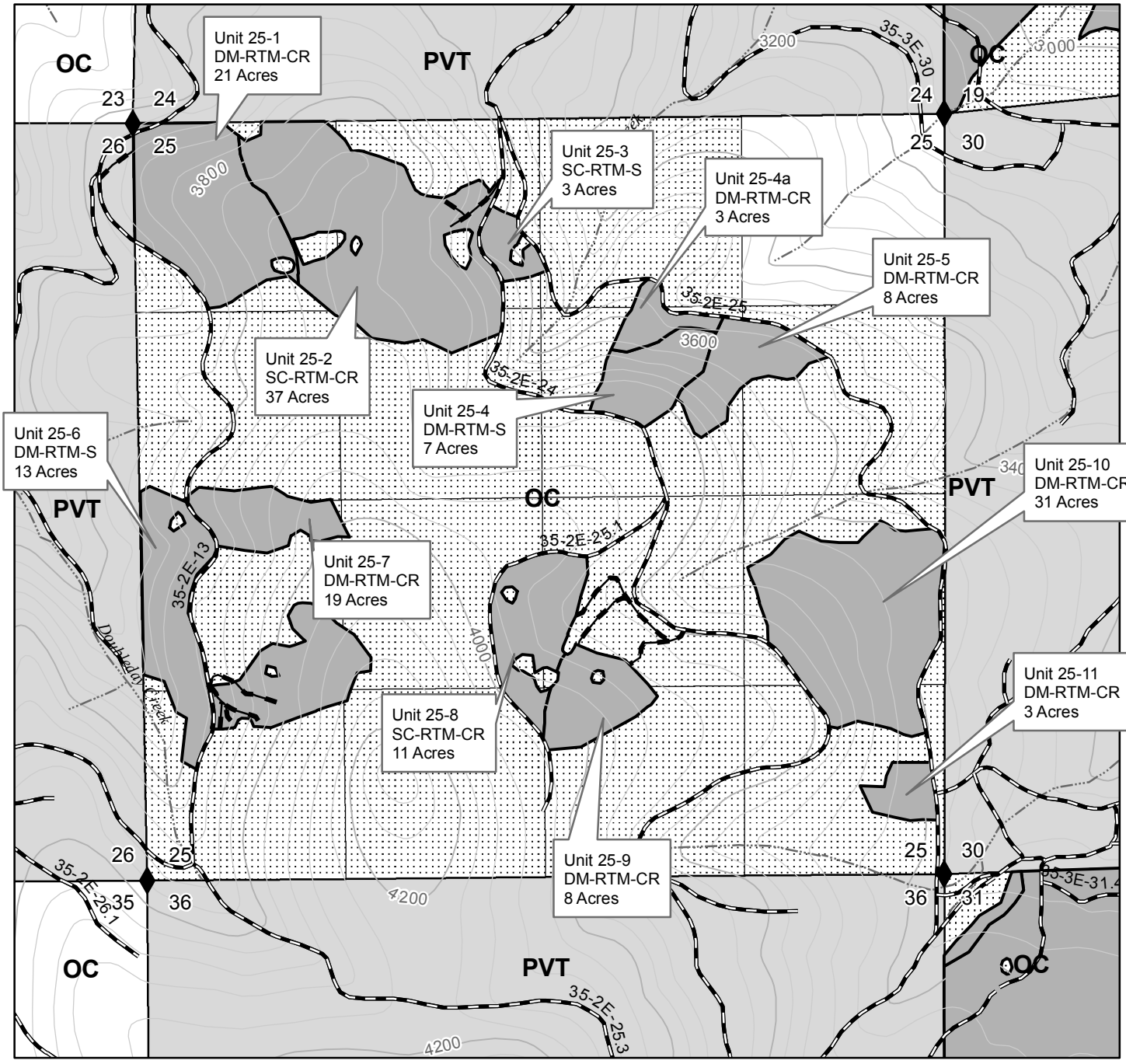
N
W E
S

0 0.25 0.5
Miles
1 inch = 1,000 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 2E., SEC 25, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

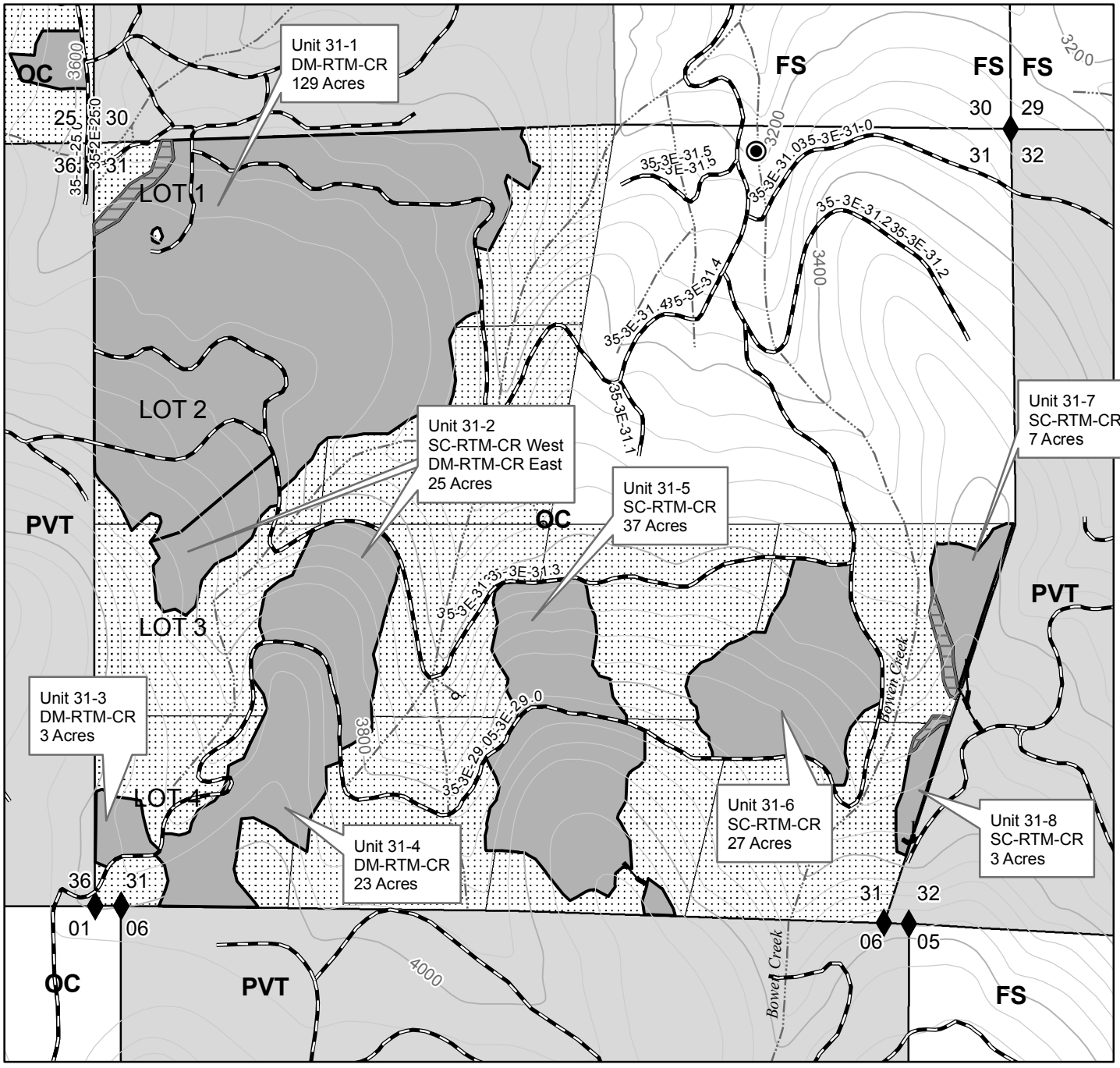
N
W E
S

0 0.25 0.5
Miles
1 inch = 998.579784 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2015.0012
T. 35S. R. 3E., SEC 31, WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15-12
EXHIBIT A



40 FOOT CONTOURS

N
W E
S

0 0.25 0.5
Miles
1 inch = 1,000 feet

Medford District BLM
July 2015

U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 15-12
T. 35S. R. 2E., SECS 13, 15, 23, 25, T. 35S. R. 3E.,
SECS 7, 19, 31 WILL. MER.
DOUBLE BOWEN TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM05 -TS15 - 12
EXHIBIT A

Legend

- Found Corner
- Water Source
- Quarry
- Log Landing
- Spring
- Gate, Existing
- Barricade, Existing
- Barricade, to be constructed
- Medford Aqueduct
- TS UNIT
- RIPARIAN THIN
- Pre-Designated Skid Road
- Road
- Temporary Spur Road
- Stream
- Bull-Line Area
- 100 ft. Index Contour
- 40 ft. Intermediate Contour
- Contract Reserve Area
- BLM Administered Land
- Non-BLM Land

DM- RTM - CR	DENSITY MANAGEMENT, RESERVE TREE MARK (ORANGE PAINT) TRACTOR LOG: UNITS: 7-1, 7-2, 7-3, 13-3, 19-1, 19-2, 19-3, 19-4, 19-5, 25-1, 25-4a, 25-5, 25-7, 25-9, 25-10, 25-11, 31-1, 31-2, 31-3, 31-4
SC - RTM - CR	SELECTION CUT, RESERVE TREE MARK (ORANGE PAINT) TRACTOR LOG: UNIT: 13-4, 13-5, 13-7, 15-1, 15-2A, 15-3, 19-6, 23-1, 25-2, 25-8, 31-2, 31-5, 31-6, 31-7, 31-8
DM - RTM - S	DENSITY MANAGEMENT, RESERVE TREE MARK (ORANGE PAINT) SKYLINE YARDING: UNIT: 25-4, 25-6
SC-RTM-S	SELECTION CUT, RESERVE TREE MARK (ORANGE PAINT) SKYLINE YARDING: UNIT 15-2, 25-3
DM- CTM - CR	DENSITY MANAGEMENT, CUT TREE MARK (BLUE PAINT) TRACTOR LOG: UNIT:13-2
SC-CTM-CR	SELECTION CUT, CUT TREE MARK (BLUE PAINT) TRACTOR LOG: UNIT: 13-1

Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 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 provided in Section 2, Purchaser shall be liable for the total purchase price even though the 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 the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
Douglas-fir	4,545		
White Fir	1,910		
Ponderosa Pine	355		
Incense-cedar	132		
Sugar Pine	4		
Sale Totals	**6,946**		

Unit Details (16' MB)

Unit 13-1 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	31		
White Fir	31		
Unit Totals	**62**		

Unit 13-2 **16 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	64		
Ponderosa Pine	1		
White Fir	46		
Unit Totals	**111**		

Unit 13-3 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	67		
Ponderosa Pine	9		
White Fir	8		
Unit Totals	**84**		

Unit 13-4 **18 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	97		
Ponderosa Pine	2		
Sugar Pine			
White Fir	32		
Unit Totals	**131**		

Unit 13-5 **4 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	2		
White Fir	15		
Unit Totals	**17**		

Unit 13-7 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	6		
White Fir	13		
Unit Totals	**19**		

Unit 15-1 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	132		
Incense-cedar	2		
Ponderosa Pine	1		
White Fir	5		
Unit Totals	**140**		

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Unit 15-2 **10 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	50		
Incense-cedar			
White Fir	24		
Unit Totals	**74**		

Unit 15-2A **6 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	36		
Incense-cedar			
White Fir	17		
Unit Totals	**53**		

Unit 15-3 **2 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	9		
White Fir	4		
Unit Totals	**13**		

Unit 19-1 **13 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	71		
Incense-cedar	13		
White Fir	15		
Unit Totals	**99**		

Unit 19-2 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	45		
Incense-cedar	9		
White Fir	16		
Unit Totals	**70**		

Unit 19-3 **9 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	26		
Incense-cedar	1		
White Fir	28		
Unit Totals	**55**		

Unit 19-4 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	19		
Incense-cedar	4		
Ponderosa Pine			
White Fir	19		
Unit Totals	**42**		

Unit 19-5 **25 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	132		
Incense-cedar	8		
Ponderosa Pine	1		
Sugar Pine			
White Fir	34		
Unit Totals	**175**		

Unit 19-6 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	230		
Incense-cedar	7		
Ponderosa Pine	25		
Sugar Pine			
White Fir	172		
Unit Totals	**434**		

Unit 23-1 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	51		
White Fir	47		
Unit Totals	**98**		

Unit 25-1 **21 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	229		
Incense-cedar			
White Fir	70		
Unit Totals	**299**		

Unit 25-10 **31 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	159		
Incense-cedar	5		
Sugar Pine	1		
White Fir	53		
Unit Totals	**218**		

Unit 25-11 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	37		
Incense-cedar			
White Fir	2		
Unit Totals	**39**		

Unit 25-2 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	166		
Incense-cedar	1		
Sugar Pine	1		
White Fir	182		
Unit Totals	**350**		

Unit 25-3 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	12		
White Fir	6		
Unit Totals	**18**		

Unit 25-4 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	61		
Incense-cedar			
Sugar Pine			
White Fir	22		
Unit Totals	**83**		

Unit 25-4A **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	24		
Incense-cedar			
Sugar Pine			
White Fir	13		
Unit Totals	**37**		

Unit 25-5 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	58		
White Fir	19		
Unit Totals	**77**		

Unit 25-6 **13 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	102		
Incense-cedar	1		
White Fir	27		
Unit Totals	**130**		

Unit 25-7 **19 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	134		
Incense-cedar			
White Fir	83		
Unit Totals	**217**		

Unit 25-8 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	39		
White Fir	32		
Unit Totals	**71**		

Unit 25-9 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	38		
Sugar Pine	1		
White Fir	28		
Unit Totals	**67**		

Unit 31-1 **129 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	1,084		
Incense-cedar	41		
Sugar Pine			
White Fir	265		
Unit Totals	**1,390**		

Unit 31-2 **25 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	193		
Incense-cedar	1		
Ponderosa Pine			
White Fir	42		
Unit Totals	**236**		

Unit 31-3 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	35		
Incense-cedar	1		
White Fir	15		
Unit Totals	**51**		

Unit 31-4 **23 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	111		
Incense-cedar	3		
Sugar Pine			
White Fir	75		
Unit Totals	**189**		

Unit 31-5 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	314		
Incense-cedar	3		
Sugar Pine			
White Fir	155		
Unit Totals	**472**		

Unit 31-6 **27 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	213		
Incense-cedar	2		
Sugar Pine			
White Fir	140		
Unit Totals	**355**		

Unit 31-7 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	42		
Incense-cedar	1		
White Fir	19		
Unit Totals	**62**		

Unit 31-8 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	28		
Incense-cedar	1		
White Fir	20		
Unit Totals	**49**		

Unit 7-1 **91 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	353		
Incense-cedar	25		
Ponderosa Pine	290		
Sugar Pine	1		
White Fir	98		
Unit Totals	**767**		

Unit 7-2 **2 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	10		
Incense-cedar	3		
Ponderosa Pine	17		
White Fir	6		
Unit Totals	**36**		

Unit 7-3 **5 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	35		
Ponderosa Pine	9		
White Fir	12		
Unit Totals	**56**		

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
DOUBLE BOWEN TIMBER SALE
TRACT NO. ORM05-TS-2015-0012

EXHIBIT C-1
SHEET 1 OF 1

PROJECT LOCATION

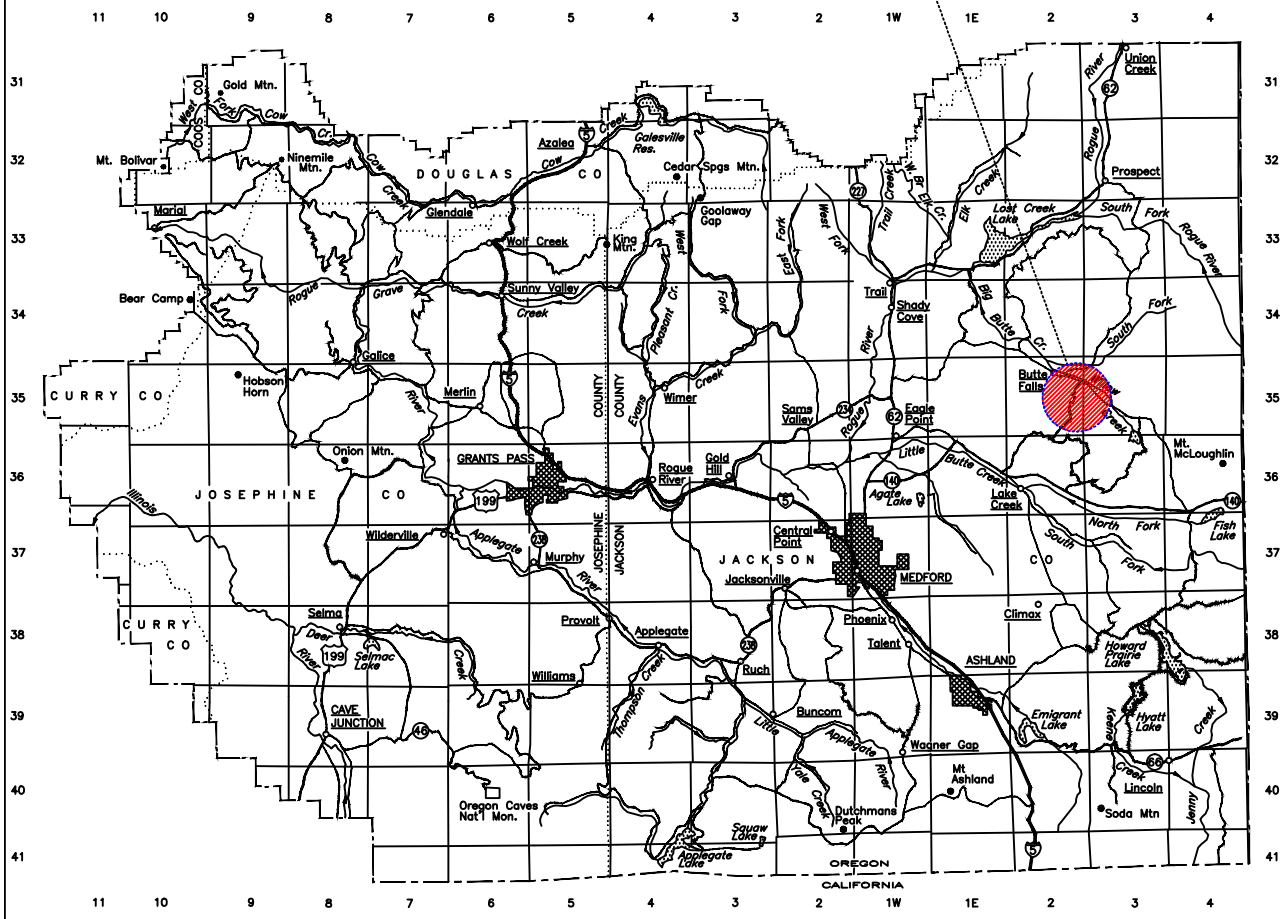


Exhibit No.	Description
C-1	TITLE SHEET
C-2	ROAD LOCATION MAP
C-3	ESTIMATE OF QUANTITIES (Includes Temp Routes)
C-4	SPECIFICATION SHEET
C-5	TYPICAL ROAD DATA
C-6	CULVERT LIST
C-7	CULVERT INSTALLATION DETAILS
C-8	CULVERT BAND DETAILS
C-9	DRAINAGE AND EROSION CONTROL
C-10	TYPICAL ARMORED WATER DIP
C-11	TYPICAL SURFACING AND TURNOUT SECTION
C-12	ROADSIDE BRUSHING DETAILS
C-13	QUARRY DEVELOPMENT PLAN
C-14	ROAD RENOVATION WORKLIST
C-15	TEMP ROUTE WORKLIST
C-16	CONSTRUCTION SPECIFICATIONS
C-17	SPECIAL PROVISIONS
D 1	ROAD MAINTENANCE SPECIFICATIONS
D 2	ROAD MAINTENANCE MAP
D3	ROAD DECOMMISSIONING WORKLIST
D4	ROAD DECOMMISSIONING MAP

N

0 6 12
SCALE IN MILES

ALWAYS
THINK
SAFETY

REV. NO.	DESCRIPTION	DATE	APPROV.

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

TITLE SHEET

DESIGNED
REVIEWED
APPROVED

DRAWN BY JAB	SCALE AS SHOWN
DATE JUNE 2015	SHEET 1 OF 1

DRAWING NO. ORM05-TS-2015-0012-C1

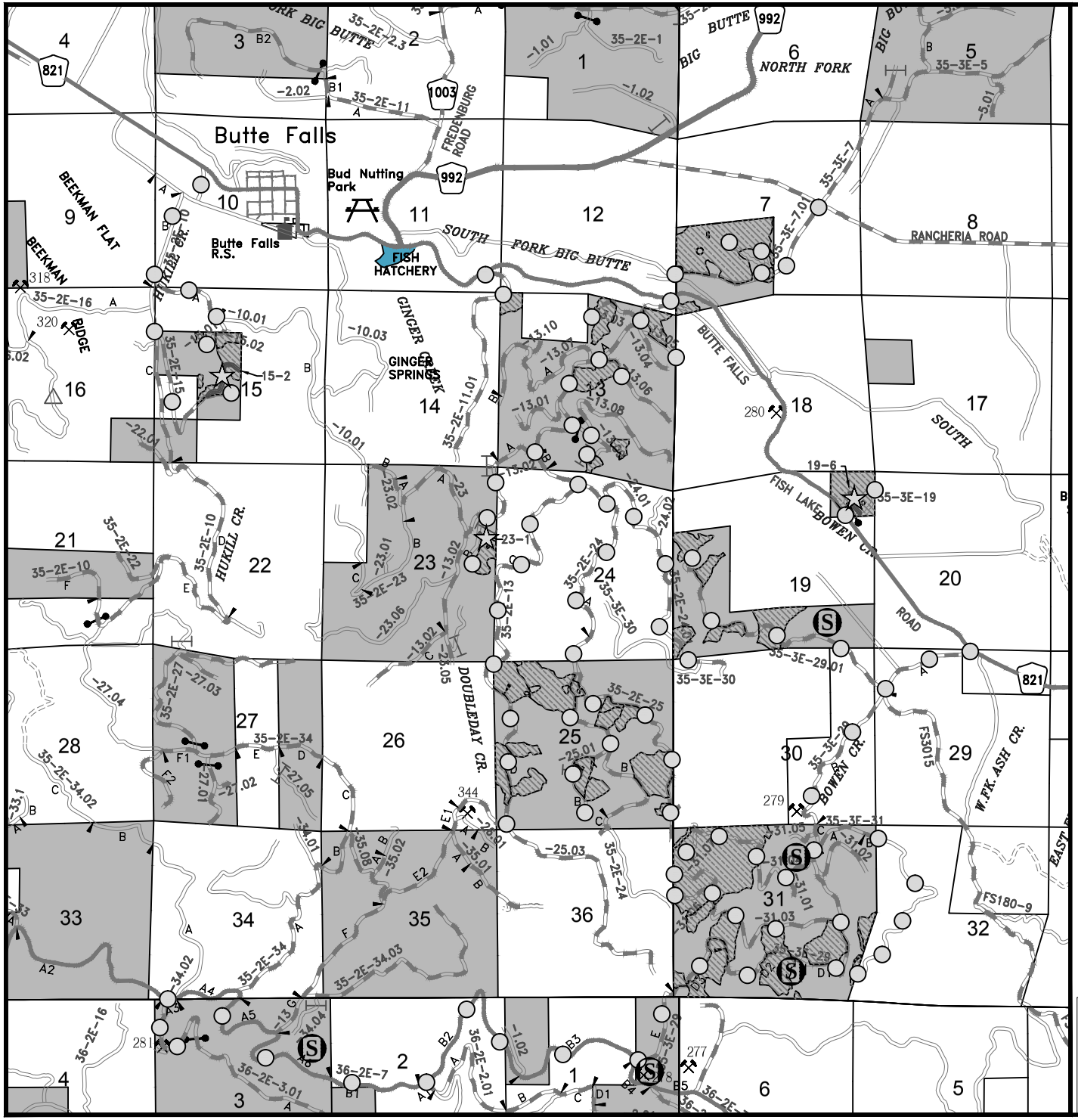


EXHIBIT C2

SHEET 1 OF 1

DOUBLE BOWEN
TIMBER SALE
TRACT NO. ORM05-TS-2015-0012

- BLM OWNERSHIP
- T.S. UNITS
- BST ROAD
- ROCKED ROAD
- NATURAL SURFACE ROAD
- PRIMITIVE ROUTE
- ROAD TO BE RENOVATED
- TEMP ROUTES
- STOCKPILE SITE (S)

N
W E
S

0 1/2 1
SCALE IN MILES

ALWAYS
THINK
SAFETY

EXHIBIT C-3
SHEET 1 OF 3
DOUBLE BOWEN TIMBER SALE

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE										RENOVATION	ARMORED WATER DIPS***	WATER DIPS	AGGREGATE****				SOIL STABILIZATION	ROADSIDE BRUSHING - SCATTER	ROADSIDE BRUSHING - CHIP	WATERBARS	EARTHEN BARRICADE	DECOMMISSION
							SIZE			Remove 12"	Remove 18"	ELBOWS	DOWNSPOUT							4" MINUS SCREENED BASE	CRUSHED SURFACE (STOCKPILED)	CRUSHED SURFACE	RIPRAP FOR SPLASH PADS CLASS C						
					ROCK	COMMON	18"	24"	30"				FULL/HALF ROUND		RECT. FLUME															
SPECIFICATION NO.				200	300	300	400	400	400			400	400	400	400	400	500		700	900	1200	1200		1800	2100	2100			
ROAD NUMBER	MP/STA	MP/STA	MILE/STA	ACRE	C.Y.	C.Y.	L.F.	L.F.	L.F.	EA.	EA.	EA.	L.F.	L.F.	L.F.	L.F.	MILE	EA.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	ACRE	MILE	MILE			
35-2E-10.00 A	0.00	0.21	0.21														0.21								0.21			
35-2E-10.00 B	0.21	0.81	0.60														0.60								0.60			
35-2E-10.00 C	0.81	1.18	0.37														0.37								0.37			
35-2E-10.01 A	0.00	0.50	0.50														0.50								0.50			
35-2E-11.01	0.00	0.28	0.28														0.28								0.28			
35-2E-13.00 A	0.00	1.52	1.52														1.52								1.52			
35-2E-13.00 B	1.52	1.66	0.14														0.14								0.14			
35-2E-13.00 C	1.66	3.75	2.09														2.09								2.09			
35-2E-13.00 D	3.75	4.49	0.74														0.74								0.74			
35-2E-13.02 A	0.00	0.28	0.28														0.28								0.28			
35-2E-13.02 B	0.28	0.68	0.40														0.40								0.40			
35-2E-13.03 A	0.00	0.29	0.29														0.29								0.29			
35-2E-13.03 B	0.29	0.39	0.10														0.10								0.10	3	1	0.10
35-2E-13.04	0.00	0.09	0.09														0.09								0.09			
35-2E-13.05	0.00	0.21	0.21								1						0.21		2					0.35	0.21		2	0.21
35-2E-13.06	0.00	0.25	0.25														0.25								0.25			
35-2E-13.08	0.00	0.12	0.12														0.12								0.12			
35-2E-13.09	0.00	0.31	0.31														0.31								0.31			
35-2E-15.00	0.00	1.03	1.03				56	32		1***							1.03	3		2229(A)			12	0.30		1.03			
35-2E-15.01	0.00	0.27	0.27														0.27									0.27		
35-2E-15.02	0.00	0.03	0.03														0.03									0.03		
35-2E-23.03	0.00	0.34	0.34				30**				1						0.34							0.60		0.34	10	1	0.34
35-2E-24.00 A	0.00	1.04	1.04														1.04								1.04			
35-2E-24.00 B	1.04	2.08	1.04														1.04								1.04			
PAGE 1 TOTALS			12.25				86	32		1***	2						12.25	3	2	2229(A)			12	1.25	10.58	1.67	13	4	0.65

ITEM 900

SIZE	GRADE
4 inch	(A)
3 inch	(B)
2 inch	(C)
1 1/2 inch	(D)

ITEM 1200

SIZE	GRADE
1 1/2inch	C,C-1
1 inch	D,F
3/4inch	E,E-1 (Stockpile Rock)

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

** Install and remove culvert after use.

***Remove existing culvert and construct armored water dip per contract specifications and drawings. Armored water dips quantities counted in AWDs column. Use 4" minus grade A for AWDs

****Indicate gradation.

ALWAYS THINK SAFETY

REV. NO.	DESCRIPTION		DATE	APPROV.

