PART III: EXHIBITS

State Timber Sale Contract No. 341-13-88 East Ranch EXHIBIT B

Page 1 of 3 629-Form 341-203 Revised 06/97

OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)

Date	Received by STATE:	(5) State Brand Information (complete):					
(1)	Contract No.: <u>341-13-88</u>						
(2)	Sale Name: East Ranch						
(3)	Contract Expiration Date: October 31, 2013	Project Completion	on Dates:				
(4)	Purchaser:						
(6)	Purchaser Representatives:						
	Projects:	Phone:	Cell/Other Phone: Cell/Other	Home:			
	Projects:	Phone:		Home:			
	Projects:	Phone:		Home:			
	Projects:	Phone:		Home:			
	Logging:	Phone:		Home:			
	Logging:	Phone:		Home:			
	Logging:	Phone:		Home:			
	Logging:	Phone:		Home:			
(7)	State Representatives:		C-II/Other				
	Projects:	Phone:		Home:			
	Logging:	Phone:	Cell/Other Phone:	Home:			
(8)	Name of Subcontractors & Starting Dates:						
	Projects: No(s)	Date: Date:	Phone: Phone:				
	Logging: Felling Yarding:	Date: Date:	Phone: Phone:				
(9)	Comments:						

(10) Operations Map: Attach a copy of timber sale Exhibit A or other suitable map which plainly shows the items listed on the instruction sheet.

EXHIBIT B

INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN TO STATE

Operations shall be limited to the work shown in the plan until a revised plan or supplemental plan is submitted covering additional work. Compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

Explanation of Item No. (from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.

Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.

- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
 - 1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
 - 2. Locations of spur roads planned for construction, other than those required by the timber sale contract. Provide spur road specifications.
 - 3. Location of proposed tractor yarding roads. Show if and how marked on the ground.
 - 4. Location of temporary stream crossings.
 - 5. List the sequence of performing project work.
 - 6. Location of rock sources attach pit development plans.

Cable Landing, with numbers for sequence.

Tractor Landing with alphabetical sequence.

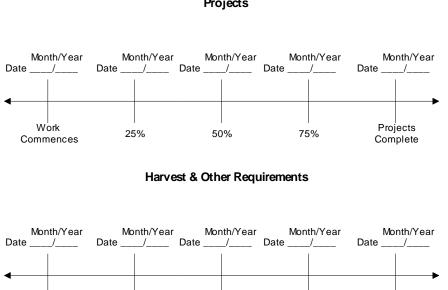
- _ _ _ _ Approximate setting boundary.
- ----- Spur truck roads.
- _____ Tractor yarding roads.
 - X Temporary stream crossings.

EXHIBIT B

OPERATIONS PLAN

Completion Timeline

Indicate on the appropriate timeline below, the dates by which you plan to complete the work as required under this contract. The purpose of this section is to develop a plan that will ensure you complete the work as required, and meet the interim completion date(s) and contract expiration date. This plan is incorporated and made a part of the contract. When, in the opinion of STATE, operations are not commencing in a manner that meets the intent of this plan, you may be placed in violation of contract and your operations suspended until an amended plan is submitted and approved by STATE.



The Federal Endangered Species Act (ESA) prohibits a person from taking any federally listed threatened or endangered species. Taking under the federal ESA may include alteration of habitat. STATE's approval of this plan does not certify that PURCHASER's operation under the plan is lawful under the federal ESA. As provided in the timber sale contract, PURCHASERS must comply with all applicable state, federal, and local laws.

50%

PURCHASER's compliance with this plan is not in lieu of compliance with any federal requirements related to the federal **Endangered Species Act.**

APPROVED: Date:

Work

Commences

STATE OF OREGON - DEPARTMENT OF FORESTRY

25%

SUBMITTED BY: PURCHASER

Sale

Complete

Title

Title

75%

Original: Salem cc: **District File** Purchaser

Operations Plan.doc/Jaz B (TS)

Projects

EXHIBIT C – SAWMILL GRADE (WESTSIDE SCALE)

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1)		REGISTRATION	Da	te te te			(9)	s
(2)		(Third Party Scali					(10)	
(3)	FROM: <u>1</u>	<u>illamook (06)</u> P State Forestry District)	hone <u>(503</u>	<u>8) 842</u>			(11)	S
(4)	PURCHAS	5005 3 rd Street, Tilla SER:					(12)	S
		ldress: mber:						
(5)	MININ	UM SCALING SPE						
;	SPECIES	SCALING DIAMETER INCHES		NIMUN VOLU	ME			
	Conifers lardwoods			10 10			