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

ESTIMATE OF QUANTITIES*

DRAWN:JAB	SCALE NONE
DATE: JUNE 2015	SHEET 1 OF 3
DRAWING NO. ORM05-TS-2015-0012-C3	

EXHIBIT C-3
SHEET 2 OF 3
DOUBLE BOWEN TIMBER SALE

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE										RENOVATION	ARMORED WATER DIPS***	WATER DIPS	AGGREGATE**				SOIL STABILIZATION	ROADSIDE BRUSHING - SCATTER	ROADSIDE BRUSHING - CHIP	WATERBARS	EARTHEN BARRICADE	DECOMMISSION
							SIZE			Remove 12"	Remove 18"	ELBOWS	DOWNSPOUT							4" MINUS SCREENED BASE	CRUSHED SURFACE (STOCKPILED)	CRUSHED SURFACE	RIPRAP FOR SPLASH PADS CLASS C						
													FULL/HALF ROUND		RECT. FLUME														
					ROCK	COMMON	18"	24"	36"																					
SPECIFICATION NO.				200	300	300	400	400	400	400	400	400	400	400	400	400	500			900	1200	1200		1800	2100				
ROAD NUMBER	MP/STA	MP/STA	MILE/STA	ACRE	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	L.F.	L.F.	L.F.	L.F.	MILE	EA.	EA.	C.Y.	C.Y.	C.Y.	C.Y.	ACREE	MILE				
35-2E-24.01 A	0.00	1.40	1.40														1.40								1.40			
35-2E-25.00	0.00	1.44	1.44														1.44								1.44			
35-2E-25.01 A	0.00	0.25	0.25														0.25								0.25			
35-2E-25.01 B	0.25	0.60	0.35														0.35								0.35		7	1
35-3E-7.01 A1	0.00	0.50	0.50														0.50								0.50			
35-3E-7.01 A2	0.50	1.12	0.62				104	44									0.62				80(E)		14	0.40	0.62			
35-3E-7.02	0.00	0.35	0.35														0.35							0.15	0.35		2	2	0.09
35-3E-7.03	0.00	0.05	0.05														0.05								0.05			
35-3E-19.00	0.00	0.26	0.26														0.26								0.26			
35-3E-29.00 A	0.00	0.59	0.59														0.59								0.59			
35-3E-29.00 B	0.59	1.61	1.02					36									1.02					1568(C)	2	0.10	1.02			
35-3E-29.00 C	1.61	1.74	0.13														0.13					200(C)			0.13			
35-3E-29.00 D1	1.74	2.72	0.98					38									0.98					1508(C)	2	0.10	0.98			
35-3E-29.00 D2	2.72	3.44	0.72				34		40								0.72					1108(C)	7	0.20	0.72			
35-3E-29.00 D3	3.44	3.90	0.46				34										0.46					708(C)	2	0.10	0.46			
35-3E-29.00 E	3.90	4.68	0.78														0.78					1200(C)			0.78			
35-3E-29.01	0.00	1.83	1.83					186									1.83				100(E)		25	0.50	1.83			
35-3E-31.00 A	0.00	0.33	0.33				34										0.33	1			60(E)		2	0.10		0.33		
35-3E-31.00 B	0.33	0.94	0.61														0.61									0.61		
35-3E-31.00 C	0.94	1.77	0.83														0.83									0.83		
35-3E-31.01	0.00	0.22	0.22					36									0.22				20(E)		5	0.10	0.22			
35-3E-31.03	0.00	1.47	1.47														1.47				80(E)				1.47			
35-3E-31.04	0.00	0.97	0.97														0.97								0.97			
35-3E-31.06	0.00	0.35	0.35														0.35								0.35			
35-3E-31.07	0.00	0.16	0.16														0.16								0.16		3	1	0.16
36-2E-3.01	0.00	0.40	0.40														0.40								0.40			
36-2E-7.00	3.55	7.96	4.41																						4.41			
Page 1 Totals			12.25				86	32		1***	2						12.25	3	2	2229(A)			12	1.25	10.58	1.67	13	4	0.65
Page 2 Totals			21.48				206	340	40								17.07	1			340(E)	6292(C)	59	1.75	19.71	1.77	12	4	0.25
TOTAL			33.73				292	372	40	1***	2						29.32	4	2	2229(A)	340(E)	6292(C)	71	3.00	30.29	3.44	25	8	0.90

ITEM 900

SIZE	GRADE
4 inch	(A)
3 inch	(B)
2 inch	(C)
1 1/2 inch	(D)

ITEM 1200

SIZE	GRADE
1 1/2inch	C,C-1
1 inch	D,F
3/4inch	E,E-1 (Stockpile Rock)

**Indicate gradation.

***Remove existing culvert and construct armored water dip per contract specifications and drawings. Armored water dips quantities counted in AWDs column. Use 4" minus grade A for AWDs

ALWAYS THINK SAFETY

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

REV. NO.	DESCRIPTION		DATE	APPROV.

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

ESTIMATE OF QUANTITIES*

DRAWN: JAB	SCALE NONE
DATE: JUNE 2015	SHEET 2 OF 3
DRAWING NO. ORM05-TS-2015-0012-C3	

TEMP ROUTE NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE										New Construction	Reconstruction	AWD	AGGREGATE**					SOIL STABILIZATION	ROADSIDE BRUSHING	WATERBARS	EARTHEN BARRICADE	DECOMMISSION
							SIZE					ELBOWS	DOWNSPOUT																
					ROCK	COMMON	18"	24"	36"				FULL/HALF ROUND		RECT. FLUME					GRID ROLLED	CRUSHED BASE	JAW CRUSHED	CRUSHED SURFACE	STOCKPILE					
SPECIFICATION NO.				200	300	300	400	400	400	400	400	400	400	400	400	400	500	500	500	800	1000	1100	1200		1800	2100			
ROAD NUMBER	MP/STA	MP/STA	MILE/STA	ACRE	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	L.F.	L.F.	L.F.	L.F.	MILE	MILE	EACH	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	ACRE	MILE			MILE
Temp 19-6	0.00	0.15	0.15	0.10														0.15						0.35		3		0.15
Temp 15-2	0+00	17+70	17+70	1.20		986											0.33							1.20		11	1	0.33
Temp 23-1	0.00	2+64	2+64	0.20													0.05							0.20		2	1	0.05
TOTAL				1.50		986											0.38	0.15						1.75		16	2	0.53

ITEM 900

SIZE	GRADE
4 inch	(A)
3 inch	(B)
2 inch	(C)
1 1/2 inch	(D)

ITEM 1200

SIZE	GRADE
1 1/2inch	C,C-1
1 inch	D,F
3/4inch	E,E-1

ALWAYS THINK SAFETY

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

**Indicate gradation.

***Remove existing culvert and construct armored water dip per contract specifications and drawings.

REV. NO.	DESCRIPTION	DATE	APPROV.

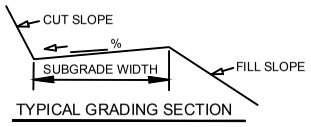
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
MEDFORD DISTRIC MEDFORD, OREGON

TEMPORARY ROUTE ESTIMATE OF QUANTITIES*

DRAWN: JAB	SCALE NONE
DATE: JUNE 2015	SHEET 3 OF 3
DRAWING NO. ORM05-TS-2015-0012-C3	

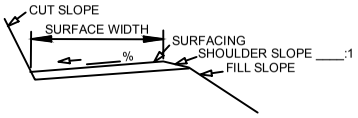
EXHIBIT C 4
SHEET 1 OF 3
DOUBLE BOWEN TIMBER SALE

ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH MILE OR STATION	TYPICAL SECTION TYPE	ALLIGNMENT	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH				SURFACING (4)								REMARKS
					MAXIMUM DEGREE OF CURVE	SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND		EXISTING ROAD(S)		BASE COURSE				SURFACE COURSE				
										TOP CUT	TOE FILL	L	R	MINIMUM WIDTH	COMP. DEPTH	TYPE (2)	GRADING	MINIMUM WIDTH	COMP. WIDTH	TYPE (2)	GRADING	
35-2E-10.00 A	0.00	0.21	0.21	6		15	0			4	4											
35-2E-10.00 B	0.21	0.81	0.60	6		15	3			4	4											
35-2E-10.00 C	0.81	1.18	0.37	6		15	3			4	4											
35-2E-10.01 A	0.00	0.50	0.50	6		15	3			4	4											
35-2E-11.01	0.00	0.28	0.28	6		15	3			4	4											
35-2E-13.00 A	0.00	1.52	1.52	6		16	3			4	4											
35-2E-13.00 B	1.52	1.66	0.14	6		16	3			4	4											
35-2E-13.00 C	1.66	3.75	2.09	6		16	3			4	4											
35-2E-13.00 D	3.75	4.49	0.74	6		16	3			4	4											
35-2E-13.02 A	0.00	0.28	0.28	6		15	3			4	4											
35-2E-13.02 B	0.28	0.68	0.40	6		15	3			4	4											
35-2E-13.03 A	0.00	0.29	0.29	6		15	3			4	4											
35-2E-13.03 B	0.29	0.39	0.10	3		14	0			4	4											
35-2E-13.04	0.00	0.09	0.09	6		15	3			4	4											
35-2E-13.05	0.00	0.21	0.21	3		15	0			4	4											
35-2E-13.06	0.00	0.25	0.25	6		15	3			4	4											
35-2E-13.08	0.00	0.12	0.12	6		15	3			4	4											
35-2E-13.09	0.00	0.31	0.31	6		15	3			4	4											
35-2E-15.00	0.00	1.03	1.03	6		15	3			4	4											
35-2E-15.01	0.00	0.27	0.27	6		15	3			4	4											
35-2E-15.02	0.00	0.03	0.03	6		14	3			4	4											
35-2E-23.03	0.00	0.34	0.34	3		14	0			4	4											



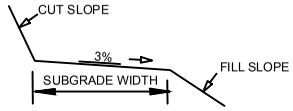
TYPICAL GRADING SECTION

TYPE 1



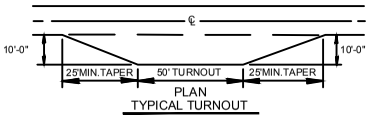
TYPICAL SURFACING SECTION

TYPE 2



TYPICAL GRADING SECTION

TYPE 3



PLAN
TYPICAL TURNOUT

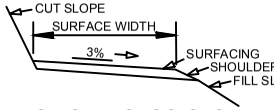
NOTES

1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1FT.FOR FILLS OF 1-6FT. & 2FT.FOR FILLS OVER 6FT. WIDEN THE INSIDE SHOLDER OF ALL CURVES AS FOLLOWS:
WHEN THE DEGREE OF CURVE EQUALS
7-21 ADD 1FT.
22-35 ADD 2FT.
36-48 ADD 3FT.
49-64 ADD 4FT.
65-96 ADD 5FT.

MATERIALS	CUT SLOPES	FILL SLOPES
COMMON	_____	1 1/2:1
SOFT ROCK & SHALE	1/2:1	_____
SOLID ROCK	1/2:1	ANGLE OF REPOSE

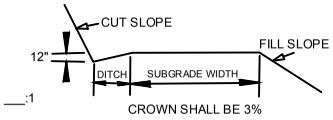
FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEEDING 60%.

2. SURFACING TYPE
A. PIT RUN ROCK MATERIAL.
B. GRID ROLLED ROCK MATERIAL
C. SCREENED ROCK MATERIAL.
D. CRUSHED ROCK MATERIAL.



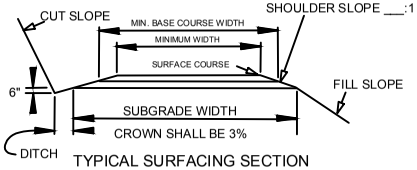
TYPICAL SURFACING SECTION

TYPE 4



TYPICAL GRADING SECTION

TYPE 5



TYPICAL SURFACING SECTION

TYPE 6

3. TURNOUTS
A. WIDTH 10FT. IN ADDITION TO SUBGRADE WIDTH,OR AS SHOWN ON THE PLANS.
B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.
C. INTERVISIBLE AND NOT MORE THAN _____FT. APART.

4. SURFACING
TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
SEE SUBSECTION 2100

ALWAYS THINK SAFETY

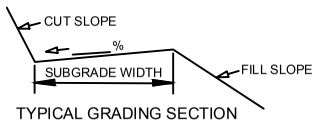
REV. NO.	DESCRIPTION	DATE	APPROV.

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

SPECIFICATION SHEET

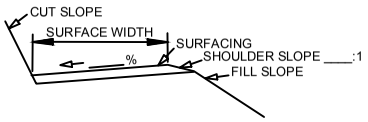
DRAWN: JAB	SCALE: NONE
DATE: JUNE 2015	SHEET: 1 OF 3
DRAWING NO. ORM05-TS-2015-0012-C4	

ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH MILE OR STATION	TYPICAL SECTION TYPE	ALLIGNMENT	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH				SURFACING (4)								REMARKS
					MAXIMUM DEGREE OF CURVE	SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND		EXISTING ROAD(S)		BASE COURSE				SURFACE COURSE				
										TOP CUT	TOE FILL	L	R	MINIMUM WIDTH	COMP. DEPTH	TYPE (2)	GRADING	MINIMUM WIDTH	COMP. WIDTH	TYPE (2)	GRADING	
35-2E-24.00 A	0.00	1.04	1.04	6		15	3			4	4											
35-2E-24.00 B	1.04	2.08	1.04	6		15	3			4	4											
35-2E-24.01 A	0.00	1.40	1.40	6		15	3			4	4											
35-2E-25.00	0.00	1.44	1.44	6		15	3			4	4											
35-2E-25.01 A	0.00	0.25	0.25	6		15	3			4	4											
35-2E-25.01 B	0.25	0.60	0.35	3		14	0			4	4											
35-3E-7.01 A1	0.00	0.50	0.50	6		16	3			4	4											
35-3E-7.01 A2	0.50	1.12	0.62	6		16	3			4	4											
35-3E-7.02	0.00	0.35	0.35	3		12	0			4	4											
35-3E-7.03	0.00	0.05	0.05	3		12	0			4	4											
35-3E-19.00	0.00	0.26	0.26	4		14	0			4	4											
35-3E-29.00 A (FS3015)	0.00	0.59	0.59	6		16	3			4	4											
35-3E-29.00 B	0.59	1.61	1.02	6		16	3			4	4											
35-3E-29.00 C	1.61	1.74	0.13	6		16	3			4	4											
35-3E-29.00 D1	1.74	2.72	0.98	6		15	3			4	4											
35-3E-29.00 D2	2.72	3.44	0.72	6		15	3			4	4											
35-3E-29.00 D3	3.44	3.90	0.46	6		15	3			4	4											
35-3E-29.00 E	3.90	4.68	0.78	6		15	3			4	4											
35-3E-29.01	0.00	1.83	1.83	6		15	3			4	4											
35-3E-31.00 A	0.00	0.33	0.33	6		15	3			4	4											
35-3E-31.00 B	0.33	0.94	0.61	6		15	3			4	4											
35-3E-31.00 C	0.94	1.77	0.83	6		14	3			4	4											



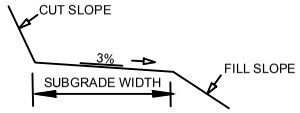
TYPICAL GRADING SECTION

TYPE 1



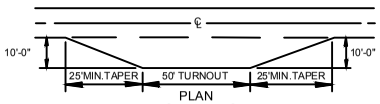
TYPICAL SURFACING SECTION

TYPE 2



TYPICAL GRADING SECTION

TYPE 3



PLAN
TYPICAL TURNOUT

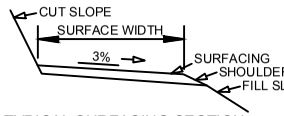
NOTES

1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1FT.FOR FILLS OF 1-6FT. & 2FT.FOR FILLS OVER 6FT. WIDEN THE INSIDE SHOLDER OF ALL CURVES AS FOLLOWS:
WHEN THE DEGREE OF CURVE EQUALS
7-21 ADD 1FT.
22-35 ADD 2FT.
36-48 ADD 3FT.
49-64 ADD 4FT.
65-96 ADD 5FT.

MATERIALS	CUT SLOPES	FILL SLOPES
COMMON	_____	1 1/2:1
SOFT ROCK & SHALE	1/2:1	_____
SOLID ROCK	1/2:1	ANGLE OF REPOSE

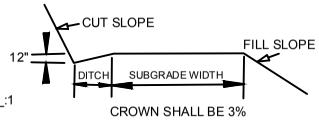
FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEEDING 60%.

2. SURFACING TYPE
A. PIT RUN ROCK MATERIAL.
B. GRID ROLLED ROCK MATERIAL
C. SCREENED ROCK MATERIAL.
D. CRUSHED ROCK MATERIAL.



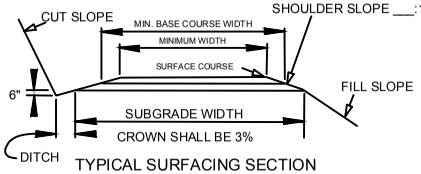
TYPICAL SURFACING SECTION

TYPE 4



TYPICAL GRADING SECTION

TYPE 5



TYPICAL SURFACING SECTION

TYPE 6

3. TURNOUTS
A. WIDTH 10FT. IN ADDITION TO SUBGRADE WIDTH,OR AS SHOWN ON THE PLANS.
B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.
C. INTERVISIBLE AND NOT MORE THAN _____FT. APART.

4. SURFACING
TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
SEE SUBSECTION 2100

ALWAYS THINK SAFETY

REV. NO.	DESCRIPTION	DATE	APPROV.

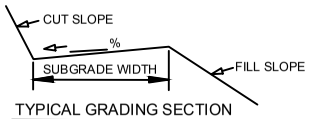
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT
MEDFORD, OREGON

SPECIFICATION SHEET

DRAWN: JAB	SCALE: NONE
DATE: JUNE 2015	SHEET: 2 OF 3
DRAWING NO. ORM05-TS-2015-0012-C4	

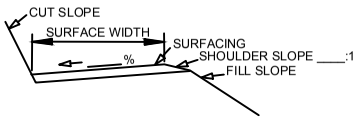
EXHIBIT C 4
SHEET 3 OF 3
DOUBLE BOWEN TIMBER SALE

ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH MILE OR STATION	TYPICAL SECTION TYPE	ALLIGNMENT	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH				SURFACING (4)								REMARKS
					MAXIMUM DEGREE OF CURVE	SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND		EXISTING ROAD(S)		BASE COURSE				SURFACE COURSE				
										TOP CUT	TOE FILL	L	R	MINIMUM WIDTH	COMP. DEPTH	TYPE (2)	GRADING	MINIMUM WIDTH	COMP. WIDTH	TYPE (2)	GRADING	
35-3E-31.01	0.00	0.22	0.22	6		15	3			4	4											
35-3E-31.03	0.00	1.47	1.47	6		15	3			4	4											
35-3E-31.04	0.00	0.97	0.97	6		15	3			4	4											
35-3E-31.06	0.00	0.35	0.35	4		14	0			4	4											
35-3E-31.07	0.00	0.16	0.16	3		14	0			4	4											
36-2E-3.01	0.00	0.40	0.40	6		16	3			4	4											
36-2E-7.00	3.55	7.96	4.41	6		20	3			4	4											



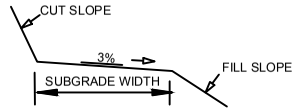
TYPICAL GRADING SECTION

TYPE 1



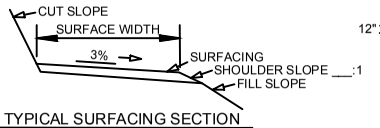
TYPICAL SURFACING SECTION

TYPE 2



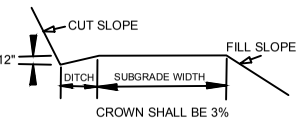
TYPICAL GRADING SECTION

TYPE 3



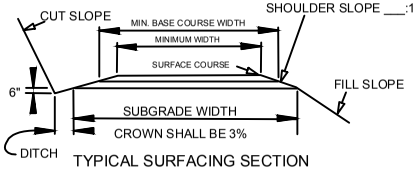
TYPICAL SURFACING SECTION

TYPE 4



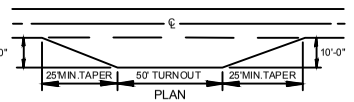
TYPICAL GRADING SECTION

TYPE 5



TYPICAL SURFACING SECTION

TYPE 6



PLAN
TYPICAL TURNOUT

NOTES

1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1FT.FOR FILLS OF 1-6FT. & 2FT.FOR FILLS OVER 6FT. WIDEN THE INSIDE SHOLDER OF ALL CURVES AS FOLLOWS:
WHEN THE DEGREE OF CURVE EQUALS
7-21 ADD 1FT.
22-35 ADD 2FT.
36-48 ADD 3FT.
49-64 ADD 4FT.
65-96 ADD 5FT.

MATERIALS	CUT SLOPES	FILL SLOPES
COMMON	_____	1 1/2:1
SOFT ROCK & SHALE	1/2:1	_____
SOLID ROCK	1/2:1	ANGLE OF REPOSE

FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEEDING 60%.

2. SURFACING TYPE
A. PIT RUN ROCK MATERIAL.
B. GRID ROLLED ROCK MATERIAL
C. SCREENED ROCK MATERIAL.
D. CRUSHED ROCK MATERIAL.

3. TURNOUTS
A. WIDTH 10FT. IN ADDITION TO SUBGRADE WIDTH,OR AS SHOWN ON THE PLANS.
B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.
C. INTERVISIBLE AND NOT MORE THAN _____FT. APART.

4. SURFACING
TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
SEE SUBSECTION 2100

ALWAYS THINK SAFETY

REV. NO.	DESCRIPTION	DATE	APPROV.

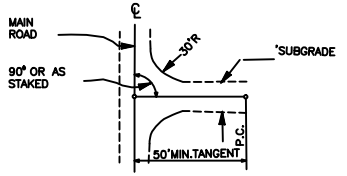
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT
MEDFORD, OREGON

SPECIFICATION SHEET

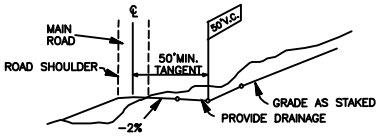
DRAWN: JAB	SCALE: NONE
DATE: JUNE 2015	SHEET: 3 OF 3
DRAWING NO. ORM05-TS-2015-0012-C4	

EXHIBIT C-5
SHEET 1 OF 1

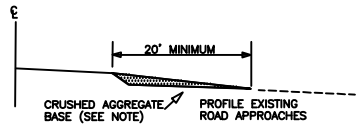
TYPICAL ROAD APPROACHES



PLAN

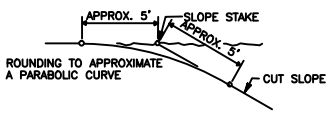


PROFILE

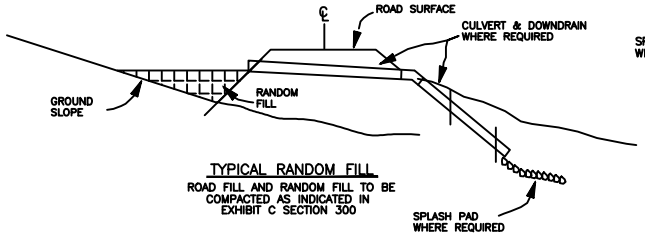


TYPICAL SURFACING SECTION

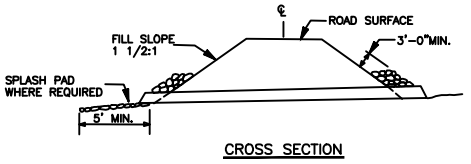
NOTES:
1. THE PROFILE OF EXISTING APPROACH ROADS SHALL BE TAPERED TO MEET THE SHOULDER LINE OF THE MAIN ROADWAY AND SHALL RECEIVE THE SAME WEARING SURFACE.
2. THE CRUSHED AGGREGATE BASE SHALL BE OF THE SAME GRADATION AS USED IN THE ADJACENT ROADBED.
3. APPROACHES SHALL BE FINISHED WITH THE SAME TREATMENT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



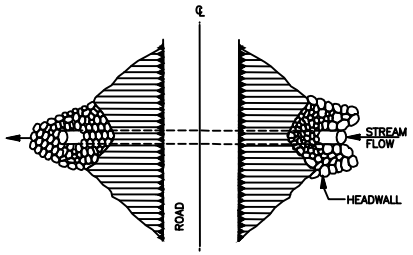
CUT SLOPE ROUNDING



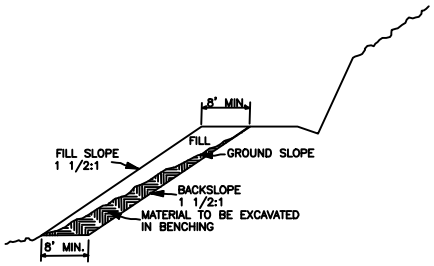
TYPICAL RANDOM FILL
ROAD FILL AND RANDOM FILL TO BE COMPACTED AS INDICATED IN EXHIBIT C SECTION 300



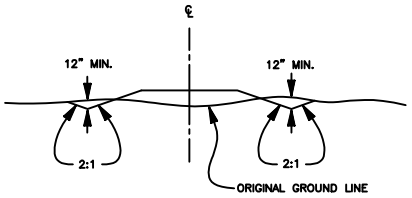
CROSS SECTION



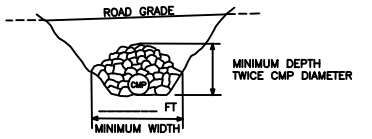
PLAN



SPECIAL COMPACTION
TYPICAL BENCHING SECTION



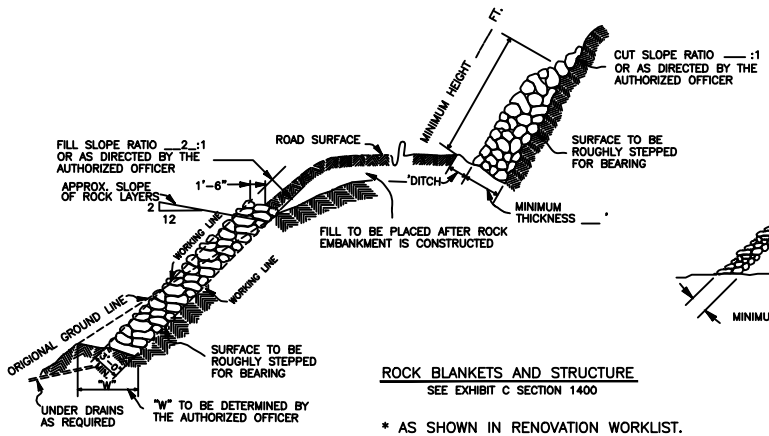
TYPICAL ROAD SECTION
FOR TURNPIKE CONSTRUCTION



ELEVATION

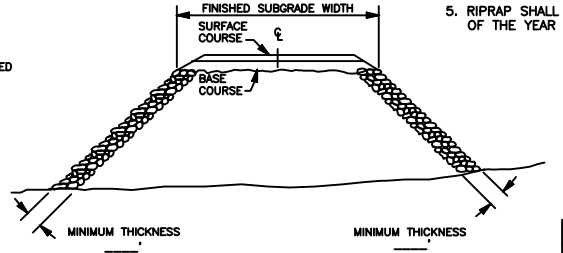
NOTES: RIPRAP AT CULVERTS

1. RIPRAP SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT DAMAGE THE CULVERT.
2. TRENCHING WILL BE DONE AS REQUIRED BY THE AUTHORIZED OFFICER.
3. MINIMUM DEPTH OF SPLASH PADS SHALL BE ___2___ FT
4. MINIMUM QUANTITY IS STATED IN WORKLIST.
5. RIPRAP SHALL BE PLACED BEFORE OCTOBER FIRST OF THE YEAR THE CMP IS INSTALLED.



ROCK BLANKETS AND STRUCTURE
SEE EXHIBIT C SECTION 1400

* AS SHOWN IN RENOVATION WORKLIST.



SLOPE PROTECTION ROCK
SEE EXHIBIT C SECTION 1400

ALWAYS THINK SAFETY

REV.NO.	DESCRIPTION	DATE	APPROVED

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

TYPICAL ROAD DATA

DRAWN BLM	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 1
DRAWING NO. ORM05-TS-2015-0012-C5	

EXHIBIT C-6
SHEET 1 OF 1
PAGE 1 OF 1

CULVERT LOCATIONS										DOWNSPOUTS						SPLASH PADS – CUBIC YARDS	REMARKS
DESIGNED						AS BUILT				1/2 ROUND		FULL ROUND		RECT. FLUME			
ROAD NO.	STATION OR M.P.	SIZE	GAGE	LENGTH	SKEW ANGLE	STATION OR M.P.	SIZE	GAGE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
35-2E-15.00	0.36	24"	16	32'												5	Installation Type 1
	0.73	18"	16	26'												2	Installation Type 3
	0.81	18"	16	30'												5	Installation Type 1
35-2E-23.03	0.14	18"	16	30'													Remove after use
35-3E-7.01 A2	0.54	18"	16	34'												2	Installation Type 3
	0.67	18"	16	36'												5	Installation Type 2
	0.83	18"	16	34'												2	Installation Type 3
	0.86	24"	16	44'												5	Installation Type 1
35-3E-29.00 B	0.92	24"	16	36'												2	Installation Type 3
35-3E-29.00 D1	2.29	24"	16	38'												2	Installation Type 3
35-3E-29.00 D2	3.21	30"	14	40'												5	Installation Type 1
	3.42	18"	16	34'												2	Installation Type 2
35-3E-29.00 D3	3.73	18"	16	34'												2	Installation Type 3
35-3E-29.01	1.31	24"	16	40'												5	Installation Type 1
	1.34	24"	16	36'												5	Installation Type 1
	1.41	24"	16	34'												5	Installation Type 1
	1.46	24"	16	36'												5	Installation Type 1
	1.67	24"	16	40'												5	Installation Type 1
35-3E-31.00 A	0.10	18"	16	34'												2	Installation Type 3
35-3E-31.01	0.07	24"	16	36'												5	Installation Type 1
	PROJECT TOTAL 18" CMP: 292 Feet																
	PROJECT TOTAL 24" CMP: 372 Feet																
	PROJECT TOTAL 30" CMP: 40 Feet																
	PROJECT TOTAL CY (RIPRAP): 71 CY																

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-3 (Estimate of Quantities).
C. All culverts and bands shall be aluminized.

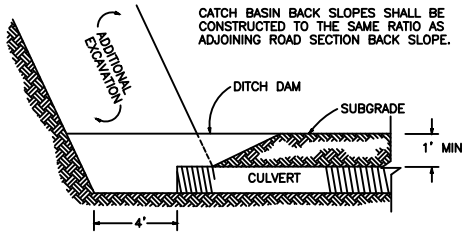
ALWAYS THINK SAFETY

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

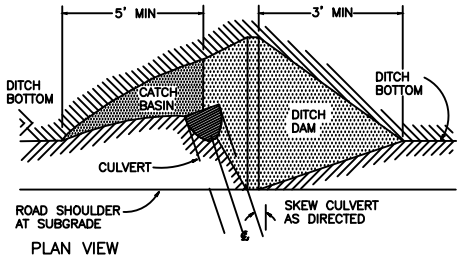
CULVERT LIST

DRAWN: JAB	**SCALE:** AS SHOWN
DATE: JUNE 2015	**SHEET** 1 OF 1
DRAWING NO. ORM05-TS-2015-0012-C6	

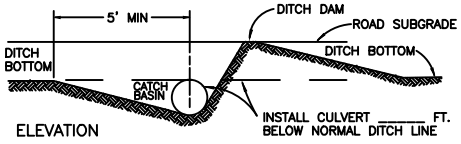
EXHIBIT C _7_
SHEET _1_ OF _1_



CROSS SECTION AT CATCH BASIN

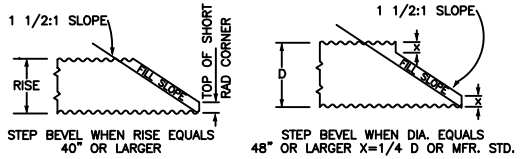


PLAN VIEW

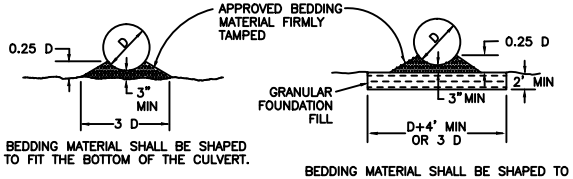


ELEVATION

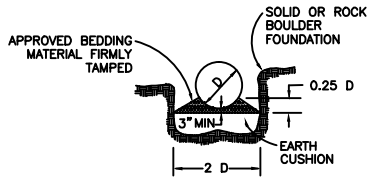
CATCH BASIN



BEVELED END DETAIL

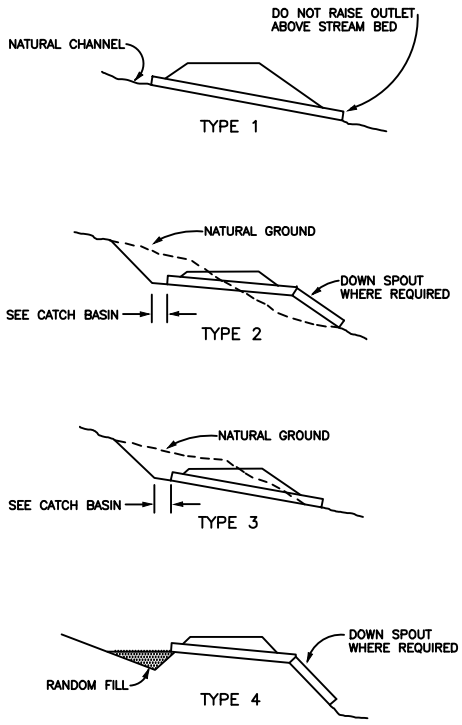


BEDDING OF CULVERTS

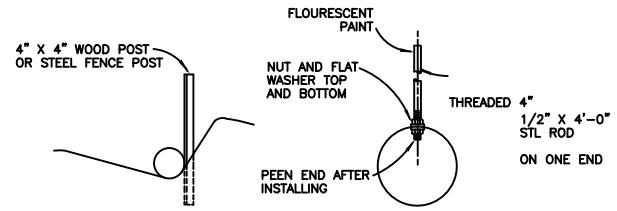


BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT. EARTH CUSHIONING OF SILTY CLAY LOAM OR SAND MAY BE USED IF MATERIAL CAN BE PLACED IN THE DRY CONDITION. IF THE EXCAVATION IS WET, USE GRANULAR FOUNDATION FILL MATERIAL. MAINTAIN 8" MIN. DEPTH BETWEEN HIGH POINTS OF ROCKS AND/OR BOULDERS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

BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION

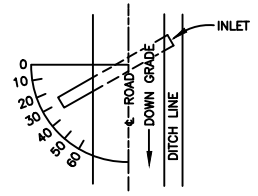


CULVERT INSTALLATION TYPES



INSTALL MARKERS NOT MORE THAN 6" BACK FROM END OF CULVERT

CULVERT MARKER INSTALLATION



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

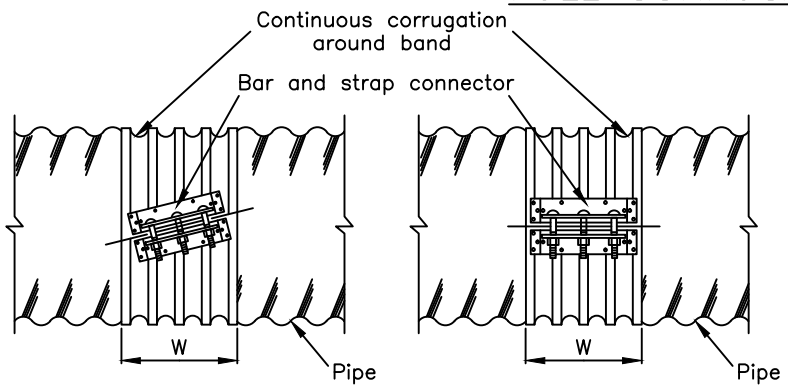
SKEW DIAGRAM

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

CULVERT INSTALLATION DETAILS

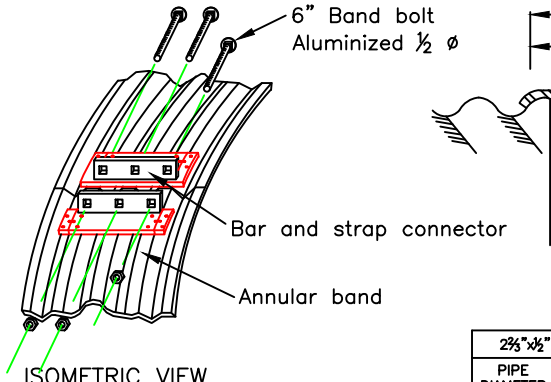
DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 1
DRAWING NO. ORM05-TS-2015-0012-C7	

FULL CORRUGATED BAND (ALUMINIZED)

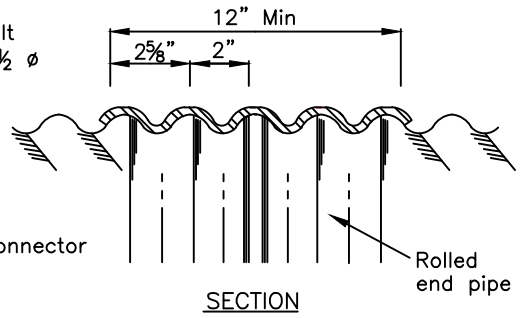


HELICAL COUPLING

ANNULAR COUPLING



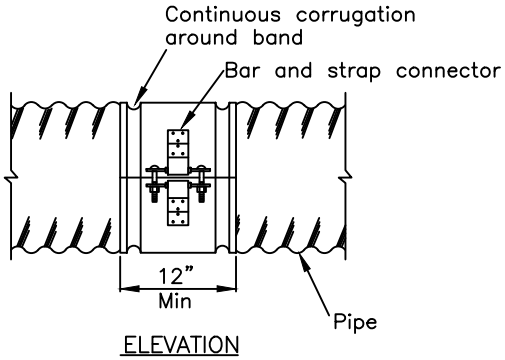
ISOMETRIC VIEW



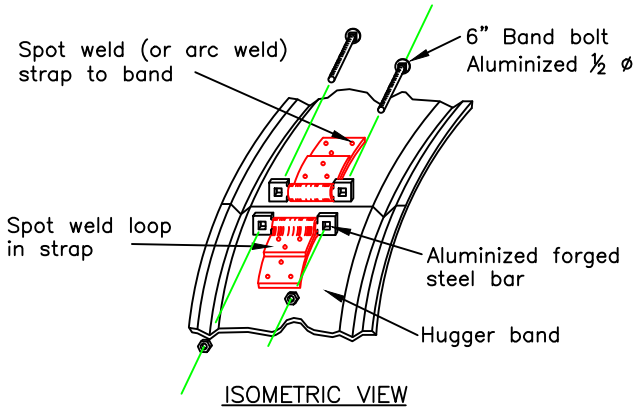
SECTION

2⅔"x½" CORRUGATIONS				3"x1" CORRUGATIONS			
PIPE DIAMETER (in)	W(in)		#of ½" Bolts	PIPE DIAMETER (in)	W(in)		#of ½" Bolts
	ANN.	HEL.			ANN.	HEL.	
6–10	7	7	2	36–84	14	14	3
12–15	7	12	2–3	36–120	26	26	5
18–84	12	12	3				
24–84	24	24	5				

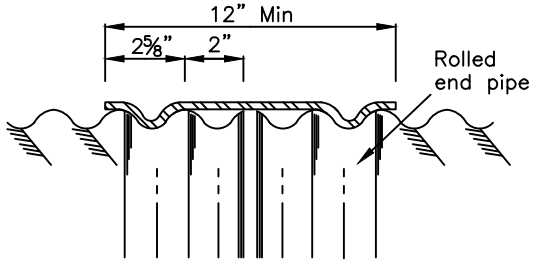
"HUGGER" BAND



ELEVATION



ISOMETRIC VIEW



SECTION

Standard construction is 1 piece 12" thru 48" and 2 piece 54" and above.

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 12 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 annuler corrugation inward from the end of each of the conduit sections joined.

Annular corrugated couplers for pipe shall cover at least two outside crest corrugations on each recorrugated end.

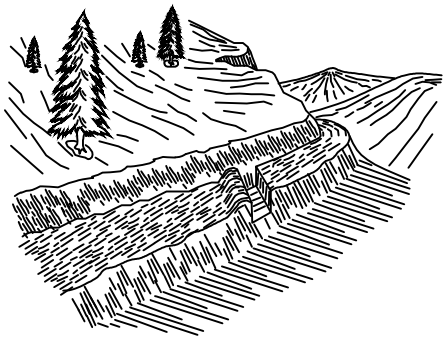
REV. NO.	DESCRIPTION	DATE	APPROV.

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

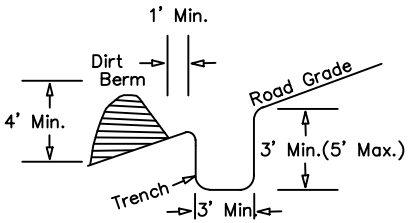
CULVERT BAND DETAIL

DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 1
DRAWING NO.	ORM05–TS–2015–0012–C8

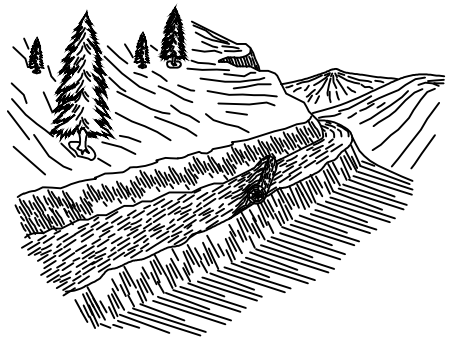
EXHIBIT C–9
SHEET 1 OF 2



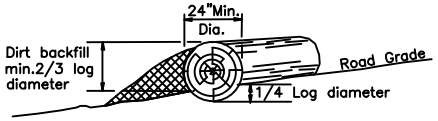
TRENCH BARRICADE



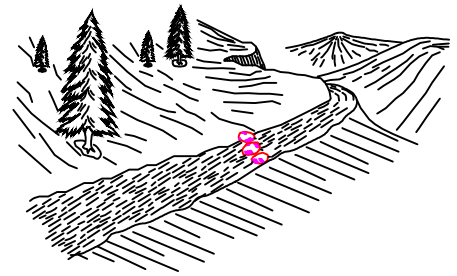
1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.
4. A MINIMUM OF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



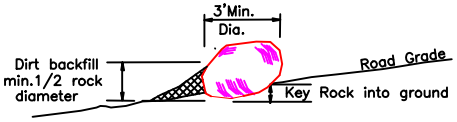
LOG BARRICADE



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".

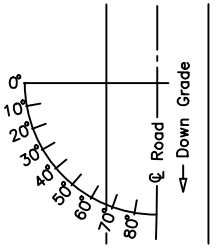


ROCK BARRICADE



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

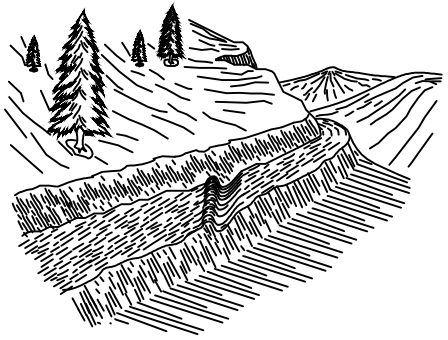


REV. NO.	DESCRIPTION	DATE	APPROV.

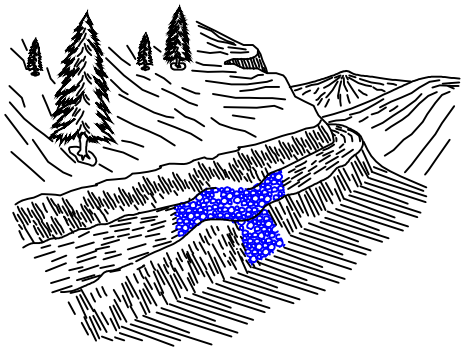
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT – MEDFORD, OREGON

DRAINAGE & EROSION CONTROL INSTALLATION

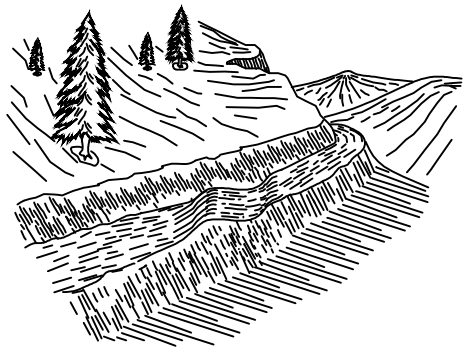
DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 2
DRAWING NO. ORM05–TS–2015–0012–C9	



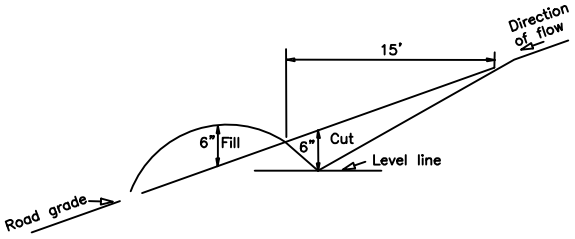
WATER BAR



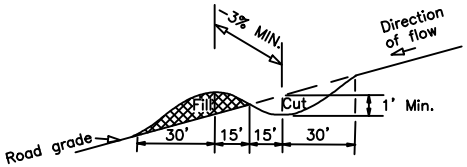
ARMORED WATER DIP



WATER DIP



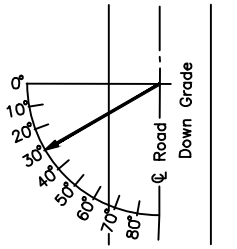
1. SEE EXHIBIT C–10 FOR ARMORED WATER DIP DETAILS.



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.

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.

SKEW DIAGRAM



REV. NO.	DESCRIPTION	DATE	APPROV.

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

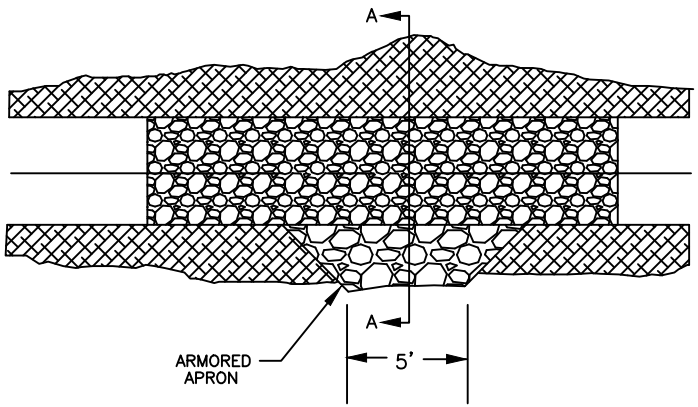
DRAINAGE & EROSION CONTROL INSTALLATION

DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 2 OF 2
DRAWING NO. ORM05–TS–2015–0012–C9	

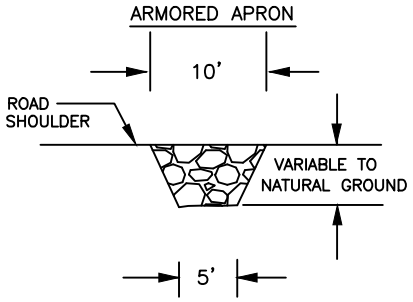
EXHIBIT C–10
SHEET 1 OF 1

TYPICAL ARMORED WATER DIP CONSTRUCTION DETAIL

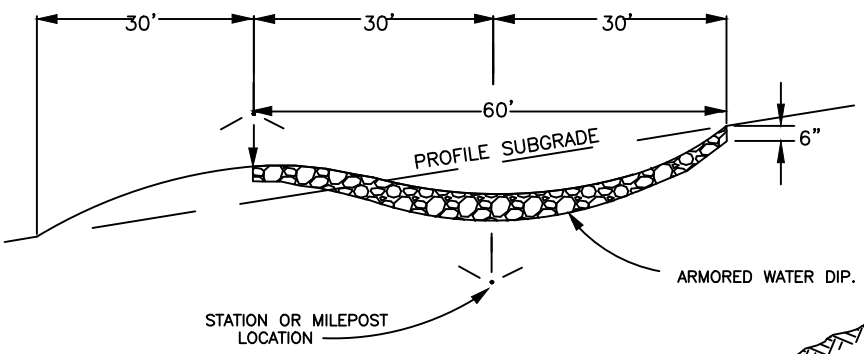
PLAN



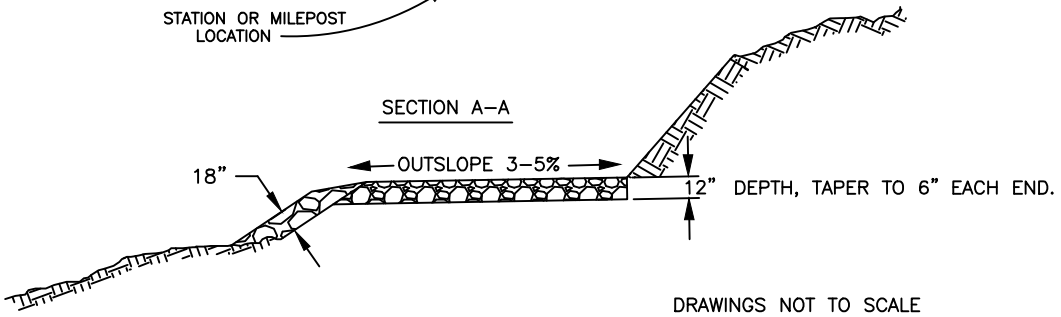
ARMORED APRON



PROFILE



SECTION A–A



DRAWINGS NOT TO SCALE

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 MATERIAL SHALL BE UTILIZED IN CONSTRUCTION OF WATER DIP. SIDECASTING IS NOT PERMITTED.
6) PIT RUN ROCK MATERIAL SHALL BE PLACED ON FILL SLOPE OF ARMORED WATERDIP.
7) SEE ROAD RENOVATION WORKLIST FOR WATER DIPS TO BE ARMORED.
8) EACH DIP SHALL BE REINFORCED WITH 20 CUBIC YARDS OF 4" MINUS ROCK, ON ROADWAY AND PIT RUN AT OUTFALL.

L E G E N D

CUT/FILL SLOPES

SUBGRADE ARMOR MATERIAL (4" minus)

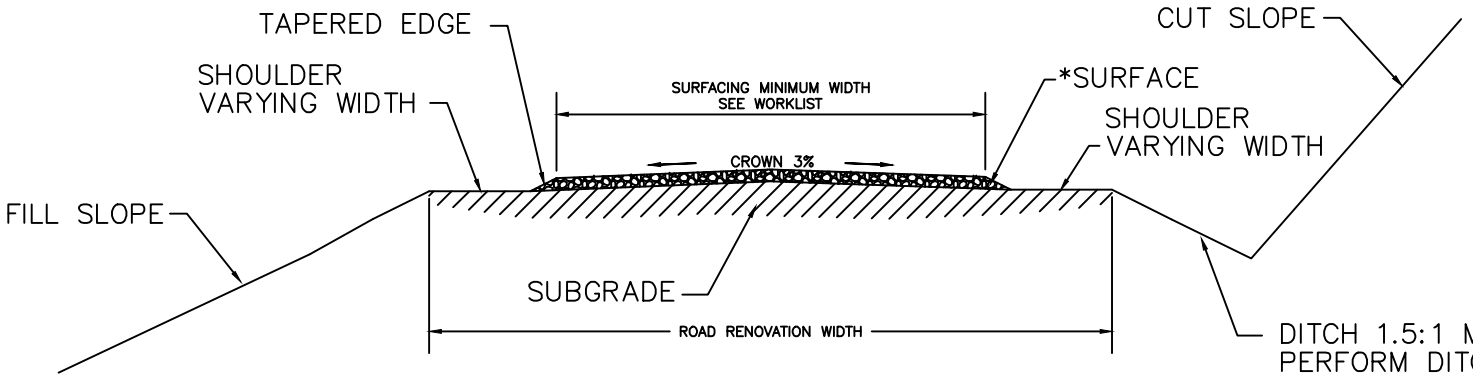
FILL SLOPE ARMOR MATERIAL PIT RUN OR OTHER APPROVED MATERIAL.

REV. NO.	DESCRIPTION	DATE	APPROV.

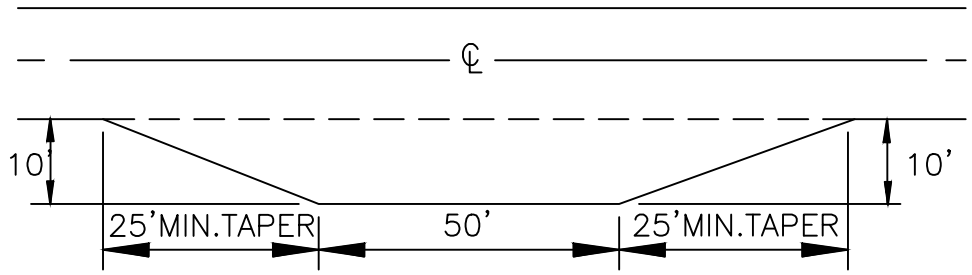
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT – MEDFORD, OREGON

ARMORED WATER DIP CONSTRUCTION

DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 1
DRAWING NO. ORM05–TS–2015–0012–C10	



TYPICAL SURFACING SECTION
DITCHED ROAD



TYPICAL TURNOUT SECTION

NOTES:

*SURFACING SHALL BE GRADE "C" AND COMPACTED TO A DEPTH OF 4" AS SPECIFIED IN THE WORKLIST.

MINIMUM WIDTH TO MATCH EXISTING ROAD WIDTH AS SPECIFIED IN THE WORKLIST

TURNOUTS SHALL BE SURFACED AT THE LOCATIONS SPECIFIED BY THE AUTHORIZED OFFICER.

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

REV. NO.	DESCRIPTION	DATE	APPROV.

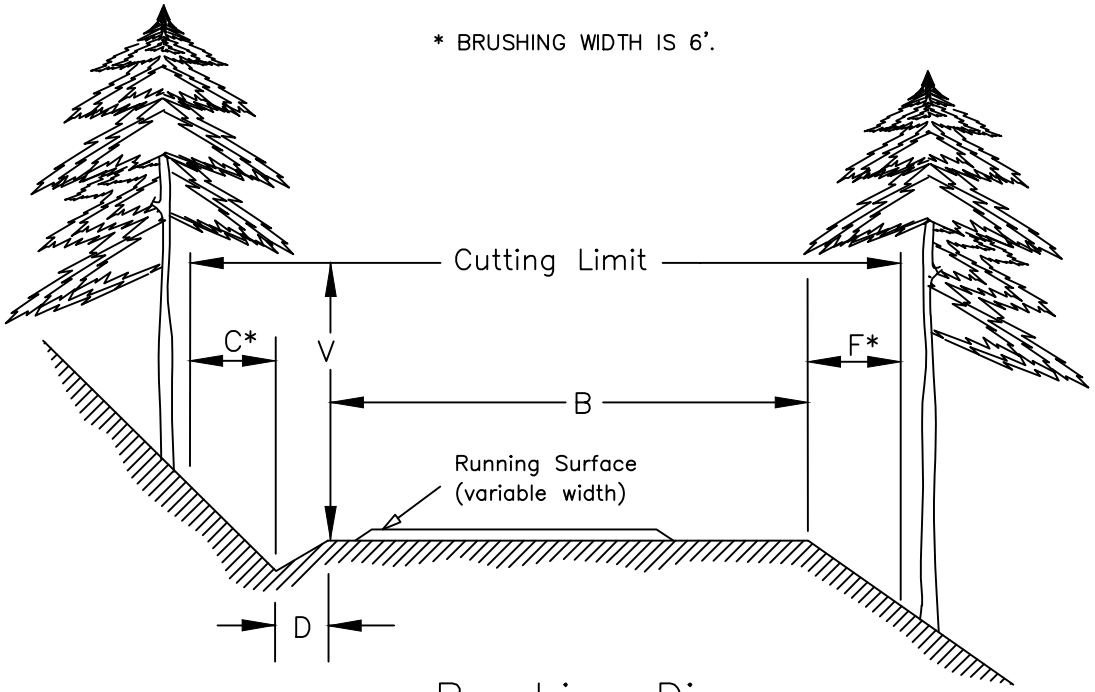
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT – MEDFORD, OREGON

TYPICAL SURFACING AND TURNOUT DETAIL

DRAWN JAB	SCALE NONE
DATE JUNE 2015	SHEET 1 OF 1
DRAWING NO. ORM05–TS–2015–0012–C11	

EXHIBIT C–12
SHEET 1 OF 1

* BRUSHING WIDTH IS 6'.



Brushing Diagram

Cutting Limit = C + D + B + F

B = Basic subgrade width (includes turnouts)

C = 6 ft – Distance to be brushed on cut slope beyond centerline of ditch

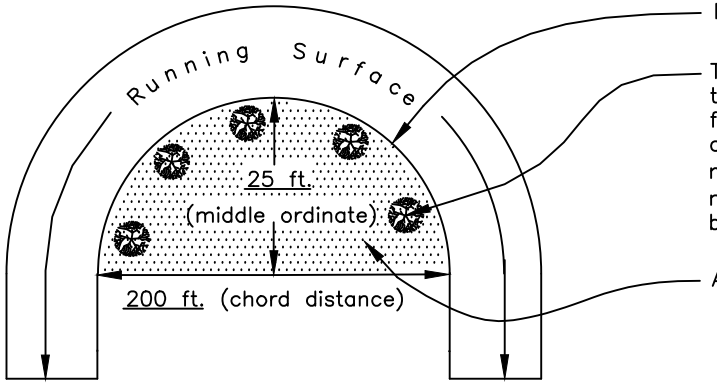
D = Centerline of ditch to inside shoulder

F = 6 ft – Distance to be brushed on fill slope beyond outside shoulder

V = 14 ft – Height of vertical cutting limit

Typical subgrade widths

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



Sight Distance Diagram

NOTES:

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

All distances shown are horizontal except for V

ALWAYS THINK SAFETY

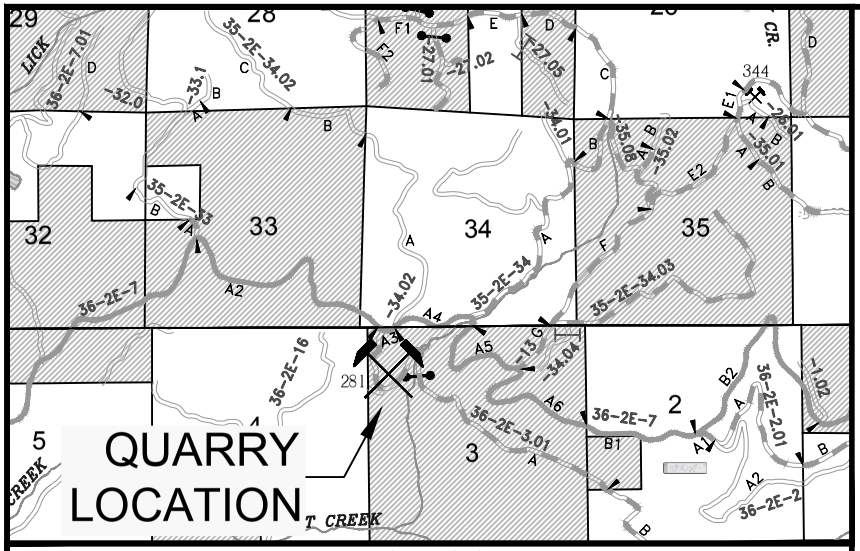
REV. NO.	DESCRIPTION	DATE	APPROV.

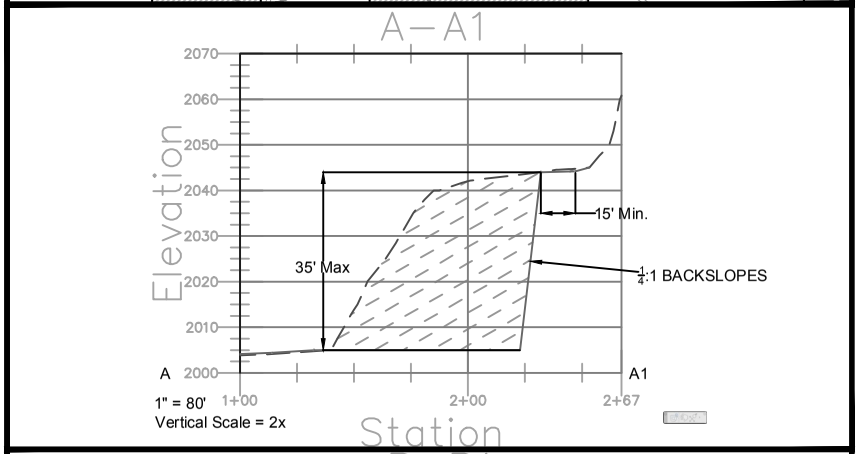
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT – MEDFORD, OREGON

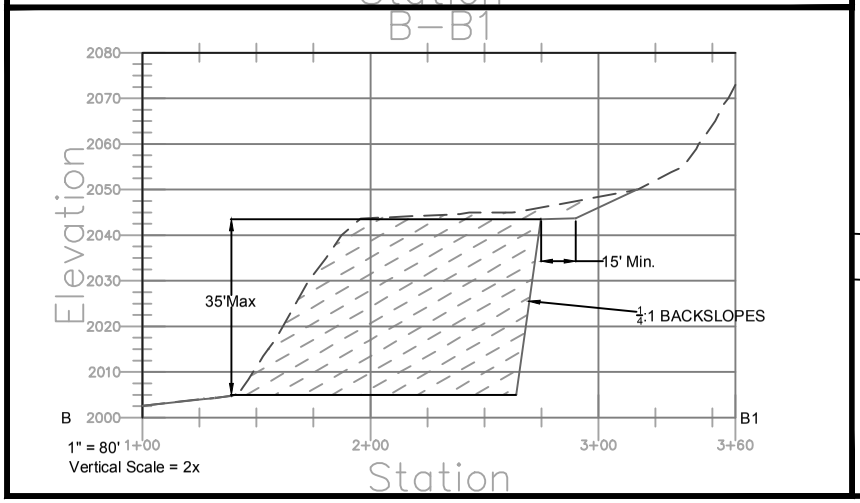
ROADSIDE BRUSHING DETAIL

DRAWN JAB	SCALE NONE
DATE JULY 2015	SHEET 1 OF 1
DRAWING NO. ORM05–TS–2015–0012–C12	

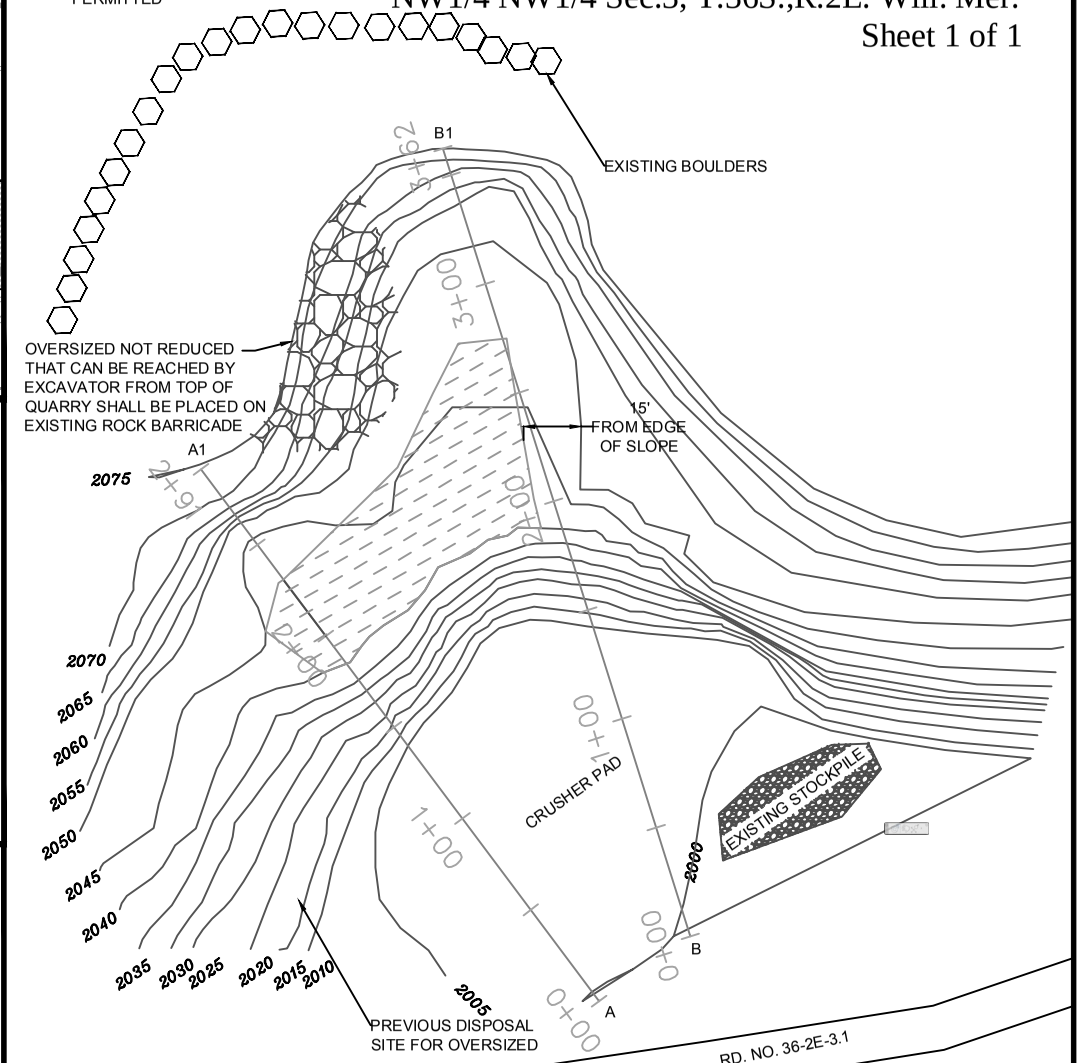
Exhibit C-13
Double Bowen Timber Sale
Salt Creek Quarry Development Plan
NW1/4 NW1/4 Sec.3, T.36S.,R.2E. Will. Mer.
Sheet 1 of 1







GENERAL DISTURBANCE OF THE MEADOW TO THE NORTH-NORTHWEST OF THE EXISTING QUARRY LIMIT IS NOT PERMITTED



NOTE:
CLEAR DEBRIS, GRUBBING DEBRIS, AND OVERBURDEN SHALL BE DISPOSED OF IN THE QUARRY AREA AS DIRECTED BY THE AUTHORIZED OFFICER.

LEGEND:

APPROXIMATE AREA OF MATERIAL TO BE REMOVED

BLM

N

SCALE
1" = 80'
CONTOUR INTERVAL 5'
0 40 80

Road Renovation Work List

Renovation: This consists of road work to be performed on the road prior to its use. The work includes, but not limited to; brushing, blading the road surface, pulling ditches, cleaning or enlarging catch basins and outlets, cleaning the entire barrel of corrugated metal pipes and/or culverts, furnishing and replacing/installing corrugated metal pipes and/or culverts, drilling, shooting, crushing, and placing 1.5" minus crushed rock surfacing, furnishing and placing 4" minus screened rock surfacing, maintaining and/or constructing water dips (WDs), maintaining and/or constructing armored water dips (AWDs) with 4" minus screened rock, removing brush near inlet or outlet of CMPs, removing brush, limbs, and trees along the roadway to improve sight distance. All drainage structures including culverts, water dips and ditch relief shall be inspected and brought to the design standard as shown on the plans. Remove all down trees from roadways.

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

Road 35-2E-10.00 (Hukill ML)
Segment A (Private) ASC

MP	Remarks
0.00	Jct. with Butte Falls Hwy. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and scarifying potholes. Prune small trees from M.P. 0.00 to M.P. 1.18 rather than cutting trees down.
0.21	Jct. with private road, old RR grade left. End segment A.

Segment B (Private) ASC

MP	Remarks
0.21	Continue road renovation.
0.28	Jct. with private road, old RR grade right. Begin cleaning ditches where needed.
0.31	Jct. with unnumbered spurs left and right.
0.40	Existing 18" culvert, cross drain.
0.49	Jct. with unnumbered private spur left.
0.76	Jct. with unnumbered private spur, Y intersection right.
0.81	Jct. with 35-2E-10.01 left. End segment B.

Segment C (Private) ASC

MP	Remarks
0.81	Continue road renovation.
0.99	Jct. with 35-2E-16.00 right. Existing culvert.
1.18	Jct. with 35-2E-15.00 left. End road renovation and roadside brushing.

Road 35-2E-10.01 (Medco Sec 15 Spur)
Segment A (Private) ASC

MP	Remarks
0.00	Jct. with 35-2E-10.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditches where needed. Prune small trees from M.P. 0.00 to M.P. 0.50 rather than cutting trees down.
0.05	Property line.
0.09	Existing 18" culvert, cross drain.
0.10	Existing 24" culvert, cross drain.
0.12	Existing cattleguard.
0.14	Existing 24" culvert, Hukill Creek.
0.14	Existing 24" culvert, Hukill Creek.
0.18	Jct. with unnumbered spur left.
0.19	Existing 12" culvert, cross drain.
0.33	Existing 12" culvert, cross drain.
0.44	Existing 12" culvert, overflow.
0.45	Existing 12" culvert, draw.
0.50	Jct. with 35-2E-15.01 right. End road renovation and roadside brushing.

Road 35-2E-11.01 (Doubleday W R/W)
(Private) PRR

MP	Remarks
0.00	Jct. with Butte Falls Hwy. Begin road renovation which includes roadside brushing; blading, watering, and rolling; clean culvert inlet and outlet; and clean ditch line where needed. Prune small trees from M.P. 0.00 to M.P. 0.22 rather than cutting trees down. Existing 18" culvert, cross drain.
0.20	Jct. with private road right.
0.28	Jct. with 35-2E-14.00 left. End road renovation and roadside brushing.

Road 35-2E-13.00 (Doubleday ML)
Segment A ASC

MP	Remarks
0.00	Jct. with Butte Falls/Willow Lake Hwy. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch line where needed. Prune small trees from M.P. 0.00 to M.P. 0.20 and M.P. 1.66 to M.P. 3.57, rather than cutting trees down.
0.01	Existing 12" concrete culvert, cross drain.
0.06	Jct. with 35-2E-12.02 left.
0.07	Existing 18" culvert, cross drain.
0.15	Jct. unnumbered spur right.
0.21	Jct. with 35-2E-13.03 right. Existing 18" culvert, cross drain.
0.32	Existing 30" culvert, draw.
0.33	Jct. with 35-2E-13.04 left.
0.49	Existing 18" culvert, cross drain.
0.54	Existing 18" culvert, cross drain.

0.65 Existing 18" culvert, cross drain.
0.67 Jct. with 35-2E-13.06 left.
0.69 Existing 18" culvert, cross.
0.72 Jct. with 35-2E-13.07 right.
0.83 Existing 18" culvert, cross drain. Clean culvert outlet ditch approximately 25' to drain water away from culvert outlet.
1.03 Existing 18" culvert, cross drain.
1.04 Jct. with 35-2E-13.01 right.
1.12 Existing 18" culvert, cross drain.
1.20 Jct. with 35-2E-13.08 and existing pipe gate left.
1.22 Existing 30" culvert, draw.
1.26 Existing 18" culvert, cross drain.
1.33 Existing 18" culvert, cross drain.
1.42 Existing 18" culvert, cross drain.
1.52 End segment A.

Segment B (Private) ASC

MP	Remarks
1.52	Jct. with 35-2E-13.02 right. Continue road renovation and roadside brushing.
1.54	Existing 18" culvert, cross drain.
1.64	Existing 18" culvert, cross drain.
1.66	Jct. with unnumbered spur right. Property line. End segment B.

Segment C (Private) ASC

MP	Remarks
1.66	Continue road renovation and roadside brushing.
1.85	Jct. with 35-2E-24.00 left. Existing 18" culvert, cross drain.
1.96	Jct. with unnumbered spur left.
2.03	Existing 12" culvert, cross drain.
2.16	Existing 12" culvert, cross drain.
2.39	Existing 12" culvert, cross drain.
2.48	Jct. with unnumbered spur left.
2.50	Existing 12" culvert, draw.
2.61	Existing 12"culvert, cross drain.
2.87	Jct. with unnumbered spur left.
2.88	Existing 12" culvert, cross drain.
3.06	Existing 12" culvert, cross drain.
3.30	Existing 12" culvert, cross drain.
3.44	Existing 12" culvert, cross drain.
3.46	Jct. with 35-2E-26.00 right.
3.69	Existing 18" culvert, cross drain.
3.75	End segment C.

Segment D ASC

MP	Remarks
3.75	Continue road renovation and roadside brushing.
3.89	Existing 18" culvert, cross drain.
4.09	Existing 18" culvert, cross drain.
4.31	Existing 18" culvert, cross drain.
4.39	Existing 18" culvert, cross drain.

4.49 Jct. with 35-2E-25.03 left. End road renovation and roadside brushing.

Road 35-2E-13.02 (Doubleday ML Spur)
Segment A ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and clean entire ditch line.
0.02	Existing 30" culvert, draw.
0.20	Existing 18" culvert, cross drain.
0.28	Jct. 35-2E-23.07 right. End segment A.

Segment B ASC

MP	Remarks
0.28	Continue road renovation and roadside brushing.
0.34	Existing 18" culvert, cross drain.
0.53	Existing 18" culvert, cross drain.
0.58	Existing 18" culvert, cross drain.
0.63	Existing 18" culvert, cross drain.
0.68	Jct. 35-2E-23.03, decommissioned left. End road renovation and roadside brushing.

Road 35-2E-13.03 (Little Tokyo TS Spur) ASC
Segment A ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditches where needed.
0.06	Existing 18" culvert, cross drain.
0.16	Existing 24" culvert, draw.
0.29	End segment A.

Segment B NAT

MP	Remarks
0.29	Continue road renovation and roadside brushing. Construct Barricade and water bar every 150' after use.
0.39	End road renovation and roadside brushing.

Road 35-2E-13.04 (Little Tokyo TS Spur 4) ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line.
0.01	Existing 18" culvert, cross drain.
0.06	Existing 18" culvert, cross drain.
0.09	Jct. with 35-2E-13.05 left. End road renovation and roadside brushing.

Road 35-2E-13.05 (Little Tokyo TS Spur 5) NAT

MP	Remarks
0.00	Jct. with 35-2E-13.04. Begin road renovation which includes roadside brushing; blading;

and removing culverts and constructing Water Dips (WDs). Partial decommission after use which includes water barring and barricading and the property line and beginning of road.

0.01 Construct barricade after use.
0.02 Remove existing 18" draw culvert and construct Water Dip (WD).
0.12 Construct Water Dip (WD).
0.21 Property line. Construct barricade after use. End road renovation and roadside brushing.

Road 35-2E-13.06 (Little Tokyo TS Spur 6) ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch lines where needed.
0.08	Existing 18" culvert, cross drain.
0.25	End road renovation and roadside brushing.

Road 35-2E-13.08 (Little Tokyo TS Spur 8) ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line.
0.01	Existing pipe gate.
0.02	Existing 18" culvert, cross drain.
0.08	Remove tree from road.
0.12	Jct. with 35-2E-13.09 right. End road renovation and roadside brushing.

Road 35-2E-13.09 (Little Tokyo TS Spur 9) ASC

MP	Remarks
0.00	Jct. with 35-2E-13.08. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line.
0.01	Existing 18" culvert, cross drain.
0.03	Remove tree from road.
0.07	Existing 18" culvert, cross drain.
0.15	Existing 18" culvert, draw.
0.28	Existing 18" culvert, cross drain.
0.31	Existing barricade. End road renovation and roadside brushing.

Road 35-2E-15.00 (Hukill Creek) PRR

MP	Remarks
0.00	Jct. with 35-2E-10.00. Begin road renovation which includes roadside brushing and chipping; blading; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; constructing AWDs; and cleaning entire ditch line. Prune small trees from M.P. 0.26 to M.P. 0.52 rather than cutting trees down. Place 6" compacted lift of 4" minus rock 15' wide for the entire length of the road.
0.01	Existing powder river gate.
0.03	Existing 42" culvert, Hukill Creek.

0.04 Jct. with unnumbered spur left.
0.11 Construct AWD.
0.21 Remove existing 12" culvert, cross drain and construct AWD.
0.36 Replace existing 18" draw culvert with a 24" x 32' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.56 Construct AWD.
0.63 Reshape ditch out right.
0.73 Replace existing 18" cross drain culvert with an 18" x 26' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.81 Replace existing 18" draw culvert with an 18" x 30' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.99 Existing 18" culvert, cross drain.
1.03 End of road. End road renovation and roadside brushing.

Road 35-2E-15.01 (Hukill Creek) PRR

MP	Remarks
0.00	Jct. with 35-2E-10.01. Begin road renovation which includes roadside brushing and chipping; blading; cleaning all culvert inlets and outlets; and cleaning and/or enlarging culvert catch basins. Prune small trees from M.P. 0.00 to M.P. 0.10 rather than cutting trees down.
0.08	Jct. with 35-2E-15.02 left.
0.22	Existing 18" culvert, draw.
0.27	End of road. End road renovation and roadside brushing.

Road 35-2E-15.02 PRR

MP	Remarks
0.00	Jct. with 35-2E-15.01. Begin road renovation which includes roadside brushing and chipping; blading; cleaning all culvert inlets and outlets; and cleaning and/or enlarging culvert catch basins. Prune small trees from M.P. 0.00 to M.P. 0.03 rather than cutting trees down.
0.03	End of road. Construct landing. End road renovation and roadside brushing.

Road 35-2E-23.03 NAT

MP	Remarks
0.00	Jct. with 35-2E-13.02. Begin road renovation which includes roadside brushing and chipping; blading; and installing temporary culvert. Decommission road after use which includes ripping, water barring every 150', removing temporary culvert, barricading, seeding, and mulching.
0.02	Existing barricade. Replace barricade after use.
0.14	Install temporary 18" culvert. Remove after use and contour bottom to match draw above and below culvert removal. Pull back slopes to 1.5:1.
0.34	End of road.

Road 35-2E-24.00 (Doubleday Spur East)
Segment A (Private) ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning the ditch line where needed. Prune small trees from M.P. 0.00 to M.P. 1.40 rather than cutting trees down.
0.19	Existing 18" culvert, cross drain.
0.20	Jct. with 35-2E-24.01 left.
0.37	Existing 18" culvert, cross drain.
0.47	Existing 18" culvert, cross drain.
0.53	Existing 18" culvert, cross drain.
0.62	Existing 18" culvert, cross drain.
0.72	Existing 18" culvert, cross drain.
0.82	Existing 18" culvert, draw.
0.96	Existing 18" culvert, draw.
1.04	End segment A.

Segment B PRR

MP	Remarks
1.04	Continue road renovation.
1.07	Existing 18" culvert, cross drain.
1.19	Existing 18" culvert, cross drain.
1.30	Existing 18" culvert, cross drain.
1.35	Existing 18" culvert, cross drain.
1.40	Jct. with 35-2E-25.00 left.
1.47	Existing 18" culvert, cross drain.
1.57	Existing 18" culvert, cross drain.
1.68	Existing 18" culvert, cross drain.
1.77	Existing 18" culvert, cross drain.
1.83	Existing 18" culvert, cross drain.
1.92	Existing 18" culvert, cross drain.
2.08	Jct. with 35-2E-25.01 right. Existing 18" culvert, cross drain. End road renovation and roadside brushing.

Road 35-2E-24.01 (Doubleday R/W)
Segment A (Private) PRR

MP	Remarks
0.00	Jct. with 35-2E-24.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch line where needed. Prune small trees from M.P. 0.00 to M.P. 1.25 rather than cutting trees down.
0.32	Existing 12" culvert, cross drain.
0.53	Existing 12" culvert, cross drain.
0.57	Jct. with 35-2E-24.02 left.
0.68	Jct. Spur right. Existing 18" culvert, cross drain.
0.72	Existing 12" culvert, cross drain.
0.87	Existing 18" culvert, draw.

1.04 Jct. with unnumbered spur right.
1.12 Existing 12" culvert, cross drain.
1.19 Existing 18" culvert, cross drain.
1.25 End segment A.
1.28 Existing 12" culvert, cross drain. Dig out outlet ditch for 40' to drain water away from culvert outlet.
1.40 End road renovation and roadside brushing.

Road 35-2E-25.00 (Doubleday Spur) ASC

MP	Remarks
0.00	Jct. with 35-2E-24.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins, and cleaning ditch line where needed.
0.14	Existing 18" culvert, cross drain.
0.27	Existing 24" culvert, draw.
0.44	Existing 18" culvert, cross drain.
0.49	Existing 18" culvert, cross drain.
0.72	Existing 18" culvert, cross drain.
0.88	Existing 24" culvert, draw.
0.89	Old pit (right). Do not use.
0.97	Existing 18" culvert, cross drain.
1.20	Existing 18" culvert, cross drain.
1.31	Existing 18" culvert, cross drain.
1.44	Jct. with private road left. End road renovation and roadside brushing.

Road 35-2E-25.01 (Upper Doubleday Spur)
Segment A ASC

MP	Remarks
0.00	Jct. with 35-2E-24.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line.
0.07	Existing 18" culvert, cross drain.
0.16	Existing 18" culvert, cross drain.
0.25	End segment A. End watering and rolling and cleaning ditch line.

Segment B NAT

MP	Remarks
0.25	Continue road renovation and roadside brushing.
0.29	Existing barricade. Start constructing water bars every 150' after use. Re-barricade after use.
0.31	Existing barricade. Re-barricade after use.
0.33	Existing water bar.
0.36	Existing water bar.
0.42	Existing water bar.
0.46	Existing water bar.
0.51	Existing water bar.
0.55	Existing water bar.
0.58	Existing water bar.

0.60 End road renovation and roadside brushing.

Road 35-3E-7.01 (Medco RR Grade South)
Segment A1 (Private) PRR

MP	Remarks
0.00	Jct. with Rancheria Road. Begin road renovation which includes roadside brushing; blading; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line. Prune small trees from M.P. 0.00 to M.P. 0.50 rather than cutting trees down. Cap all culvert replacements with 20 cubic yards of government furnished crushed aggregate rock. Crushed aggregate stock piles are located on Exhibit C-2 maps.
0.11	Existing 18" culvert, cross drain.
0.31	Existing 12" culvert, cross drain.
0.50	End Segment A1

Segment A2 PRR

MP	Remarks
0.50	Continue road renovation and roadside brushing.
0.54	Replace existing 12" cross drain culvert with an 18" x 34' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.55	Jct. with 35-3E-7.02 right.
0.67	Replace existing 12" cross drain culvert with an 18" x 36' CSP with a 5 cubic yard splash pad with new culvert outlet installed 3' lower than existing culvert outlet. Culvert installation shall be a Type 2 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.83	Replace existing 12" cross drain culvert with an 18" x 34' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.86	Replace existing 12" cross drain culvert with a 24" x 44' CSP with a 5 cubic yard splash pad with new culvert outlet installed 4' lower than existing culvert outlet. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.12	Jct. with unnumbered spur (left). End road renovation and roadside brushing.

Road 35-3E-7.02 (Rancheria RR Grade Spur) NAT

MP	Remarks
0.00	Jct. with 35-3E-7.01. Begin road renovation which includes roadside brushing; blading; and constructing Water Dips (WDs). After use, construct double barricade, rip first 0.09 miles, and water bar where drainage allows.
0.01	Construct double barricade after use.
0.03	Construct WD.
0.09	Jct. with 35-3E-7.03 right.
0.15	Construct WD.
0.35	End road renovation and roadside brushing.

Road 35-3E-7.03 (Rancheria RR Grade Spur North) NAT

MP	Remarks
0.00	Jct. with 35-3E-7.02. Begin road renovation which includes roadside brushing; and blading.
0.05	End road renovation and roadside brushing.

Road 35-3E-19.00 (Aqueduct road) PRR

MP	Remarks
0.00	Jct. with Butte Falls / Willow Lake Hwy. Begin road renovation which includes roadside brushing and blading.
0.01	Existing pipe gate (Key to be given at pre-work meeting).
0.03	Jct. with Pvt. Road (right).
0.04	Remove tree from road.
0.26	End road renovation and roadside brushing.

Road FS 3015 (Bowen Creek ML)

See Road 35-3E-29.00

Segment A (Forest Service) BST/ASC

MP	Remarks
0.00	Jct. with Butte Falls/Willow Lake Hwy. Begin BST. Begin road renovation which includes roadside brushing; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditches where needed.
0.01	Existing 18” culvert, cross drain.
0.05	Jct. with unnumbered spur, powder river gate left.
0.06	Existing cattleguard.
0.07	End BST. Begin ASC. Begin blading, watering, and rolling.
0.10	Existing 18” culvert, cross drain.
0.13	Jct. with unnumbered spur left.
0.19	Existing 18” culvert, cross drain.
0.30	Jct. with unnumbered spur left.
0.36	Existing 18” culvert, draw.
0.41	Existing 18” culvert, cross drain.
0.43	Jct. with FS 020 right.
0.56	Jct. with 35-3E-29.01 right.
0.59	Jct. with 35-3E-29.00. End segment A.

Road 35-3E-29.00 (Bowen Creek ML)

See Road FS 3015

Bowen Creek Road from the Butte Falls / Willow Lake Hwy. to the 35-3E-29.00 junction (MP0.59) is Forest Service road FS3015.

Segment B ASC

MP	Remarks
0.59	Jct. FS 3015. Continue road renovation and roadside brushing. Begin place 4” compacted lift of crushed aggregate rock 16’ in width from M.P. 0.59 to M.P. 4.68.
0.75	Jct. with unnumbered spur, wire gate (right).
0.81	Existing 42” culvert, Bowen Creek.
0.92	Replace existing 18” cross drain culvert with a 24” x 36’ CSP with a 2 cubic yard splash

pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).

1.06 Existing 18" culvert, cross drain.
1.20 Existing 18" culvert, cross drain.
1.27 Existing cattleguard. Existing 18" culvert, cattleguard relief.
1.29 Existing 18" culvert, draw.
1.41 Existing 18" culvert, cross drain.
1.46 Forest Service pit right.
1.50 Existing 36" culvert, Bowen Creek.
1.58 Existing 18" culvert, cross drain.
1.61 Property line. End segment B.

Segment C ASC

MP	Remarks
1.61	Continue road renovation and roadside brushing.
1.64	Existing water source
1.65	Existing 18" culvert, cross drain.
1.66	Jct. with 35-3E-31.05 right.
1.69	Existing 18" culvert, cross drain.
1.74	Jct. with 35-3E-31.00 left. End segment C.

Segment D1 ASC

MP	Remarks
1.74	Continue road renovation and roadside brushing.
1.80	Jct. with 35-3E-31.01 right. Existing stockpile / 100 CY right.
1.82	Existing 18" culvert, cross drain.
1.89	Jct. with 35-3E-31.02, barricade left.
1.93	Existing 18" culvert, cross drain.
1.95	Existing 18" culvert, cross drain.
2.06	Existing 18" culvert, cross drain.
2.15	Existing 18" culvert, cross drain.
2.25	Jct. with 35-3E-31.03 right. Existing 18" culvert, cross drain.
2.29	Replace existing 18" cross drain culvert with a 24" x 38' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
2.40	Existing 18" culvert, cross drain.
2.48	Existing 18" culvert, cross drain.
2.70	Existing 18" culvert, cross drain.
2.72	End segment D1.

Segment D2 ASC

MP	Remarks
2.72	Continue road renovation and roadside brushing.
2.79	Existing stockpile / ~150 CY (right).
2.88	Existing 18" culvert, cross drain.
3.10	Existing 18" culvert, cross drain.
3.21	Replace existing 24" cross drain culvert with a 30" x 40' CSP with a 5 cubic yard splash pad with the new culvert outlet installed 1' lower than the existing culvert outlet. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).

3.34 Existing 18" culvert with a 10' half round downspout, cross drain.
3.42 Replace existing 18" cross drain culvert with an 18" x 34' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 2 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
3.44 End segment D2.

Segment D3 ASC

MP	Remarks
3.44	Continue road renovation, surfacing, and roadside brushing.
3.60	Existing 18" culvert, cross drain.
3.66	Existing 18" culvert, cross drain.
3.73	Replace existing 18" cross drain culvert with an 18" x 34' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
3.79	Existing 18" culvert, cross drain.
3.90	End segment D3.

Segment E ASC

MP	Remarks
3.90	Continue road renovation, surfacing, and roadside brushing.
3.95	Existing 18" culvert, cross drain.
4.07	Existing 18" culvert, cross drain.
4.57	Existing 18" culvert, cross drain.
4.68	Jct. with 36-2E-7.00. Existing stockpile, Approximately 50 C.Y. left. End road renovation, surfacing, and roadside brushing.

Road 35-3E-29.01 (Bowen Creek Flats) ASC

MP	Remarks
0.00	Jct. with 35-3E-29.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch line where needed. Cap all culvert replacements with 20 cubic yards of government furnished crushed aggregate rock. Crushed aggregate stock piles are located on Exhibit C-2 maps.
0.01	Existing cattle guard.
0.07	Existing 18" culvert, cross drain.
0.15	Existing 44" x 72" culvert, draw.
0.21	Existing 22" x 36" culvert, draw.
0.34	Existing 18" culvert, cross drain.
0.44	Existing stockpile, Approximately 100 C.Y. right.
0.45	Existing 18" culvert, cross drain.
0.51	Existing 18" culvert, cross drain.
0.58	Existing 18" culvert, cross drain.
0.63	Existing 18" culvert, cross drain.
0.73	Existing 18" culvert, draw. Reshape catch basin to drain water into culvert inlet without pooling. Remove two dead trees at inlet.
0.79	Existing 18" culvert, cross drain.
0.85	Existing 18" culvert, cross drain.
0.93	Existing 18" culvert, cross drain.
0.99	Existing 24" culvert, draw.

1.02 Existing 18" culvert, draw. Clean culvert outlet ditch approximately 40' to drain water away from culvert outlet.
1.19 Existing 18" culvert, cross drain.
1.27 Existing 18" culvert, cross drain.
1.28 Existing 18" culvert, draw.
1.31 Replace existing 18" cross drain culvert with a 24" x 40' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.34 Replace existing 18" cross drain culvert with a 24" x 36' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.41 Replace existing 18" cross drain culvert with a 24" x 34' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.42 Existing 18" culvert, cross drain.
1.44 Existing 18" culvert, cross drain.
1.46 Replace existing 18" cross drain culvert with a 24" x 36' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.48 Existing 18" culvert, draw.
1.53 Existing 18" culvert, cross drain.
1.58 Existing 18" culvert, cross drain.
1.67 Replace existing 18" cross drain culvert with a 24" x 40' CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
1.69 Existing 24" culvert, draw.
1.76 Existing 18" culvert, cross drain.
1.80 Existing 18" culvert, cross drain.
1.83 End road renovation and roadside brushing.

Road 35-3E-31.00 (Bowen Creek Lower Spur Right)
Segment A PRR

MP	Remarks
0.00	Jct. with 35-3E-29.00. Begin road renovation which includes roadside brushing and chipping; blading, watering, and rolling; replacing culverts; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; constructing AWDs; and cleaning entire ditch line. Prune small trees from M.P. 0.40 to M.P. 1.77 rather than cutting trees down. Spot rock where designated in work list. Crushed aggregate stock piles are located on Exhibit C-2 maps.
0.01	Existing 24" culvert, draw.
0.09	Place 40 cubic yards of crushed rock. This rock should be used to cap culvert replacement as well.
0.10	Replace existing 18" cross drain culvert with an 18" x 34' CSP with a 2 cubic yard splash pad. Culvert installation shall be a Type 3 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.30	Construct AWD. Cap armored water dip with 20 cubic yards of government furnished crushed aggregate rock.

0.33 End segment A.

Segment B (Private) ASC

MP	Remarks
0.33	Continue road renovation and roadside brushing.
0.40	Cattle Guard.
0.52	Existing 18” culvert, cross drain.
0.58	Jct. with private road left. Existing 18” culvert, cross drain.
0.76	Existing 18” culvert, draw.
0.85	Existing 12” culvert, cross drain.
0.94	Jct. with private road left. End segment B.

Segment C (Private) ASC

MP	Remarks
0.94	Continue road renovation and roadside brushing.
1.13	Jct. with private road left.
1.18	Jct. with private road right.
1.28	Jct. with private road left.
1.56	Jct. with private road left.
1.77	End segment E. End road renovation and roadside brushing.

Road 35-3E-31.01 (Bowen Creek Lower Spur Right) ASC

MP	Remarks
0.00	Jct. with 35-3E-29.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch line where needed. Cap all culvert replacements with 20 cubic yards of government furnished crushed aggregate rock. Crushed aggregate stock piles are located on Exhibit C-2 maps.
0.07	Replace existing 18” cross drain culvert with a 24” x 36’ CSP with a 5 cubic yard splash pad. Culvert installation shall be a Type 1 (refer to Exhibit C-7; Culvert Installation Details Sheet for installation type).
0.15	Existing 18” culvert, cross drain.
0.20	Existing 18” culvert, cross drain.
0.22	Jct. with 35-3E-31.04 right. End road renovation and roadside brushing.

Road 35-3E-31.03 (Upper Bowen Original) ASC

MP	Remarks
0.00	Jct. with 35-3E-29.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning entire ditch line. Spot rock where designated in work list.
0.09	Existing 18” culvert, cross drain.
0.22	Existing 18” culvert, cross drain.
0.40	Existing 18” culvert, cross drain.
0.43	Place 30 cubic yards of crushed rock to smooth road surface.
0.61	Existing 30” culvert, draw.
0.78	Place 30 cubic yards of crushed rock to smooth road surface.
0.86	Existing 18” culvert, cross drain.
0.96	Existing 24” culvert, draw.

1.09 Existing 18" culvert, cross drain.
1.10 Jct. with 35-3E-31.06 left.
1.19 Existing 18" culvert, cross drain. Clean culvert outlet ditch approximately 30' to drain water away from culvert outlet.
1.30 Existing 18" culvert, cross drain.
1.36 Existing 18" culvert, cross drain.
1.37 Place 20 cubic yards of crushed rock to smooth road surface.
1.43 Existing 18" culvert, cross drain.
1.47 End road renovation and roadside brushing.

Road 35-3E-31.04 (Bowen Creek Spur) ASC

MP	Remarks
0.00	Jct. with 35-3E-31.01. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; cleaning and/or enlarging culvert catch basins; and cleaning ditch line where needed.
0.01	Existing 18" culvert, draw.
0.19	Existing 18" culvert, cross drain.
0.27	Existing 36" culvert, draw.
0.35	Existing 18" culvert, cross drain.
0.45	Existing 18" culvert, cross drain.
0.54	Jct. with unnumbered spur right.
0.73	Existing 18" culvert, cross drain.
0.82	Existing 18" culvert, cross drain.
0.91	Existing 18" culvert, draw.
0.97	Jct. with 35-3E-31.07. End road renovation and roadside brushing.

Road 35-3E-31.06 (Bowen Creek RW) ASC

MP	Remarks
0.00	Jct. with 35-3E-31.03. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; and cleaning and/or enlarging culvert catch basins. Prune small trees from M.P. 0.26 to M.P. 0.35 rather than cutting trees down.
0.09	Clean ditch out left.
0.26	Property line.
0.35	Jct. with 35-2E-24.00 (left, right). End road renovation and roadside brushing.

Road 35-3E-31.07 NAT

MP	Remarks
0.00	Jct. with 35-3E-31.04. Begin road renovation and roadside brushing. Decommission road after use which includes ripping, water barring every 150', barricading, seeding, and mulching.
0.02	Existing barricade. Re-barricade after use.
0.16	End of road renovation and roadside brushing.

Road 36-2E-3.01 (Gardner Butte Road) ASC

MP	Remarks
0.00	Jct. with 36-2E-7.00. Begin road renovation which includes roadside brushing; blading, watering, and rolling; cleaning all culvert inlets and outlets; and cleaning and/or enlarging culvert catch basins.
0.30	Jct. with PVT road right.
0.40	Salt Creek Quarry left. End road renovation and roadside brushing.

Road 36-2E-7.00 BST

MP	Remarks
3.55	Jct. with 36-2E-3.01. Begin roadside brushing.
7.96	Jct. with 35-3E-29.00 left. End roadside brushing.

DOUBLE BOWEN TIMBER SALE
Temp Route Work List

Temp Route 19-6 T35S-R03E-Section 19 NAT. off of 35-3E-19.00 (Aqueduct Road)
(Reconstruct. Decommission)

MP	Remarks
0.00	Jct. 35-3E-19.00. Begin temp route reconstruction. Decommission after use (rip, water bar, seed, mulch, and barricade).
0.01	Construct barricade after use.
0.15	End temp route reconstruction.

Temp Route 15-2 T35S-R2E-Section 15 NAT. off of 35-2E-15.00 (Hukill Creek)
(Construct. Decommission. Barricade)

MP	Remarks
0.00	Jct. 35-2E-15.00. Begin temp route construction. Decommission after use (rip, water bar every 150', seed, mulch, and barricade).
0.01	Construct barricade after use.
0.33	Proposed landing location. End temp route construction.

Temp Route 23-1 T35S-R2E-Section 23 NAT. off of 35-2E-23.03
(Construct. Decommission. Barricade)

MP	Remarks
0.00	Jct. 35-2E-23.03. Begin temp route construction. Decommission after use (rip, water bar, seed, mulch, and barricade).
0.05	Proposed landing location. End temp route re-construction.

TIMBER SALE ROAD SPECIFICATIONS

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TIMBER SALE ROAD SPECIFICATIONS

GENERAL – 100

101 - Prework Conference(s):

A prework conference will be held prior to the start of new construction, improvement, renovation, quarry development, and surfacing operations. The Purchaser shall request the conference at least 48 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). A prework conference shall be scheduled at the worksite for quarry development.

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.

TIMBER SALE ROAD SPECIFICATIONS

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 sidecasting material outside of the road prism.

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

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

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

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

TIMBER SALE ROAD SPECIFICATIONS

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.

TIMBER SALE ROAD SPECIFICATIONS

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 - 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

TIMBER SALE ROAD SPECIFICATIONS

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

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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.

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

103 - Compaction equipment shall meet the following requirements:

103f - Vibratory roller. The drum diameter shall be not less than 48 inches, the drum

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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.

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201a - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions from borrow pits, quarries, channel changes, stockpile sites, etc., in accordance with these specifications 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.

202b - Where clearing limits for borrow pits or quarries have not been staked or shown on the plans, the limits shall extend (10) feet back of the top of the cut slope and (5) feet outside of the outside slope lines.

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 and 202b as shown on the plans and as staked on the ground.

203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.

203c - Disposal of logs from private timber cleared within the limits established as staked on the ground shall consist of decking at a location designated by the Authorized Officer.

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 Subsection 204a 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.

205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.

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206 - Clearing and grubbing debris shall be disposed of by scattering in accordance with Subsection 210 and at the following road locations:

Road No.	From Sta./M.P.	To Sta./M.P.
Temp Spur 15-2	0+00	17+42
Temp Spur 19-6	0+00	7+92
Temp Spur 23-1	0+00	2+64

206a - Notwithstanding Subsections 204, 204a, and 205, clearing and grubbing debris resulting from landing construction, shall be placed at and shall not be covered with excavated material. Location of disposal site(s) will be determined by the Authorized Officer.

210 - Disposal of clearing and grubbing debris shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.

210a - Disposal of clearing and grubbing debris on non-government property by scattering this material outside of clearing limits will be permitted provided the Purchaser obtains a written permit from the property owner on whose property the disposal is to be made. The Purchaser shall furnish the Authorized Officer a certified copy of the permit and a written release from the property owner absolving the Government from responsibilities in connection with the disposal of debris on said property.

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.

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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.

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

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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 (12) inches in depth.

306 - Layers of embankment material as specified under Subsections 305a and 305b, shall be moistened or dried to a uniform optimum moisture content suitable for maximum density and compacted to full width with compacting equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i.

306f - Compaction of embankment layers placed as specified under Subsection 305b shall be accomplished by routing construction equipment over full width of embankment structures.

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.

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.

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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.

318a - Selected borrow or selected roadway excavation material shall be uniformly spread on the roadbed to a depth which, after compaction, will provide the depth shown on the plans. Compaction shall be accomplished by routing construction and hauling equipment over the full width of the roadbed.

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. Such materials shall be disposed of in accordance with Subsection 321c. Materials not disposed of in this manner shall be retrieved and disposed of at the Purchaser's expense and at the direction of the Authorized Officer.

321c - End-dumping will be permitted for the placement of excess materials under Subsection 321 in designated disposal areas or within areas approved by the Authorized Officer. Watering, rolling, and placement in layers are required. Materials placed shall be sloped, shaped, and otherwise brought to a visible condition acceptable to the Authorized Officer.

323 - In the construction of channel changes and stream-crossing embankment sections, natural stream flow shall be maintained unless otherwise provided.

324 - Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of (2) feet on the uphill side.

327 - The finished grading shall be approved in writing by the Authorized Officer for the total project. The Purchaser shall give the Authorized Officer (3) days notice prior to final inspection of the grading operations.

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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, full round downspout(s), and other erosion control device(s) 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 from established construction stakes and upon installation of the appurtenance structures. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule.

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

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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 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 the 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.

413 - Pipe culverts and pipe-arch culverts shall be bedded on a selected granular, crushed rock material in accordance with Section 1200 gradation (E-1), 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.

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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 (E-1), 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, fill material conforming to the requirements of Subsection 416 shall be placed and compacted under the haunches of the pipe, and shall be brought up evenly and simultaneously on both sides of the pipe to (1) foot above the pipe, in layers not exceeding (6) inches in depth and (1) pipe diameter/span, or a minimum of (2) feet in width each side of, and adjacent to, the full length of the pipe barrel. Each layer shall be moistened or dried to an uniform moisture content suitable for maximum compaction and immediately compacted by approved hand or pneumatic tampers.

419 - The pipe culverts after being bedded and backfilled as required by these specifications shall be protected by a (2)-foot cover of fill before heavy equipment is permitted to cross the drainage structures. Removal of the protection fill shall be as directed by the Authorized Officer.

423 - Construction of catch basins and ditch dams conforming to lines, grades, dimensions and typical diagrams shown on the plans, shall be required for grade culverts and culverts at the following locations:

Road No.	M.P.
35-2E-15.00	0.36
	0.73
	0.81
35-3E-7.01 A2	0.54
	0.67
	0.83
	0.86

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35-3E-29.00 B	0.92
35-3E-29.00 D1	2.29
35-3E-29.00 D2	3.21
	3.42
35-3E-29.00 D3	3.73
35-3E-29.01	1.31
	1.34
	1.41
	1.46
	1.67
35-3E-31.00 A	0.10
35-3E-31.01	0.07

424 - Construction of splash pads energy dissipaters conforming to lines, grades, dimensions and typical diagram shown on the plans, shall be required for culverts at the following locations:

Road No.	M.P.
35-2E-15.00	0.36
	0.73
	0.81
35-3E-7.01 A2	0.54
	0.67
	0.83
	0.86
35-3E-29.00 B	0.92
35-3E-29.00 D1	2.29
35-3E-29.00 D2	3.21
	3.42
35-3E-29.00 D3	3.73

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35-3E-29.01	1.31
	1.34
	1.41
	1.46
	1.67
35-3E-31.00 A	0.10
35-3E-31.01	0.07

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 within three (3) working days of completion of the culvert replacement work for each road.

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 in a manner that will avoid damage to adjacent property. 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, as shown on the plans, and as marked on the ground with stakes.

502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.

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504 - Existing road surface shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i and in accordance with the following table:

Road No.	From Sta./M.P.	To Sta./M.P.	Total Miles	Subsection 504
35-2E-10.00 A-C	0.00	1.18	1.18	504a
35-2E-10.01 A	0.00	0.50	0.50	504a
35-2E-11.01	0.00	0.28	0.28	504a
35-2E-13.00 A-D	0.00	4.49	4.49	504a
35-2E-13.02 A-B	0.00	0.68	0.68	504a
35-2E-13.03 A	0.00	0.29	0.29	504a
35-2E-13.04	0.00	0.09	0.09	504a
35-2E-13.06	0.00	0.25	0.25	504a
35-2E-13.08	0.00	0.12	0.12	504a
35-2E-13.09	0.00	0.31	0.31	504a
35-2E-15.00	0.00	1.03	1.03	504a
35-2E-15.01	0.00	0.27	0.27	504a
35-2E-15.02	0.00	0.03	0.03	504a
34-2E-24.00 A-B	0.00	2.08	2.08	504a
35-2E-24.01 A-B	0.00	1.40	1.40	504a
35-2E-25.00	0.00	1.44	1.44	504a
35-2E-25.01 A	0.00	0.25	0.25	504a
35-3E-7.01 A1-A2	0.00	1.12	1.12	504a
35-3E-19.00	0.00	0.26	0.26	504a
35-3E-29.00 A-E	0.00	4.68	4.68	504a
35-3E-29.01	0.00	1.83	1.83	504a
35-3E-31.00 A-B	0.00	1.77	1.77	504a
35-3E-31.01	0.00	0.22	0.22	504a
35-3E-31.03	0.00	1.47	1.47	504a
35-3E-31.04	0.00	0.97	0.97	504a
35-3E-31.06	0.00	0.35	0.35	504a
36-2E-3.01	0.00	0.40	0.40	504a

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504a - Minimum compaction required shall be 1 hour of continuous rolling for each (3) stations of road, or fraction thereof, as measured along the centerline per layer of material.

506 - The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.

507 - Existing and new drainage structures at the following locations:

Road No.	M.P.
35-2E-15.00	0.36
	0.73
	0.81
35-3E-7.01 A2	0.54
	0.67
	0.83
	0.86
35-3E-29.00 B	0.92
35-3E-29.00 D1	2.29
35-3E-29.00 D2	3.21
	3.42
35-3E-29.00 D3	3.73
35-3E-29.01	1.31
	1.34
	1.41
	1.46

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	1.67
35-3E-31.00 A	0.10
35-3E-31.01	0.07

shall be replaced 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 at the following locations:

Road No.	From M.P.	To M.P.	Total Miles	Brush Disposal Type
35-2E-10.00 A-B	0.00	1.18	1.18	Scatter
35-2E-10.01 A	0.00	0.50	0.50	Scatter
35-2E-11.01	0.00	0.28	0.28	Scatter
35-2E-13.00 A-D	0.00	4.49	4.49	Scatter
35-2E-13.02 A-B	0.00	0.68	0.68	Scatter
35-2E-13.03 A-B	0.00	0.39	0.39	Scatter
35-2E-13.04	0.00	0.09	0.09	Scatter
35-2E-13.05	0.00	0.21	0.21	Scatter
35-2E-13.06	0.00	0.25	0.25	Scatter
35-2E-13.08	0.00	0.12	0.12	Scatter
35-2E-13.09	0.00	0.31	0.31	Scatter
35-2E-15.00	0.00	1.03	1.03	Chip
35-2E-15.01	0.00	0.27	0.27	Chip
35-2E-15.02	0.00	0.03	0.03	Chip
35-2E-24.00 A-B	0.00	2.08	2.08	Scatter
35-2E-24.01 A-B	0.00	1.40	1.40	Scatter
35-2E-25.00	0.00	1.44	1.44	Scatter
35-2E-25.01 A-B	0.00	0.60	0.60	Scatter
35-3E-7.01 A1-A2	0.00	1.12	1.12	Scatter
35-3E-7.02	0.00	0.35	0.35	Scatter

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35-3E-7.03	0.00	0.05	0.05	Scatter
35-3E-19.00	0.00	0.26	0.26	Scatter
35-3E-29.00 A-E	0.00	4.68	4.68	Scatter
35-3E-29.01	0.00	1.83	1.83	Scatter
35-3E-31.00 A-C	0.00	1.77	1.77	Chip
35-3E-31.01	0.00	0.22	0.22	Scatter
35-3E-31.03	0.00	1.47	1.47	Scatter
35-3E-31.04	0.00	0.97	0.97	Scatter
35-3E-31.06	0.00	0.35	0.35	Scatter
35-3E-31.07	0.00	0.16	0.16	Scatter
36-2E-3.01	0.00	0.40	0.40	Scatter
36-2E-7.00	3.55	7.96	4.41	Scatter

shall be removed by cutting and disposed of in accordance with Subsection 2100 of these specifications.

509 - The finished grading shall be approved in writing by the Authorized Officer (3) days prior to surfacing operations. The Purchaser shall give the Authorized Officer (3) days notice prior to final inspection of the grading operations.

WATERING - 600

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

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

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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 approved for placing screened rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans.

902 - Screened rock materials used in this work shall be obtained from the sources shown on the plans. Development and mining of such sources shall be in accordance with Subsection 1602.

902a - Screened rock materials to be used in this work may be obtained from a source selected by the Purchaser, at his option, providing the rock materials furnished comply with these specifications and the source is approved in writing by the Authorized Officer prior to use.

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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	**100**			
3 inch	**95-100**			
2 inch				
1-1/2 inch				
1 inch				
No. 4	**11-44**			
No. 200	**2-15**			

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

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equal thickness.

906a - Screened rock materials used to repair or reinforce a soft, muddy, frozen, yielding, or rutted subgrade(s) 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 approved for placing crushed rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road at the purchaser's expense.

1202 - Crushed rock materials used in this work shall consist of quarry rock, stone, gravel, or other approved materials obtained from source shown on the plans. Development and mining of such source shall be in accordance with Subsection 1602 of these specifications.

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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**	C-1	D	D-1	E	E-1
1-1/2-inch	**100**					
1-inch	**-**					
3/4-inch	**50-90**					
1/2-inch	**-**					
No. 4	**25-50**					
No. 8	**-**					
No. 30	**-**					
No. 40	**5-25**					
No. 200	**2-15**					

1204a - The Purchaser shall be required to take one sample for each (1,000) cubic yards of crushed rock material to be utilized , using AASHTO sampling procedures. The Purchaser shall submit samples to a certified lab or perform testing for gradation requirements using AASHTO T 11 and AASHTO T 27 testing procedures. Each sample and the results of Purchaser testing shall be made available to the Authorized Officer within 24 hours of sampling. The Purchaser shall provide test results for the first (500) cubic yards produced prior to commencing production crushing and hauling.

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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.

1209 - Shaping and compacting of roadbed shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsection 500 for placing on the roadbed. 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.

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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 (6) passes over each full-width layer, or fraction thereof.

1215 - The Purchaser is authorized to remove crushed rock material, from BLM stockpiles for placement on **culvert replacements** in accordance with the requirements and details shown on the plans and as follows:

Stockpile No.	Willamette Meridian			Available Cu. Yds.	Road No.	M.P.
	Sec.	T.	R.			
1	13	36S	02E	3,000	36-2E-7.00	11.25
2	03	36S	02E	3,000	36-2E-7.00	5.26
3	03	36S	02E	750	36-2E-3.01	0.25
4	19	34S	03E	3,000	34-3E-19.03	0.20
5	19	35S	03E	100	35-3E-29.01	0.44
6	31	35S	03E	100	35-3E-29.00	1.80
7	31	35S	03E	150	35-3E-29.00	2.79
8	01	36S	02E	50	35-3E-29.00	4.68

Approximately (340) cubic yards of additional crushed rock material required to complete the surfacing of culvert replacements shall be furnished by the Purchaser in accordance with these specifications and as shown on the plans. The Purchaser shall maintain records of material removed from each of the stockpile sites designated above. These records shall be submitted to the Authorized Officer upon completion of the surfacing operation.

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SLOPE PROTECTION - 1400

1401 - This work shall consist of furnishing, hauling, and placing stone materials for culvert replacement 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.):

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

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

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1405 - Rip rap shall conform to the following gradations:

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
3	**14-16**	**21**	**100**
	10-14	**18**	**80**
	5-10	**12**	**50**
	0-5	**6**	**10**
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.

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

QUARRY AND BORROW PIT DEVELOPMENT - 1600

1601 - This work shall consist of quarry development in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.

1602 - The designated rock quarry site is located at the following location:

Willamette Meridian			
Subdivision	Sec.	T.	R.
NW1/4NW1/4	03	36S	02E

shall be developed and mined in strict accordance with these specifications and the mining and reclamation plan shown on the plans.

1603 - If the Purchaser elects to use a rock source other than the designated source, the rock material produced shall comply with applicable sections of these specifications. If the alternate source is located on BLM ownership and a current BLM plan is not available, a development, mining, and reclamation plan shall be prepared by the Purchaser, and submitted for approval by the Authorized Officer. Development, mining and reclamation work shall be in accordance with the approved plan and 1600 specifications.

1604 - If the designated source proves insufficient as to quantity and quality of the required rock material, the Purchaser shall, when ordered in writing by the Authorized Officer, move his operation to an alternate materials source as selected by the Authorized Officer. Development and extraction work on the alternate source shall be in accordance with the mining plans. An equitable adjustment will be made in the contract price.

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1605c - The operation of equipment related to the production of rock aggregate and quarry operations shall be confined to the quarry operations area.

1607b - Slash, stumps, logs, and other organic debris shall be piled as directed by the Authorized Officer.

1609 - Overburden, trees, stumps, logs, and loose rock shall be removed back from the edge of working quarry faces for a minimum distance of (20) feet.

1610 - Waste disposal sites shall be selected and prepared to minimize erosion and establish conditions conducive to vegetative growth. Disposal areas shall be seeded and mulched in accordance with the requirements set forth in Section 1800 of these specifications.

1611 - The Purchaser shall notify the Authorized Officer in writing at least (5) days prior to commencing quarry operations.

1611a - The Purchaser shall not commence production drilling or crushing until the Authorized Officer has inspected and approved the site development in writing.

1612 - The Purchaser shall notify MSHA (Mining Safety and Health Administration) by standard form or telephone, and in accordance with part 56, Chapter 1 of Title 30 Code of Federal Regulations (CFR), of what date he intends to commence, terminate, and/or temporarily close down operations of the quarry. Notice shall be submitted a minimum of 10 days prior to the proposed date of the action to be taken. Notification shall be submitted to:

Mining Safety and Health Administration
Albany, OR 97321
or
Mining Safety and Health Administration
Bellevue, WA 98004

The Purchaser shall also prepare and submit to MSHA the quarterly Employment Report and Injury and Illness Report for the mining operation.

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1613 - The Purchaser shall comply with local and State Safety Codes covering quarrying operations, warning signs, seismic monitoring, and traffic control. All quarrying operations will be conducted by appropriately licensed personnel; i.e. blasting and powder handler's license, etc.

1613a - The Purchaser shall submit a written blasting plan or modification of the plan to the Authorized Officer for the Salt Creek Quarry, 7 working days prior to the start of drilling. The plan shall include: a) plan view of delay pattern; b) cross section of a typical loaded hole; c) types of explosives; d) powder factor; e) burden spacing, hole diameter, depth of holes, and depth of subdrill; and f) number of lifts. Acceptance of the blasting plan does not relieve the Purchaser of the liability or responsibility for the results of the blasting.

1613b - Controlled blasting techniques shall be employed during production blasting to contain blasted rock.

1613c - The Purchaser shall submit to the Authorized Officer a blasting log showing "as built" data and a brief summary of the blasting results, within 10 days after blasting.

1614 - Rock materials extracted from the quarry walls shall be utilized or disposed of as shown on the plans. Secondary blasting or other methods shall be employed to reduce (50) percent of the quarried rock to a maximum (24) inches in any dimension.

1615 - Operations on the quarry site shall be so conducted that, both during and after completion of work, erosion will be minimized and sediment will not enter streams or other bodies of water. Waste or disposal areas and quarry access roads shall be located, constructed, and maintained in a manner that will prevent sediment from entering live streams or other bodies of water. Noncombustible debris and silt-laden water material resulting from the quarry operations shall be placed in such waste or disposal areas as directed by the Authorized Officer.

1616 - Upon completion of quarrying operations, overburden and waste materials shall be disposed of in accordance with requirements of the approved reclamation plan or in a manner approved in writing by the Authorized Officer.

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1617 - Upon completion of quarrying operations, required site reclamation measures shall be performed to the satisfaction of the Authorized Officer, including but not limited to the following:

(a) Permanently seal or fill unused drill holes as directed by the Authorized Officer. Follow State of Oregon Department of Water Resources guidelines and requirements.
(b) Construct waterbars and take other erosion control measures as directed by the Authorized Officer.
(c) Remove blockages from drainage systems, streams, and waterways, and restore streams and waterways to their original courses. Follow State of Oregon guidelines and requirements.
(d) Erect barricades on quarry access roads and existing rock/earthen berm on top of quarry as directed by the Authorized Officer.
(e) Complete required site-reclamation measures within 14 days after final cessation of quarrying operations.
(f) Clear quarry benches and scale wall of loose or dislodged shot material and move to a designated location within the quarry.

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 **10,890** square feet (0.25 acres) after October 1 without prior approval by the Authorized Officer.

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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 10,890 square feet (0.25 acres) after October 1 without prior approval by the Authorized Officer.

1707 - Completed and partially completed segments of roads at the following locations:

Road No.	From Sta./M.P.	To Sta./M.P.
Temp Spur 15-2	0+00	17+42
Temp Spur 19-6	0+00	7+92
Temp Spur 23-1	0+00	2+64
35-3E-31.07	0.00	0.16

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

1708 - Newly constructed roads to be carried over the winter period, shall be blocked to vehicular traffic.

1708a - Road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway using water bars, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Portions of roads not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.

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

SOIL STABILIZATION – 1800

1801 - This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications. This work is required for road acceptance under Section 18 of this contract.

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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 Sta./M.P.	To Sta./M.P.
35-2E-13.05 (after decom)	0.00	0.21
35-2E-23.03 (after decom)	0.00	0.34
35-3E-7.02 (after decom)	0.00	0.35
35-3E-7.03 (after decom)	0.00	0.05
35-3E-31.07 (after decom)	0.00	0.16
Temp Spur 15-2 (after decom)	0+00	17+42
Temp Spur 19-6 (after decom)	0+00	7+92
Temp Spur 23-1 (after decom)	0+00	2+64

1802a - Soil stabilization work consisting of seeding and mulching shall be performed on culvert replacements, disturbed areas, landings, and disposal sites in accordance with these specifications and as shown on the plans.

1803 - Soil stabilization work as specified under Subsections 1802 and 1802a shall be performed during the following seasonal periods:

From: September 15	To: October 31 (of the same year)

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

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

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

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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 Subsections 1815 and 1815b.

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 4.60 acres designated for treatment as shown on the plans and as specified under Subsections 1802 and 1802a, a mixture of grass seed and mulch material at the following rate of application:

a. Two Stage:

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

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

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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.

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 of this exhibit, at designated locations as shown in the plans.

2102 - Roadside brushing may be performed with mechanically with self powered, self-propelled equipment or manually with hand tools, including chain saws.

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2103 - Vegetation cut manually or mechanically less than **(**6**)** inches in diameter 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 shoulder(s) and the ditch centerline and such vegetation shall be cut to a maximum height of (1) inch above the ground and running surface. Limbs below the (1) inch area will be severed from the trunk. Sharp pointed ends will not be permitted. Cuts shall be parallel to the ground line or running surface.

2104 - Trees in excess of (6) inches in diameter at D.B.H. shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of (14) feet above the running surface of the roadway on cut and fill slopes, within the road prism-variable distance. Limbs shall be cut to within (1) inch of the trunk to produce a smooth vertical face. Removal of trees larger than (6) inches in diameter for sight distance or safety may be directed by the Authorized Officer.

2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within (14) feet in elevation above the running surface shall be cut, to within (1) 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. 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

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remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer. Roadside brushing shall be accomplished as shown on the plans and as listed below:

Road No.	From M.P.	To M.P.	Total Miles	Brush Disposal Type
35-2E-10.00 A-B	0.00	1.18	1.18	Scatter
35-2E-10.01 A	0.00	0.50	0.50	Scatter
35-2E-11.01	0.00	0.28	0.28	Scatter
35-2E-13.00 A-D	0.00	4.49	4.49	Scatter
35-2E-13.02 A-B	0.00	0.68	0.68	Scatter
35-2E-13.03 A-B	0.00	0.39	0.39	Scatter
35-2E-13.04	0.00	0.09	0.09	Scatter
35-2E-13.05	0.00	0.21	0.21	Scatter
35-2E-13.06	0.00	0.25	0.25	Scatter
35-2E-13.08	0.00	0.12	0.12	Scatter
35-2E-13.09	0.00	0.31	0.31	Scatter
35-2E-15.00	0.00	1.03	1.03	Chip
35-2E-15.01	0.00	0.27	0.27	Chip
35-2E-15.02	0.00	0.03	0.03	Chip
35-2E-24.00 A-B	0.00	2.08	2.08	Scatter
35-2E-24.01 A-B	0.00	1.40	1.40	Scatter
35-2E-25.00	0.00	1.44	1.44	Scatter
35-2E-25.01 A-B	0.00	0.60	0.60	Scatter
35-3E-7.01 A1-A2	0.00	1.12	1.12	Scatter
35-3E-7.02	0.00	0.35	0.35	Scatter
35-3E-7.03	0.00	0.05	0.05	Scatter
35-3E-19.00	0.00	0.26	0.26	Scatter
35-3E-29.00 A-E	0.00	4.68	4.68	Scatter
35-3E-29.01	0.00	1.83	1.83	Scatter
35-3E-31.00 A-C	0.00	1.77	1.77	Chip
35-3E-31.01	0.00	0.22	0.22	Scatter
35-3E-31.03	0.00	1.47	1.47	Scatter
35-3E-31.04	0.00	0.97	0.97	Scatter
35-3E-31.06	0.00	0.35	0.35	Scatter

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35-3E-31.07	0.00	0.16	0.16	Scatter
36-2E-3.01	0.00	0.40	0.40	Scatter
36-2E-7.00	3.55	7.96	4.41	Scatter

2110 - Vegetation (6) inches and smaller in diameter shall be chipped. Chips shall be scattered downslope from the roadway.

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. SEASONAL RESTRICTION - Waivers may be granted if conditions are favorable.

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

2. STREAMS:
   - All instream 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.

3. CULVERTS / CMPs:
   - When removing culverts, pull slopes back to the natural slope, or at least 2:1, 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.

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 wet weather or at stream crossings or other locations that could result in direct delivery to a water body.

5. EQUIPMENT
   - All equipment shall be washed and cleaned prior to entering BLM lands. All equipment shall be inspected by an authorized BLM representative prior to entering BLM lands.

6. PERMITS:
   - All permits required are the responsibility of the Purchaser.

7. WATER SOURCE:
   - The Purchaser is responsible for obtaining water and associated rights and permits.

8. DAMAGE:
   - The contractor shall protect and is responsible for any damage to existing telephone lines, transmission lines, fiber optic lines, fences, ditches, and other existing improvements as required in Section 14. Damage to utilities and existing improvements shall be promptly paid for or repaired to a condition which is, in the opinion of the Authorized Officer and the governing utility company, at least as good as the condition just prior to such damage.

. 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. BLM will furnish native grass seed, if available. Certified weed free straw mulch will be the responsibility of the contractor.

10. ROADSIDE BRUSHING
    - While roadside brushing, there shall be no scarring or any other damage of the tree trunk or bole allowed. All debris resulting from roadside brushing activities shall be either scattered or mechanically chipped – See Estimate of Quantities (Exhibit C-3) and Double Bowen Road Renovation Worklist (Exhibit C-14) for specific disposal types and locations. Use of Excavators for brush removal will be at the discretion of the Authorized Officer. All culvert inlets and outlets shall be brushed for a radius of 4 feet.
    - While roadside brushing through private industry lands, conifer trees at the edges of the cleared area (see cutting limit, Exhibit C-12) shall have the branches pruned rather than being felled.

11. TEMPORARY ROUTES and DISTURBED AREAS
    - 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 31st. 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 A and C shall be performed in accordance with Exhibit C.
    - Construction of temporary spur routes shall be to minimum width.
    - In cases of forecasted heavy rainfall, disturbed areas and temporary routes should be placed in a stable state that reduce exposed soils and movement of soil.

12. SALT CREEK QUARRY DEVELOPMENT
    - Oversized material that will not be broken down that can be reached by excavator from the top of the quarry shall be placed on the boulder barricade (shown on Exhibit C-13) that lies approximately 20-25’ back from the upper edge. These oversized boulders should be placed in areas that lack boulders to prevent vehicles from driving through the boulder barricade.
    -All quarry access roads shall be blocked with oversized boulders.
    -Driving across the meadow above the quarry will not be allowed unless approved by the Authorized Officer.

13. START-UP and SHUTDOWN

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

ROAD MAINTENANCE SPECIFICATIONS

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

ROAD MAINTENANCE SPECIFICATIONS

GENERAL - 3000

3001 The Purchaser shall be required to maintain all roads as shown on the Exhibit D-2 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 and 3403a.

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 place 250 cu. yds. of stockpiled aggregate conforming to the requirements in Section 1200 of Exhibit C of this contract on the roadway at locations and in the amounts designated by the Authorized Officer.

Stockpiled aggregate shall be obtained from the following BLM stockpiles:

ROAD MAINTENANCE SPECIFICATIONS

Stockpile No.	Willamette Meridian			Available Cu. Yds.	Road No.	M.P.
	Sec.	T.	R.			
1	13	36S	02E	3,000	36-2E-7.00	11.25
2	03	36S	02E	3,000	36-2E-7.00	5.26
3	03	36S	02E	750	36-2E-3.01	0.25
4	19	34S	03E	3,000	34-3E-19.03	0.20

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 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

ROAD MAINTENANCE SPECIFICATIONS

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.

ROAD MAINTENANCE SPECIFICATIONS

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 31 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 preceding 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

ROAD MAINTENANCE SPECIFICATIONS

conditions are suitable for normal maintenance equipment operations as determined by the Authorized Officer.

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

OTHER MAINTENANCE - 3400

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

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

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

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

The following roads shall be watered in addition to any other roads shown in Exhibit C when directed by the Authorized Officer:

Road Number	From Sta./M.P.	to Sta./M.P.
35-2E-10.00A	0.00	0.81

ROAD MAINTENANCE SPECIFICATIONS

35-2E-13.00	0.00	1.52
35-3E-29.00 A-C	0.00	1.80
35-3E-29.01	0.00	1.25

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.

Water required under these specifications can be obtained at the locations indicated below:

Willamette Meridian

Common Name	Section	T	R	Road No.	M.P.
Bowen Creek	31	35S	03E	35-3E-29.00	1.64
S. Fk Big Butte Creek	13	35S	02E	35-2E-13.07	0.54
Prentice Road	35	35S	02E	35-2E-13.00	5.68

During drought periods when the transportation of water from the source to the roads noted above exceeds 10 miles, a reduction shall be made in the total purchase price to reflect the additional haul or the substitution of other acceptable dust palliatives in lieu of watering based on equipment rental rates from the current BLM Road Cost Guide.

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

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

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

ROAD MAINTENANCE SPECIFICATIONS

be required to maintain the conditions specified in Subsection 3403.

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

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

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

DECOMMISSIONING – 3500

3501 Decommissioning shall consist of removing cross drain and draw culverts. Work includes ripping or subsoiling, installing water bars and drain dips, placement of soil stabilization material, and blocking road from access by vehicles. This work is not 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
35-2E-13.03 B	0.29	0.39	Partial
35-2E-13.05	0.00	0.21	Partial
35-2E-23.03	0.00	0.34	Full
35-2E-25.01 B	0.25	0.60	Partial
35-3E-7.02	0.00	0.09	Full
35-3E-7.02	0.09	0.35	Partial
35-3E-7.03	0.00	0.05	Partial
35-3E-31.07	0.00	0.16	Full
Temp 19-6	0.00	0.15	Full
Temp 15-2	0+00	17+70	Full
Temp 23-1	0+00	2+64	Full

3504 Decommissioning work shall be after road use. All decommissioning work shall be performed during the following seasonal periods:

ROAD MAINTENANCE SPECIFICATIONS

From: September 15	To: October 31 (of the same year)

3505 Where draw crossing fill material is to be excavated and removed, the finished bottom of draw profile shall be re-established to its original channel grade and resulting adjacent banks shall be constructed to a 2:1 backslope ratio.

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 no longer available, remaining 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 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 Drainage and Erosion Control Detail Sheet Exhibit C-9 and at locations as shown on Exhibits D-3.

3511 Ripping or subsoiling and water barring shall be done on designated roadways, temporary roads, disturbed areas, and landings. Ripping or subsoiling shall be performed with wing-toothed rippers or excavator modified for tillage.

3513 Water bars and drain dips shall be installed across full width of roadway at spacing shown in the specifications. Water bars and drain dips shall be constructed as shown on Exhibit C-9.

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, disturbed areas, lands, cut banks, fill slopes and other areas disturbed by the purchaser's decommissioning operations in accordance with these specifications and as shown in the plans.

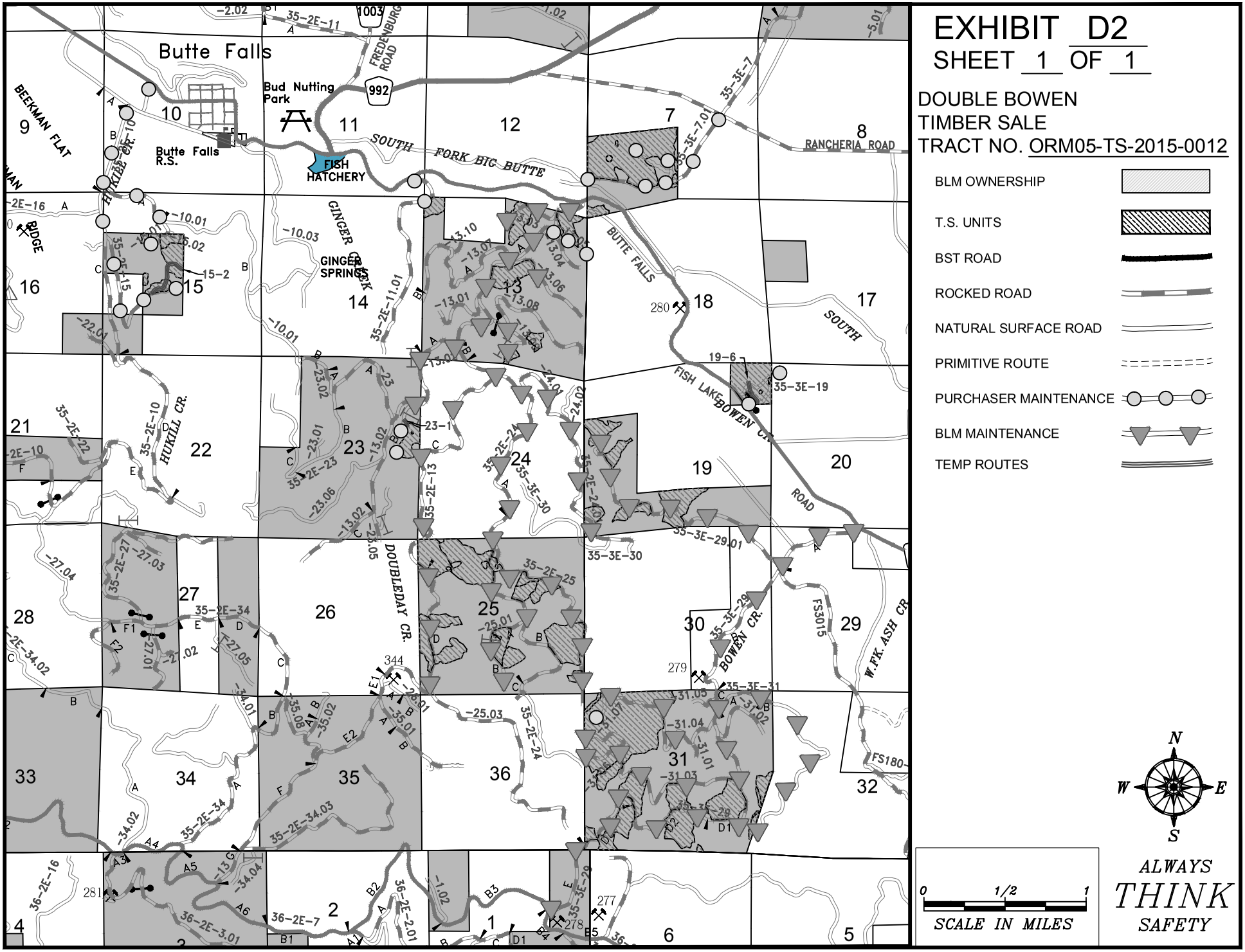


EXHIBIT D2

SHEET 1 OF 1

DOUBLE BOWEN
TIMBER SALE
TRACT NO. ORM05-TS-2015-0012

- BLM OWNERSHIP
- T.S. UNITS
- BST ROAD
- ROCKED ROAD
- NATURAL SURFACE ROAD
- PRIMITIVE ROUTE
- PURCHASER MAINTENANCE
- BLM MAINTENANCE
- TEMP ROUTES

DOUBLE BOWEN TIMBER SALE
Road Decommissioning Work List

Road 35-2E-13.03 (Little Tokyo TS Spur) ASC
Segment A ASC

MP	Remarks
0.00	Jct. with 35-2E-13.00.
0.29	End segment A.

Segment B NAT

MP	Remarks
0.29	Begin partial decommissioning which includes barricading, water barring every 150', seeding, and mulching.
0.30	Construct barricade.
0.39	End partial road decommissioning.

Road 35-2E-13.05 (Little Tokyo TS Spur 5) NAT

MP	Remarks
0.00	Jct. with 35-2E-13.04. Begin partial decommissioning which includes barricading, water barring every 150', seeding, and mulching.
0.01	Construct barricade.
0.21	Property line. Construct barricade. End road decommissioning.

Road 35-2E-23.03 NAT

MP	Remarks
0.00	Jct. with 35-2E-13.02. Begin full decommissioning road which includes barricading, ripping, water barring every 150', removing temporary culvert, seeding, and mulching.
0.02	Construct barricade.
0.14	Remove temporary culvert after use.
0.34	End road decommissioning.

Road 35-2E-25.01 (Upper Doubleday Spur)
Segment A ASC

MP	Remarks
0.00	Jct. with 35-2E-24.00.
0.25	End segment A.

Segment B NAT

MP	Remarks
0.29	Begin partial decommissioning which includes barricading, water barring where designated, seeding, and mulching.

0.31 Construct barricade.
0.33 Construct water bar.
0.36 Construct water bar.
0.42 Construct water bar.
0.46 Construct water bar.
0.51 Construct water bar.
0.55 Construct water bar.
0.58 Construct water bar.
0.60 End road decommissioning.

Road 35-3E-7.02 (Rancheria RR Grade Spur) NAT

MP	**Remarks**
0.00	Jct. with 35-3E-7.01. Begin full decommissioning which includes constructing a double barricade, ripping the first 0.09 miles, water barring where drainage allows, seeding, and mulching.
0.01	Construct double barricade.
0.09	Jct. with 35-3E-7.03 right. End road ripping. Begin partial decommissioning which includes water barring where drainage allows, seeding, and mulching.
0.35	End road decommissioning.

Road 35-3E-7.03 (Rancheria RR Grade Spur North) NAT

MP	**Remarks**
0.00	Jct. with 35-3E-7.02. Begin partial decommissioning which includes water barring where drainage allows, seeding, and mulching.
0.05	End road decommissioning.

Road 35-3E-31.07 NAT

MP	**Remarks**
0.00	Jct. with 35-3E-31.04. Begin full decommissioning which includes barricading, ripping, water barring every 150', seeding, and mulching.
0.02	Construct barricade.
0.16	End road decommissioning.

Temp Route 19-6 T35S-R03E-Section 19 NAT. off of 35-3E-19.00

MP	**Remarks**
0.00	Jct. 35-3E-19.00. Begin full decommissioning which includes, ripping, water barring where drainage allows, seeding, and mulching.
0.15	End temp route decommissioning.

Temp Route 15-2 T35S-R2E-Section 15 NAT. off of 35-2E-15.00

MP	**Remarks**
0.00	Jct. 35-2E-15.00. Begin full decommissioning which includes barricading, ripping, water barring every 150', re-contouring minor draw crossing, seeding, and mulching.
0.01	Construct barricade.
0.33	End temp route decommissioning.

Temp Route 23-1 T35S-R2E-Section 23 NAT. off of 35-2E-13.02

MP	**Remarks**
0.00	Jct. 35-2E-23.03. Begin full decommissioning which includes ripping, water barring every 150', seeding, and mulching.
0.05	End temp route decommissioning.

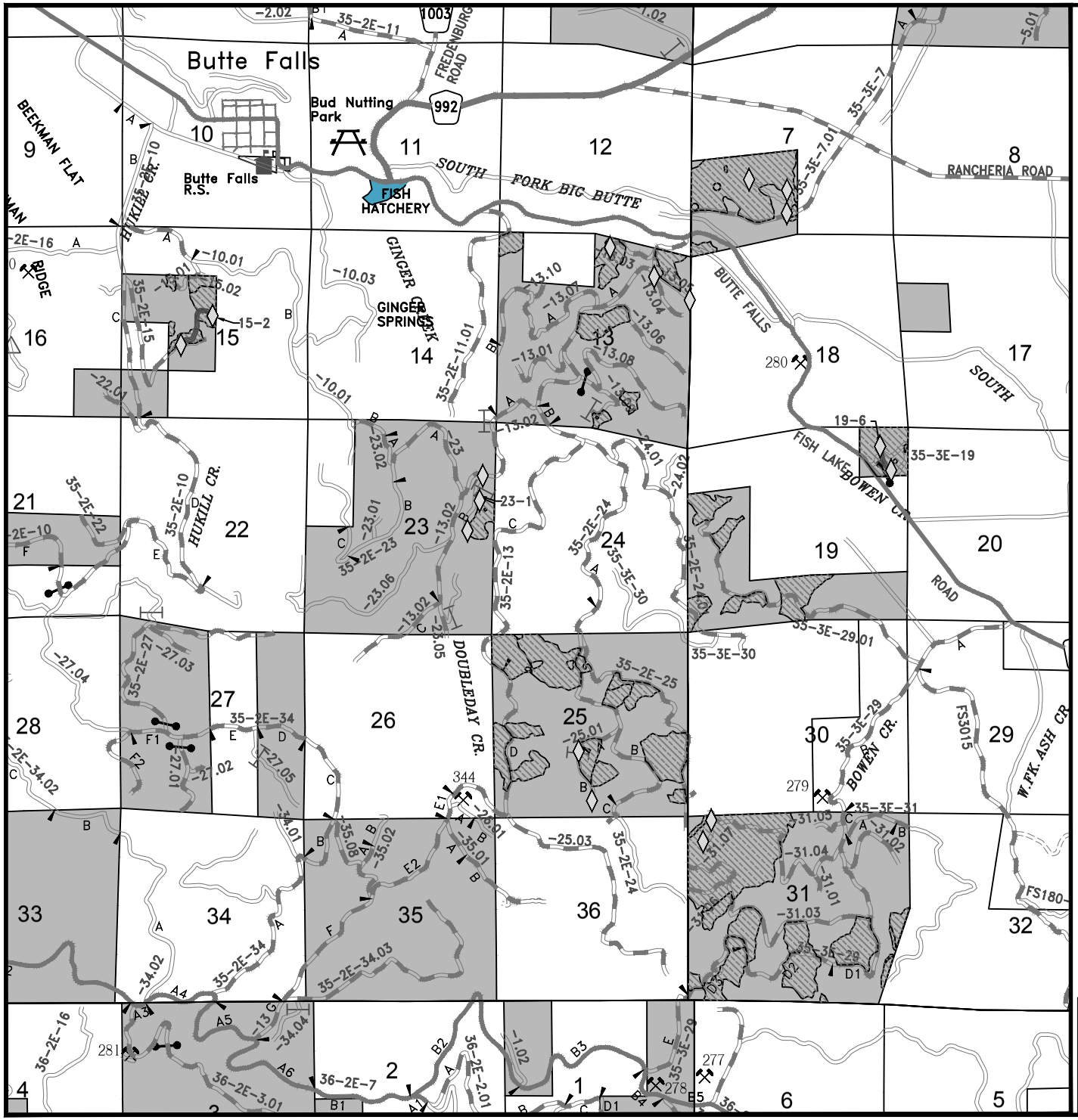


EXHIBIT D4

SHEET 1 OF 1

DOUBLE BOWEN
TIMBER SALE
TRACT NO. ORM05-TS-2015-0012

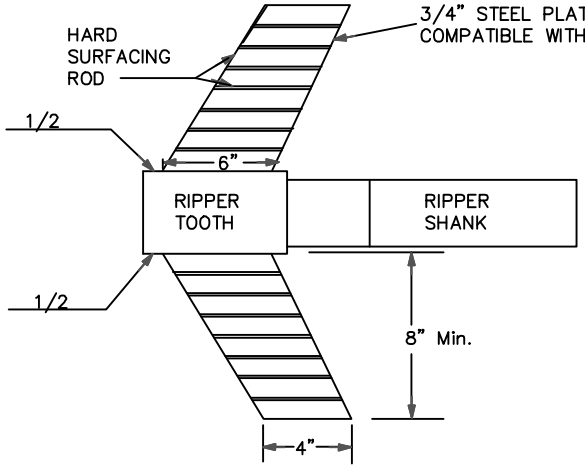
- BLM OWNERSHIP
- T.S. UNITS
- BST ROAD
- ROCKED ROAD
- NATURAL SURFACE ROAD
- PRIMITIVE ROUTE
- DECOMMISSION AFTER USE

N
W E
S

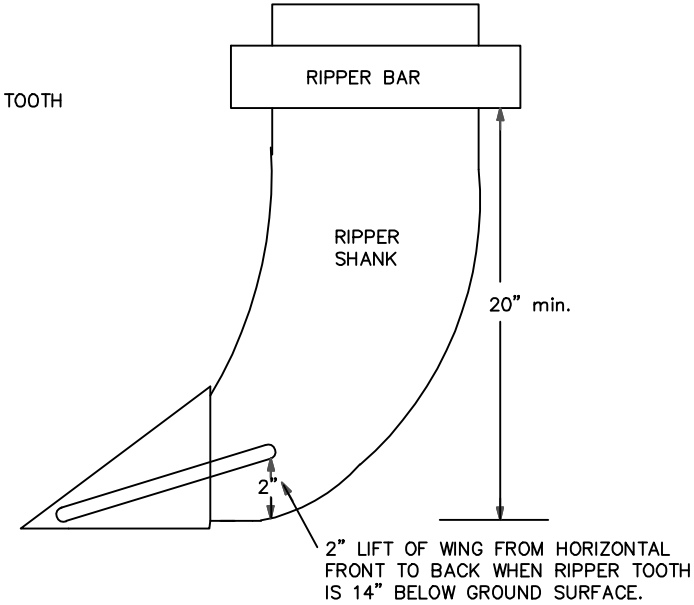
0 1/2 1
SCALE IN MILES

ALWAYS
THINK
SAFETY

EXHIBIT R
*SHEET _1_ OF _1_*

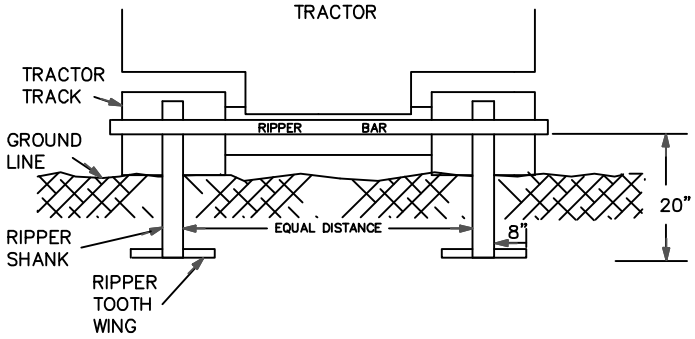


TOP VIEW



SIDE VIEW

TYPICAL RIPPER POSITION



NOTES: TYPICAL RIPPER TOOTH CONSTRUCTION

1. USE HARD SURFACING ROD FOR ALL EDGE AND SURFACE REINFORCEMENT.
2. WELD THAT ATTATCHES WINGS TO RIPPER TEETH MUST BE COMPATIBLE WITH METAL IN TEETH AND WINGS.
3. RIPPER SHANKS AND RIPPER TEETH MAY BE NEW OR USED.
4. WINGS SHALL PROVIDE TWO (2) INCHES OF LIFT FROM THE HORIZONTAL WHEN TEETH ARE EXTENDED FOURTEEN (14) INCHES BELOW THE GROUND SURFACE.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASHLAND RESOURCE AREA MEDFORD DISTRICT

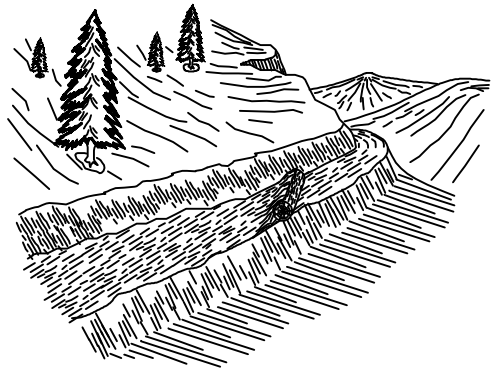
WING RIPPER DETAIL

DESIGNED _____
REVIEWED _____
APPROVED _____
CHIEF, BRANCH OF ENGINEERING OR DISTRICT ENGINEER

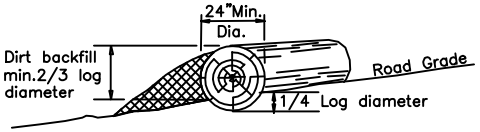
DRAWN: JWR	SCALE: NONE
DATE: October 2009	SHEET 1 OF 1
DRAWING NO.	

EXHIBIT W

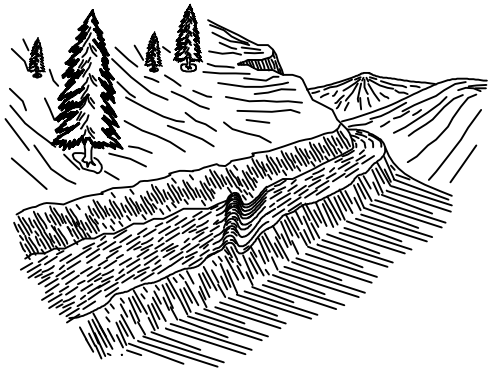
*SHEET _1_ OF _1_*



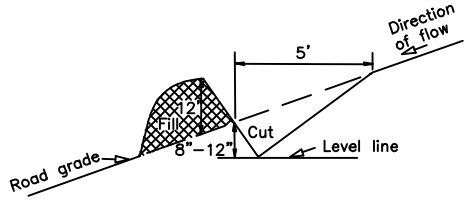
LOG BARRICADE



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

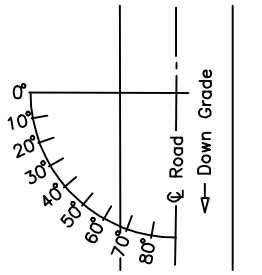


WATER BAR



1. WATER BARS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER BARS SHALL BE SKEWED 30 DEGREES
4. UPON COMPLETION OF SKIDDING LOGS, FOR THE LOGGING SEASON, EACH SKID ROAD WILL HAVE CROSS DRAINAGE CONSTRUCTED AS SHOWN ABOVE.
5. PRIOR TO BLOCKING, EACH ROAD WILL HAVE CROSS DRAINAGE CONSTRUCTED AS SHOWN ABOVE.

SKEW DIAGRAM



WATER BAR SPACING *

ROAD GRADE	LOAM OR CLAY LOAM	DECOMPOSED GRANITE
%	FEET	FEET
4–6	400	300
7–9	300**	200**
10–14	200	150
15–20	150	90
21–40	90	50
41–60	50	25

* DISTANCES ARE MAXIMUM.

** ON GRADES IN EXCESS OF 10% CONSTRUCT WATER BARS.

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

DRAINAGE & EROSION CONTROL INSTALLATION

DESIGNED	BLM
REVIEWED	
APPROVED	
DRAWN DCM	SCALE NONE
DATE October 2009	SHEET 1 OF 1
DRAWING NO.	OR-11-9113.4-8

United States of America

Department of the Interior

Bureau Of Land Management

Timber Sale Appraisal

District :	Medford	**Contract # :**	ORM05-TS-15-12
Sale Name :	Double Bowen	**Job File # :**	M11309
Sale Date :	08/27/2015	**Master Unit :**	Jackson
Appraisal Method :	16' MBF	**Planning Unit :**	Butte Falls

Contents

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	35S	2E	13	N1/2 NE1/4, SW1/4 NE1/4, NW1/4 NW1/4, SE1/4 NW1/4, SW1/4 SE1/4.
O&C	35S	2E	15	S1/2 NW1/4, NE1/4 SW1/4.
O&C	35S	2E	23	SE1/4 NE1/4, NE1/4 SE1/4.
O&C	35S	2E	25	NW1/4 NE1/4, S1/2 NE1/4, NW1/4, SW1/4, SE1/4.
O&C	35S	3E	7	SW1/4, LOT 3, LOT 4.
O&C	35S	3E	19	NE1/4 NE1/4, SW1/4 NW1/4, W1/2 SW1/4, SE1/2 SW1/4, SW1/4 SE1/4.
O&C	35S	3E	31	NW1/4, LOT 1, LOT 2, SE1/4, LOT 3, LOT 4.

Cutting Volume (16' MBF)

Unit	DF	WF	PP	IC	SP				Total	Regen	Partial	ROW
13-3	67	8	9						84	0	11	0
25-6	102	27		1					130	0	13	0
25-8	39	32							71	0	11	0
25-10	159	53		5	1				218	0	31	0
25-9	38	28			1				67	0	8	0
25-4	61	22		0	0				83	0	7	0
25-1	229	70		0					299	0	21	0
7-3	35	12	9						56	0	5	0
15-2	50	24		0					74	0	10	0
15-1	132	5	1	2					140	0	11	0
15-3	9	4							13	0	2	0
19-4	19	19	0	4					42	0	8	0
31-4	111	75		3	0				189	0	23	0
31-5	314	155		3	0				472	0	37	0
19-1	71	15		13					99	0	13	0
19-2	45	16		9					70	0	7	0
31-1	1,084	265		41	0				1,390	0	129	0
31-6	213	140		2	0				355	0	27	0
31-3	35	15		1					51	0	3	0
13-5	2	15							17	0	4	0
13-2	64	46	1						111	0	16	0
13-1	31	31							62	0	7	0
23-1	51	47							98	0	11	0
19-6	230	172	25	7	0				434	0	37	0
13-4	97	32	2		0				131	0	18	0
19-5	132	34	1	8	0				175	0	25	0
25-5	58	19							77	0	8	0
7-1	353	98	290	25	1				767	0	91	0
25-2	166	182		1	1				350	0	37	0
19-3	26	28		1					55	0	9	0
31-7	42	19		1					62	0	7	0
31-8	28	20		1					49	0	3	0
25-3	12	6							18	0	3	0
25-4A	24	13		0	0				37	0	3	0
31-2	193	42	0	1					236	0	25	0
7-2	10	6	17	3					36	0	2	0
25-7	134	83		0					217	0	19	0
13-7	6	13							19	0	3	0
15-2A	36	17		0					53	0	6	0
25-11	37	2		0					39	0	3	0
Totals	**4,545**	**1,910**	**355**	**132**	**4**				**6,946**	**0**	**714**	**0**

Logging Costs per 16' MBF

Stump to Truck	$	119.10
Transportation	$	116.43
Road Construction	$	49.30
Road Amortization	$	0.60
Road Maintenance	$	7.09

Other Allowances :

Fuels Treatment	$ 9.70
Misc	$ 0.02
Other Costs	$ 5.94
Total Other Allowances :	**$ 15.67**

Total Logging Costs per 16' MBF $ **308.19**

Utilization Centers

Center #1 : Cave Junction, Ore	98	Miles
Center #2	0	Miles
Weighted distance to Utilization Centers	98	

Length of Contract

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

Profit & Risk

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

Tract Features

Avg Log	Douglas-fir : 62 bf	All : 63 bf
Recovery	Douglas-fir : 87 %	All : 86 %
Salvage	Douglas-fir : 0 %	All : 0 %

Avg Volume (16' MBF per Acre)	10
Avg Yarding Slope	15 %
Avg Yarding Distance (feet)	450
Avg Age	120
Volume Cable	4 %
Volume Ground	96 %
Volume Aerial	0 %
Road Construction Stations	0.00
Road Improvement Stations	0.00
Road Renovation Stations	0.00
Road Decomission Stations	0.00

Cruise

Cruised By	:s, Darner, Worman, Siemer, Rentz
Date	06/01/2015
Type of Cruise	3P
County, State	Jackson, OR

Net Volume

Green (16' MBF)	6,946
Salvage (16' MBF)	0
Douglas-fir Peeler	136
Export Volume	0
Scaling Allowance ($0.50 per 16' MBF)	$3,473.00

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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	20,347	4,545	$ 479.18	$ 52.71	$ 308.19	$ 2.18		$ 120.50	$ 547,672.50
WF	8,554	1,910	$ 392.30	$ 43.15	$ 308.19	$ 6.36		$ 47.30	$ 90,343.00
PP	1,100	355	$ 325.22	$ 35.77	$ 308.19	$ 5.07		**$ 32.50**	$ 11,537.50
IC	1,404	132	$ 489.29	$ 53.82	$ 308.19			$ 127.30	$ 16,803.60
SP	33	4	$ 302.78	$ 33.31	$ 308.19			**$ 30.30**	$ 121.20
Totals	**31,438**	**6,946**							**$ 666,477.80**

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
White Fir				58.0	36.0	6.0
Douglas-fir			3.0	58.0	34.0	5.0
Ponderosa Pine				63.0	35.0	2.0
Sugar Pine					87.0	13.0
Incense-cedar				44.0	46.0	10.0

Marginal Log Volume

Species	Grade #7	Grade #8
White Fir	81	
Douglas-fir	66	
Ponderosa Pine	12	
Sugar Pine		
Incense-cedar		

Appraised By : Parks, Corey **Date :** 06/04/2015

Area Approval By : Rentz, George **Date :** 06/15/2015

District Approval By : **Date :**

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Douglas-fir	20,347	4,545	3,633	7,988
White Fir	8,554	1,910	1,539	3,328
Ponderosa Pine	1,100	355	283	590
Incense-cedar	1,404	132	104	259
Sugar Pine	33	4	3	8
Total	**31,438**	**6,946**	**5,562**	**12,173**

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
8,064	31,438	256	15.2	7,794	123,336	63

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
123,336	5,184	128,520	4.1	6,946	8,064	86 %

Douglas-fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
5,205	20,347	255	15.2	5,051	81,633	62

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
81,633	3,081	84,714	4.2	4,545	5,205	87 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
13-3		11		11
25-6		13		13
25-8		11		11
25-10		31		31
25-9		8		8
25-4		7		7
25-1		21		21
7-3		5		5
15-2		10		10
15-1		11		11
15-3		2		2
19-4		8		8
31-4		23		23
31-5		37		37
19-1		13		13
19-2		7		7
31-1		129		129
31-6		27		27
31-3		3		3
13-5		4		4
13-2		16		16
13-1		7		7
23-1		11		11
19-6		37		37
13-4		18		18
19-5		25		25
25-5		8		8
7-1		91		91
25-2		37		37
19-3		9		9
31-7		7		7
31-8		3		3
25-3		3		3
25-4A		3		3
31-2		25		25
7-2		2		2
25-7		19		19
13-7		3		3
15-2A		6		6
25-11		3		3
Totals :		**714**		**714**

Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 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 provided in Section 2, Purchaser shall be liable for the total purchase price even though the 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 the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
Douglas-fir	4,545		
White Fir	1,910		
Ponderosa Pine	355		
Incense-cedar	132		
Sugar Pine	4		
Sale Totals	**6,946**		

Unit Details (16' MB)

Unit 13-1 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	31		
White Fir	31		
Unit Totals	**62**		

Unit 13-2 **16 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	64		
Ponderosa Pine	1		
White Fir	46		
Unit Totals	**111**		

Unit 13-3 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	67		
Ponderosa Pine	9		
White Fir	8		
Unit Totals	**84**		

Unit 13-4 **18 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	97		
Ponderosa Pine	2		
Sugar Pine			
White Fir	32		
Unit Totals	**131**		

Unit 13-5 **4 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	2		
White Fir	15		
Unit Totals	**17**		

Unit 13-7 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	6		
White Fir	13		
Unit Totals	**19**		

Unit 15-1 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	132		
Incense-cedar	2		
Ponderosa Pine	1		
White Fir	5		
Unit Totals	**140**		

UNITED STATES
DEPARTMENT OF THE INTERIOR
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Unit 15-2 **10 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	50		
Incense-cedar			
White Fir	24		
Unit Totals	**74**		

Unit 15-2A **6 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	36		
Incense-cedar			
White Fir	17		
Unit Totals	**53**		

Unit 15-3 **2 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	9		
White Fir	4		
Unit Totals	**13**		

Unit 19-1 **13 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	71		
Incense-cedar	13		
White Fir	15		
Unit Totals	**99**		

Unit 19-2 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	45		
Incense-cedar	9		
White Fir	16		
Unit Totals	**70**		

Unit 19-3 **9 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	26		
Incense-cedar	1		
White Fir	28		
Unit Totals	**55**		

Unit 19-4 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	19		
Incense-cedar	4		
Ponderosa Pine			
White Fir	19		
Unit Totals	**42**		

Unit 19-5 **25 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	132		
Incense-cedar	8		
Ponderosa Pine	1		
Sugar Pine			
White Fir	34		
Unit Totals	**175**		

Unit 19-6 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	230		
Incense-cedar	7		
Ponderosa Pine	25		
Sugar Pine			
White Fir	172		
Unit Totals	**434**		

Unit 23-1 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	51		
White Fir	47		
Unit Totals	**98**		

Unit 25-1 **21 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	229		
Incense-cedar			
White Fir	70		
Unit Totals	**299**		

Unit 25-10 **31 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	159		
Incense-cedar	5		
Sugar Pine	1		
White Fir	53		
Unit Totals	**218**		

Unit 25-11 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	37		
Incense-cedar			
White Fir	2		
Unit Totals	**39**		

Unit 25-2 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	166		
Incense-cedar	1		
Sugar Pine	1		
White Fir	182		
Unit Totals	**350**		

Unit 25-3 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	12		
White Fir	6		
Unit Totals	**18**		

Unit 25-4 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	61		
Incense-cedar			
Sugar Pine			
White Fir	22		
Unit Totals	**83**		

Unit 25-4A **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	24		
Incense-cedar			
Sugar Pine			
White Fir	13		
Unit Totals	**37**		

Unit 25-5 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	58		
White Fir	19		
Unit Totals	**77**		

Unit 25-6 **13 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	102		
Incense-cedar	1		
White Fir	27		
Unit Totals	**130**		

Unit 25-7 **19 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	134		
Incense-cedar			
White Fir	83		
Unit Totals	**217**		

Unit 25-8 **11 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	39		
White Fir	32		
Unit Totals	**71**		

Unit 25-9 **8 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	38		
Sugar Pine	1		
White Fir	28		
Unit Totals	**67**		

Unit 31-1 **129 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	1,084		
Incense-cedar	41		
Sugar Pine			
White Fir	265		
Unit Totals	**1,390**		

Unit 31-2 **25 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	193		
Incense-cedar	1		
Ponderosa Pine			
White Fir	42		
Unit Totals	**236**		

Unit 31-3 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	35		
Incense-cedar	1		
White Fir	15		
Unit Totals	**51**		

Unit 31-4 **23 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	111		
Incense-cedar	3		
Sugar Pine			
White Fir	75		
Unit Totals	**189**		

Unit 31-5 **37 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	314		
Incense-cedar	3		
Sugar Pine			
White Fir	155		
Unit Totals	**472**		

Unit 31-6 **27 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	213		
Incense-cedar	2		
Sugar Pine			
White Fir	140		
Unit Totals	**355**		

Unit 31-7 **7 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	42		
Incense-cedar	1		
White Fir	19		
Unit Totals	**62**		

Unit 31-8 **3 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	28		
Incense-cedar	1		
White Fir	20		
Unit Totals	**49**		

Unit 7-1 **91 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	353		
Incense-cedar	25		
Ponderosa Pine	290		
Sugar Pine	1		
White Fir	98		
Unit Totals	**767**		

Unit 7-2 **2 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	10		
Incense-cedar	3		
Ponderosa Pine	17		
White Fir	6		
Unit Totals	**36**		

Unit 7-3 **5 Acres** **Value per Acre : $0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	35		
Ponderosa Pine	9		
White Fir	12		
Unit Totals	**56**		

Sale Volume Totals

714 **Acres** 0 **Regen** 714 **Partial** 0 **R/W** 41 **Units**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Net	16' MBF GM	16' MBF Gross	32' MBF Net	32' MBF GM	32' MBF Gross	CCF Net	CCF GM	CCF Gross
Douglas-fir	20,347	81,633	3,081	4,545	5,051	5,205	3,633	4,037	4,154	7,988	8,878	9,153
White Fir	8,554	34,072	1,463	1,910	2,171	2,264	1,539	1,758	1,830	3,328	3,755	3,912
Ponderosa Pine	1,100	4,444	586	355	425	446	283	337	355	590	698	743
Incense-cedar	1,404	3,024	38	132	143	144	104	113	114	259	284	287
Sugar Pine	33	163	16	4	4	5	3	4	4	8	9	10
Totals	**31,438**	**123,336**	**5,184**	**6,946**	**7,794**	**8,064**	**5,562**	**6,249**	**6,457**	**12,173**	**13,624**	**14,105**

Unit Totals

Unit : 13-3 **11 Acres** **0 Regen** **11 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	435	1,210	46	77	75	67
Ponderosa Pine	35	111	15	11	11	9
White Fir	59	147	6	10	9	8
Unit Totals	**529**	**1,468**	**67**	**98**	**95**	**84**

Unit : 25-6 **13 Acres** **0 Regen** **13 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	478	1,838	69	117	114	102
White Fir	138	488	21	32	31	27
Incense-cedar	10	16		1	1	1
Unit Totals	**626**	**2,342**	**90**	**150**	**146**	**130**

Unit : 25-8 **11 Acres** **0 Regen** **11 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	132	693	26	44	43	39
White Fir	120	567	24	38	36	32
Unit Totals	**252**	**1,260**	**50**	**82**	**79**	**71**

Unit : 25-10 **31 Acres** **0 Regen** **31 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	636	2,863	108	183	177	159

White Fir	271	938	40	62	60	53
Incense-cedar	63	122	2	6	6	5
Sugar Pine	7	37	4	1	1	1
Unit Totals	**977**	**3,960**	**154**	**252**	**244**	**218**

Unit : 25-9 **8 Acres** **0 Regen** **8 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	175	677	26	43	42	38
White Fir	139	500	21	33	32	28
Sugar Pine	5	33	3	1	1	1
Unit Totals	**319**	**1,210**	**50**	**77**	**75**	**67**

Unit : 25-4 **7 Acres** **0 Regen** **7 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	285	1,101	42	70	68	61
White Fir	110	398	17	26	25	22
Incense-cedar	2	6				
Sugar Pine	1	5	1			
Unit Totals	**398**	**1,510**	**60**	**96**	**93**	**83**

Unit : 25-1 **21 Acres** **0 Regen** **21 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	860	4,118	155	263	255	229
White Fir	316	1,240	53	82	79	70
Incense-cedar	1	1				
Unit Totals	**1,177**	**5,359**	**208**	**345**	**334**	**299**

Unit : 7-3 **5 Acres** **0 Regen** **5 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	197	629	24	40	39	35
White Fir	50	211	9	14	13	12
Ponderosa Pine	35	115	15	12	11	9
Unit Totals	**282**	**955**	**48**	**66**	**63**	**56**

Unit : 15-2 **10 Acres** **0 Regen** **10 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	165	896	34	57	55	50
White Fir	108	423	18	28	27	24

Incense-cedar	2	3				
Unit Totals	**275**	**1,322**	**52**	**85**	**82**	**74**

Unit : 15-1 **11 Acres** **0 Regen** **11 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	500	2,367	89	151	146	132
White Fir	27	84	4	6	5	5
Incense-cedar	36	53	1	3	3	2
Ponderosa Pine	5	14	2	1	1	1
Unit Totals	**568**	**2,518**	**96**	**161**	**155**	**140**

Unit : 15-3 **2 Acres** **0 Regen** **2 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	46	161	6	10	10	9
White Fir	21	74	3	5	5	4
Unit Totals	**67**	**235**	**9**	**15**	**15**	**13**

Unit : 19-4 **8 Acres** **0 Regen** **8 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	80	338	14	22	22	19
Douglas-fir	113	344	13	21	21	19
Incense-cedar	43	88	1	4	4	4
Ponderosa Pine	1	1				
Unit Totals	**237**	**771**	**28**	**47**	**47**	**42**

Unit : 31-4 **23 Acres** **0 Regen** **23 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	503	1,988	75	127	123	111
White Fir	371	1,330	57	88	85	75
Incense-cedar	35	68	1	3	3	3
Sugar Pine	1	3				
Unit Totals	**910**	**3,389**	**133**	**218**	**211**	**189**

Unit : 31-5 **37 Acres** **0 Regen** **37 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	1,165	5,642	213	360	349	314
White Fir	656	2,769	119	184	176	155
Incense-cedar	38	73	1	3	3	3

Sugar Pine	2	15	2			
Unit Totals	**1,861**	**8,499**	**335**	**547**	**528**	**472**

Unit : 19-1 **13 Acres** **0 Regen** **13 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	424	1,275	48	81	79	71
White Fir	54	271	12	18	17	15
Incense-cedar	135	295	4	14	14	13
Unit Totals	**613**	**1,841**	**64**	**113**	**110**	**99**

Unit : 19-2 **7 Acres** **0 Regen** **7 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	262	816	31	52	50	45
White Fir	55	288	12	19	18	16
Incense-cedar	90	202	3	10	10	9
Unit Totals	**407**	**1,306**	**46**	**81**	**78**	**70**

Unit : 31-1 **129 Acres** **0 Regen** **129 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	5,288	19,467	735	1,244	1,206	1,084
White Fir	1,215	4,727	202	315	301	265
Incense-cedar	449	939	12	45	44	41
Sugar Pine	2	8	1	1		
Unit Totals	**6,954**	**25,141**	**950**	**1,605**	**1,551**	**1,390**

Unit : 31-6 **27 Acres** **0 Regen** **27 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	858	3,826	144	244	237	213
White Fir	575	2,499	107	166	159	140
Incense-cedar	18	36		2	2	2
Sugar Pine	1	3				
Unit Totals	**1,452**	**6,364**	**251**	**412**	**398**	**355**

Unit : 31-3 **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	122	632	24	40	39	35
White Fir	74	273	12	18	17	15
Incense-cedar	19	31		1	1	1

Unit Totals	**215**	**936**	**36**	**59**	**57**	**51**

Unit : 13-5 **4 Acres** **0 Regen** **4 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	49	260	11	17	17	15
Douglas-fir	10	30	1	2	2	2
Unit Totals	**59**	**290**	**12**	**19**	**19**	**17**

Unit : 13-2 **16 Acres** **0 Regen** **16 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	296	1,152	44	73	71	64
White Fir	206	825	35	55	53	46
Ponderosa Pine	1	8	1	1	1	1
Unit Totals	**503**	**1,985**	**80**	**129**	**125**	**111**

Unit : 13-1 **7 Acres** **0 Regen** **7 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	157	559	24	37	36	31
Douglas-fir	86	552	21	35	34	31
Unit Totals	**243**	**1,111**	**45**	**72**	**70**	**62**

Unit : 23-1 **11 Acres** **0 Regen** **11 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	192	920	35	59	57	51
White Fir	175	847	36	56	54	47
Unit Totals	**367**	**1,767**	**71**	**115**	**111**	**98**

Unit : 19-6 **37 Acres** **0 Regen** **37 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	834	4,138	156	264	256	230
White Fir	519	3,072	132	204	196	172
Ponderosa Pine	111	312	41	31	30	25
Incense-cedar	75	168	2	8	8	7
Sugar Pine	1	3				
Unit Totals	**1,540**	**7,693**	**331**	**507**	**490**	**434**

Unit : 13-4 **18 Acres** **0 Regen** **18 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	444	1,746	66	111	108	97
White Fir	143	573	25	38	37	32
Ponderosa Pine	14	21	3	2	2	2
Sugar Pine	1	2				
Unit Totals	**602**	**2,342**	**94**	**151**	**147**	**131**

Unit : 19-5 **25 Acres** **0 Regen** **25 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	695	2,362	89	151	146	132
White Fir	127	612	26	41	39	34
Incense-cedar	65	176	2	8	8	8
Ponderosa Pine	5	10	1	1	1	1
Sugar Pine	1	3				
Unit Totals	**893**	**3,163**	**118**	**201**	**194**	**175**

Unit : 25-5 **8 Acres** **0 Regen** **8 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	360	1,038	39	66	64	58
White Fir	117	333	14	22	21	19
Unit Totals	**477**	**1,371**	**53**	**88**	**85**	**77**

Unit : 7-1 **91 Acres** **0 Regen** **91 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	1,621	6,339	239	404	392	353
Ponderosa Pine	829	3,637	480	366	348	290
White Fir	365	1,749	81	116	111	98
Incense-cedar	243	586	8	28	28	25
Sugar Pine	9	43	4	1	1	1
Unit Totals	**3,067**	**12,354**	**812**	**915**	**880**	**767**

Unit : 25-2 **37 Acres** **0 Regen** **37 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	904	3,244	139	216	207	182
Douglas-fir	657	2,977	112	190	184	166
Incense-cedar	6	13		1	1	1
Sugar Pine	1	3		1	1	1

Unit Totals	**1,568**	**6,237**	**251**	**408**	**393**	**350**

Unit : 19-3 **9 Acres** **0 Regen** **9 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	140	492	21	33	31	28
Douglas-fir	161	459	17	29	28	26
Incense-cedar	10	20		1	1	1
Unit Totals	**311**	**971**	**38**	**63**	**60**	**55**

Unit : 31-7 **7 Acres** **0 Regen** **7 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	269	763	29	47	47	42
White Fir	121	338	14	22	22	19
Incense-cedar	9	17		1	1	1
Unit Totals	**399**	**1,118**	**43**	**70**	**70**	**62**

Unit : 31-8 **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	158	495	19	32	31	28
White Fir	107	351	15	23	22	20
Incense-cedar	4	16		1	1	1
Unit Totals	**269**	**862**	**34**	**56**	**54**	**49**

Unit : 25-3 **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	61	221	8	14	14	12
White Fir	36	101	4	7	6	6
Unit Totals	**97**	**322**	**12**	**21**	**20**	**18**

Unit : 25-4A **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	121	425	16	27	26	24
White Fir	65	228	10	15	15	13
Incense-cedar	1	1				
Sugar Pine	1	5	1			
Unit Totals	**188**	**659**	**27**	**42**	**41**	**37**

Unit : 31-2 **25 Acres** **0 Regen** **25 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	832	3,470	131	221	215	193
White Fir	242	748	32	50	48	42
Incense-cedar	12	25		1	1	1
Ponderosa Pine	1	2				
Unit Totals	**1,087**	**4,245**	**163**	**272**	**264**	**236**

Unit : 7-2 **2 Acres** **0 Regen** **2 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Ponderosa Pine	63	213	28	21	20	17
Douglas-fir	56	188	7	12	12	10
White Fir	21	113	5	8	7	6
Incense-cedar	32	62	1	3	3	3
Unit Totals	**172**	**576**	**41**	**44**	**42**	**36**

Unit : 25-7 **19 Acres** **0 Regen** **19 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	534	2,411	91	154	149	134
White Fir	449	1,474	63	98	94	83
Incense-cedar	2	2				
Unit Totals	**985**	**3,887**	**154**	**252**	**243**	**217**

Unit : 13-7 **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	70	238	10	16	15	13
Douglas-fir	23	102	4	7	6	6
Unit Totals	**93**	**340**	**14**	**23**	**21**	**19**

Unit : 15-2A **6 Acres** **0 Regen** **6 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	135	646	24	41	40	36
White Fir	89	310	13	21	20	17
Incense-cedar	2	2				
Unit Totals	**226**	**958**	**37**	**62**	**60**	**53**

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Unit : 25-11 **3 Acres** **0 Regen** **3 Partial** **0 R/W**

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	158	656	25	42	41	37
White Fir	13	40	2	3	3	2
Incense-cedar	2	3				
Unit Totals	**173**	**699**	**27**	**45**	**44**	**39**

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Stump to Truck Costs

Total (16' MBF)

Total Stump to Truck Costs	Net Volume	Cost / Net Volume
$ 827,296.37	6,946	$ 119.10

Detail

Yarding & Loading

Yarding System	Unit Of Measure	Units	Cost / Unit	Total Cost
Med Twr=40-70	GM MBF	341	$ 172.28	$ 58,747.48
Wheel Skidder	GM MBF	1,439	$ 135.77	$ 195,373.03
Wheel Skidder	GM MBF	6,014	$ 93.99	$ 565,255.86
Subtotal				**$ 819,376.37**

Other Costs

Explanation	Unit Of Measure	Units	Cost / Unit	Total Cost
Directional Falling	MBF	200	$ 13.00	$ 2,600.00
Subtotal				**$ 2,600.00**

Additional Move-Ins

Equipment	# Move-In	Cost / Move In	Total Cost
Yarder / Loader	12	$ 150.00	$ 1,800.00
Skidder	4	$ 110.00	$ 440.00
Feller Buncher	12	$ 110.00	$ 1,320.00
Delimber	12	$ 110.00	$ 1,320.00
Dozer	4	$ 110.00	$ 440.00
Subtotal			**$ 5,320.00**

Other Allowances Costs

Total (16' MBF)

Total Other Allowances Costs	Net Volume	Cost / Net Volume *	Total Buy Out Cost
$108,826.50	6,946	$15.67	$0.00

Fuels Treatment

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Excavator	$ 48,800.00	$ 7.03	N	$ 0.00
Excavator	$ 4,500.00	$ 0.65	N	$ 0.00
Lop and Scatter-Lvl 3	$ 9,600.00	$ 1.38	N	$ 0.00
Slashing - Level 1	$ 4,500.00	$ 0.65	N	$ 0.00
Subtotal	**$ 67,400.00**	**$ 9.70**		**$ 0.00**

Misc

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Porta-Jon mobile toilet	$ 150.00	$ 0.02		$ 0.00
Subtotal	**$ 150.00**	**$ 0.02**		**$ 0.00**

Other Costs

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Equipment Washing	$ 740.00	$ 0.11	N	$ 0.00
Equipment Washing	$ 1,000.00	$ 0.14	N	$ 0.00
Skid Location	$ 911.50	$ 0.13	N	$ 0.00
Skid Construction	$ 1,875.00	$ 0.27	N	$ 0.00
Barricades	$ 6,000.00	$ 0.86	N	$ 0.00
Landing Construction	$ 2,625.00	$ 0.38	N	$ 0.00
Landing Clean up	$ 2,625.00	$ 0.38	N	$ 0.00
Waterbar Skids	$ 25,500.00	$ 3.67	N	$ 0.00
Subtotal	**$ 41,276.50**	**$ 5.94**		**$ 0.00**

* Cost / Net Volume has been rounded to the nearest $0.01 Subtotals may not tie to Sale Total Cost / Net Volume.

General

Yarding & Loading

Wheel Skidder #1 = manually falling 20"<, skidding, processing, loading.
Wheel Skidder #2 = Feller buncher(20">), skidding, processing, loading.
Directional Falling = falling away from buffers, P/L, riparian, BF-Fish Lake Hwy, Medford Aquaduct in unit 7-3.
Dozer=additional move-in for ripping and waterbar.
Additional Move-in: #move in = hours

Road Costs

(see Engineering Appraisal for details).

Transportation

SBA Sale= 100% to SBA utilization center

(see Transportation appendix for details).

Other Allowances

Equipment washing #1=yarder, loader
Equipment washing #2=skidder, delimber, feller buncher, ripping cat.
Excavator #1 = excavator pile
Excavator #2 = excavator pile burn

Prospectus

All species cruised with 3P cruise method. Combined sampling error = 5.4%
Form Class = DF-80 WF-83 IC-66 PP-80 SP-80.

Sale: Double Bowen
Sale Date: 8-27-2015
Prep. By : Brown
Tract No: 201.012

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ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1) Road Use - Amortization: (1) $4149.04 (R-3b) / 7794 MBF (Tot Sale Vol) = $0.53/MBF [1/]

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2) Road Maintenance Obligation:

$16492.04 (2.1) + $6569.25 (2.2) + $0.00 (3.1) + $1954.60 (3.2) + $336.29 (5.1) = $25352.17 (R-2)

3) Other Maintenance Payments:

$0.00 (4.1)

4). Purchaser Maintenance Allowances:

(5.2A) Move In	$1299.00
(5.2B) Culverts, Catch Basins, Downspouts	$501.26
(5.2C) Grading, Ditching	$1801.25
(5.2D) Slide Removal and Slump Repair	$0.00
(5.2E) Dust Palliative (Water)	$8061.30
(5.2F) Surface Repair (Aggregate)	$1918.00
(5.2G) Other	$10300.00

Total (5.2) = $23880.81 (Ex. D)

2)+3)+4) Total = $49,232.97 (Total Sale Vol) / 7794 MBF = $6.32/MBF [1/]

Costs are estimates only and do not include Profit and Risk.

1) Road Use Fees - Amortization

R/W Number	Road Number	Rd Use Fee	x	Vol MBF	=	Road Use Obligation
M-2000 C	35-3E-31.00 B	9.24		124		$1145.76
M-2000 C	35-3E-31.00 C	24.22		124		$3003.28

(1.1) Subtotal $4149.04

2) BLM Maintenance - Timber Haul

All PVT AGG Rds turned to NAT avoids double rockwear charge

			MAINTENANCE (2.1)				ROCKWEAR (2.2)			
Road Number and Segment	A N	Surf Type	Mi	Maint x Fee	x Vol MBF	= Maint	Fee	x MBF	= Rkwear
35-2E-13.00	A1N	ASC	0.21	0.97	2375	$483.79	0.49	2375	$244.39
35-2E-13.00	A2N	ASC	0.12	0.97	2250	$261.90	0.49	2250	$132.30
35-2E-13.00	A3N	ASC	0.34	0.97	2155	$710.72	0.49	2155	$359.02
35-2E-13.00	A4N	ASC	0.53	0.97	2095	$1077.04	0.49	2095	$544.07
35-2E-13.00	A5N	ASC	0.32	0.97	1968	$610.87	0.49	1968	$308.58
35-2E-13.00	B N	ASC	0.14	0.97	1857	$252.18	0.00	1857	$0.00
35-2E-13.00	C1N	ASC	0.19	0.97	1857	$342.25	0.00	1857	$0.00
35-2E-13.00	C2N	ASC	1.51	0.97	823	$1205.45	0.00	823	$0.00
35-2E-13.00	D N	ASC	0.74	0.97	389	$279.22	0.49	389	$141.05
35-2E-13.02	N	ASC	0.68	0.97	111	$73.22	0.49	111	$36.99
35-2E-13.03	A N	ASC	0.29	0.97	154	$43.32	0.49	154	$21.88
35-2E-13.03	B N	NAT	0.10	0.97	75	$7.28	0.00	75	$0.00
35-2E-13.06	N	ASC	0.25	0.97	60	$14.55	0.49	60	$7.35
35-2E-13.08	N	ASC	0.12	0.97	40	$4.66	0.49	40	$2.35
35-2E-13.09	N	ASC	0.31	0.97	40	$12.03	0.49	40	$6.08
35-2E-24.00	A1N	ASC	0.20	0.97	1034	$200.60	0.00	1034	$0.00
35-2E-24.00	A2N	ASC	0.84	0.97	974	$793.62	0.00	974	$0.00
35-2E-24.00	B1N	ASC	0.17	0.97	974	$160.61	0.49	974	$81.13
35-2E-24.00	B2N	ASC	0.37	0.97	560	$200.98	0.49	560	$101.53
35-2E-24.00	B3N	ASC	0.31	0.97	247	$74.27	0.49	247	$37.52
35-2E-24.01	A N	ASC	1.40	0.97	60	$81.48	0.00	60	$0.00
35-2E-25.00	A N	ASC	0.70	0.97	414	$281.11	0.49	414	$142.00
35-2E-25.00	B N	ASC	0.74	0.97	288	$206.73	0.49	288	$104.43
35-2E-25.01	A N	ASC	0.25	0.97	154	$37.35	0.49	154	$18.87
35-2E-25.01	B N	NAT	0.35	0.97	154	$52.28	0.00	154	$0.00
35-3E-29.00	A N	ASC	0.59	0.97	3562	$2038.53	0.00	3562	$0.00
35-3E-29.00	B A	ASC	1.02	0.76	3133	$2428.70	0.49	3133	$1565.87
35-3E-29.00	C A	ASC	0.13	0.76	3133	$309.54	0.49	3133	$199.57
35-3E-29.00	D1AA	ASC	0.06	0.76	3009	$137.21	0.49	3009	$88.46
35-3E-29.00	D1BA	ASC	0.45	0.76	1956	$668.95	0.49	1956	$431.30
35-3E-29.00	D1CA	ASC	0.47	0.76	997	$356.13	0.49	997	$229.61
35-3E-29.00	D2A	ASC	0.72	0.76	579	$316.83	0.49	579	$204.27
35-3E-29.00	D3N	ASC	0.46	0.97	268	$119.58	0.49	268	$60.41
35-3E-29.01	A N	ASC	1.27	0.97	429	$528.49	0.49	429	$266.97
35-3E-29.01	B N	ASC	0.56	0.97	188	$102.12	0.49	188	$51.59
35-3E-31.00	A A	PRR	0.33	0.76	124	$31.10	0.49	124	$20.05
35-3E-31.00	B-CN	ASC	1.44	0.97	124	$173.20	0.00	124	$0.00
35-3E-31.01	A	ASC	0.22	0.76	1053	$176.06	0.49	1053	$113.51
35-3E-31.03	A A	ASC	0.50	0.76	959	$364.42	0.49	959	$234.96
35-3E-31.03	B A	ASC	0.60	0.76	762	$347.47	0.49	762	$224.03
35-3E-31.03	C A	ASC	0.37	0.76	328	$92.23	0.49	328	$59.47
35-3E-31.04	A	ASC	0.97	0.76	1053	$776.27	0.49	1053	$500.49
35-3E-31.06	N	ASC	0.35	0.97	170	$57.72	0.49	170	$29.16

(2.1) Subtotal $16492.04 (2.2) Subtotal $6569.25

3) Third Party Maintenance and Rockwear

Agrmnt Number	Road Number	MAINTENANCE (3.1) Mi	x Fee	x MBF = Maint	ROCKWEAR (3.2) Fee	x MBF = Rkwear
M-2000C	35-2E-31.00 B	0.61			0.49	124 $37.06
M-2000C	35-2E-31.00 C	0.83			0.49	124 $50.43
M-2000D	35-2E-24.01 A	1.40			0.49	60 $41.16
M-2000D	35-2E-24.00 A2	0.84			0.49	974 $400.90
M-2000D	35-2E-24.00 A1	0.20			0.49	1034 $101.33
M-2000D	35-2E-13.00 C2	1.51			0.49	823 $608.94
M-2000D	35-2E-13.00 C1	0.19			0.49	1857 $172.89
M-2000D	35-2E-13.00 B	0.14			0.49	1857 $127.39
M-2000D	35-2E-10.01	0.50			0.49	75 $18.38
M-2000D	35-2E-10.00 C	0.33			0.49	237 $38.32
M-2000E	35-2E-11.01	0.28			0.49	70 $9.60
M-2000F	35-3E-7.01 A1	0.50			0.49	922 $225.89
M-2000F	35-2E-10.00 B	0.59			0.49	312 $90.20
M-2000F	35-2E-10.00 A	0.21			0.49	312 $32.10

(3.1) Subtotal $0.00 (3.2) Subtotal $1954.60

4) Other Maintenance Payments - USFS or Others Perform Maintenance

Agency	Road Number	Fee MBF/Mi	x Mi =	Fee /MBF	x Hauled =	Maint Cost

(4.1) Subtotal $0.00

5) Purchaser Maintenance - Rock Wear

All PVT AGG rds changed to NAT avoids double rockwear charge

TIMBER HAUL (5.1)[1/2]

Road No and Segment	1/ A N	RkWear Mi	x Fee x	Vol MBF =	Total RkWear
35-2E-10.00 A	N	0.21	0.00	312	$0.00
35-2E-10.00 B	N	0.59	0.00	312	$0.00
35-2E-10.00 C	N	0.33	0.00	237	$0.00
35-2E-10.01 A	N	0.50	0.00	75	$0.00
35-2E-11.01	N	0.28	0.00	70	$0.00
35-2E-13.04	N	0.09	0.49	50	$2.21
35-2E-13.05	N	0.21	0.00	50	$0.00
35-2E-15.00	N	1.03	0.49	237	$119.61
35-2E-15.01	N	0.27	0.49	75	$9.92
35-2E-15.02	N	0.03	0.49	50	$0.74
35-2E-23.03	N	0.34	0.00	111	$0.00
35-3E-19.00	A	0.26	0.49	490	$62.43
35-3E-7.01 A2A	N	0.07	0.49	922	$31.62
35-3E-7.01 A2B	N	0.56	0.49	400	$109.76
35-3E-31.07	N	0.16	0.00	200	$0.00
35-3E-7.01 A1	N	0.50	0.00	922	$0.00
35-3E-7.02	N	0.35	0.00	480	$0.00
35-3E-7.03	N	0.05	0.00	150	$0.00

(5.1) Subtotal $336.29

1/ All surfaced roads have a rockwear fee which includes an allowance for rock haul
2/ Include lump sum logging damage repair

Purchaser Operational Maintenance

Cost allowances must be limited to work required under timber sale Exhibit D.
If purchaser maint. such as dust control/damage repair is performed on BLM maint. roads, add appropriate mandatory Ex. D provisions. Note in prospectus.

Move In

No	Move Cost/	Dist	Sub-

Equipment 1/	Units	x	in x	50 Mi	x Factor =	total
Motor Grader:	1		1	$483.00	1.00	$483.00
Back Hoe:	1		1	$483.00	1.00	$483.00
Loader:				$483.00	0.63	$0.00
Water Truck:	1		1	$107.00	1.00	$107.00
Dump Truck:	2		1	$113.00	1.00	$226.00

(5.2A) Total $1299.00

1/ Equipment limited to that allowed in Exhibit D.

Culvert Maintenance - Including Catch basins and Downpipes [1/]

Miles	x	Cost/Mi	=	Subtotal
1.50		334.17		$501.26

(5.2B) Total $501.26

1/ Does not include purchase or installation of culvert pipe.

Grading (Includes Ditches and Shoulders) [1/]

		Miles	x	Cost/Mi	x Freq =	Subtotal
Blade w/ Ditch:	2.50	720.50		1	$1801.25	
Blade w/o Ditch:	0.00	446.73		0	$0.00	

(5.2C) Total $1801.25

1/ Watch for double allowance on roadway preparation for dust palliative application.

Slide and Slough removal, Slump Repair (15 sta-yds. ea.) [1/]

Type Equipment	No Slides /Slumps	x	Hours Each	x	Equip Cost	= Subtotal
Grader:	0		0		147.33	$0.00
Loader:	0		0		107.45	$0.00
Backhoe:	0		0		76.21	$0.00

(5.2D) Total $0.00

1/ Maximum haul is 15 sta. yds. Use grader or front end loader only.

Dust Palliative (Water) [1/]

Spreading Hours

	Miles	/	MPH	=	Hours	x	No Days	x	Freq /Day	=	Truck Hours
	5.00		5		1.0		90		1		90
Load & Haul =					0.0		0		0		0
									Total Hours =		90

Truck Cost: $89.57/Hr. x 90.0 Hours = $8061.30

(5.2E) Total $8061.30

1/ Allow water for all BLM maintaintained non-oiled roads.

Surface Repair (Aggregate)

Production Cost:	0.0 CY x $0.00/CY	=	$0.00
Haul to Stockpile:	0.0 CY x (($2.21/CY x 0.00 Mi) + $0.74)	=	$0.00
Stockpile:	0.0 CY x $1.01/CY	=	$0.00
Load from Stockpile:	200.0 CY x $1.11/CY	=	$222.00

Haul from Stockpile:	200.0 CY x (($1.10/CY x 5.00 Mi) + $0.74)	= $1248.00
Process with Grader:	200.0 CY x $0.90/CY	= $180.00
Compaction:	200.0 CY x $1.34/CY	= $268.00

(5.2F) Total $1918.00

Other

Fallen Timber Cutting: [1/]	0.0 Hours x $0.00/Hour = $0.00
Brush Cutting/Tree Trimming: [2/]	0.0 Hours x $0.00/Hour = $0.00
Oil/Asphalt Materials: [3/]	Lump Sum = $0.00
Signing for Dust Palliatives: [4/]	Lump Sum = $0.00
35-2E-13.05 Partial Decom	Lump Sum = $1750.00
35-2E-23.03 Partial Decom	Lump Sum = $2000.00
35-2E-13.3B/25.01 Barricade/WB	Lump Sum = $1200.00
35-3E-7.02/31.07 Partial Decom	Lump Sum = $1600.00
Temp Route Decoms	Lump Sum = $3750.00

(5.2G) Total $10300.00

1/ Exhibit D Subsection 3104.
2/ Exhibit D Subsection 3107.
3/ Exhibit D Subsection 3401.
4/ Exhibit D Subsection 3405b.

Form 5440-9
(December 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEPOSIT AND BID FOR [X] **TIMBER*** [ ] **VEGETATIVE RESOURCE (Other Than Timber)**

SCALE SALE

Name of Bidder	
Tract Number	ORM05-TS-2015.0012
Sale Name	Double Bowen
Sale Notice *(dated)*	7/23/2015
BLM District	Medford

		Sealed Bid for Sealed Bid Sale	X	Written Bid for Oral Auction Sale	

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

Required bid deposited is **$66,700.00** and is enclosed in the form of ☐ cash ☐ money order ☐ bank draft ☐ cashier's check ☐ certified check ☐ bid bond of corporate surety on approved list of the United States Treasury ☐ guaranteed remittance approved by the authorized officer.

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

BID SCHEDULE – LUMP SUM SALE

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

			BID SUBMITTED		ORAL BID MADE	
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
Douglas-fir	MBF	4,545	X	=	X	=
White fir	MBF	1,910	X	=	X	=
Ponderosa Pine	MBF	355	X	=	X	=
Incense Cedar	MBF	132	X	=	X	=
Sugar Pine	MBF	4	X	=	X	=
Total		**6,946**	X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

(Continued on reverse)

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

Bid submitted on *(date)*

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

☐ Signature, if firm is individually owned	Name of firm *(type or print)*
☐ ☐ Signatures, if firm is a partnership or L.L.C.	Business address, include zip code *(type or print)*
☐ Corporation organized under the state laws of	*(To be completed following oral bidding)*
Signature of Authorized Corporate Signing Officer	I HEREBY confirm the above oral bid By *(signature)*
Title	Date

Submit bid, in *duplicate*, to qualify for either an oral auction or sealed bid sale together with the required bid deposit made payable to the Department of the Interior – BLM. Oral Auction – Submit to Sales Supervisor prior to closing of qualifying period for tract.	Sealed Bid – Send to District Manager, who issued the sale notice, in a sealed envelope marked on the outside: (1) "Bid for Timber" (2) Vegetative Resource Other Than Timber (3) Time bids are to be opened (4) Legal description

NOTICE

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

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

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

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

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

INSTRUCTIONS TO BIDDERS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

10. *PERFORMANCE BOND* -

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

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

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

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

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

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

**Applies to Timber Only*

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

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

17. *LOG EXPORT* – All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs, and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end product use; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. Timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to *"unprocessed timber"*. Special reporting, branding and painting of logs may be included in contract provisions.*

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

*U.S. GOVERNMENT PRINTING OFFICE: 1993-839-310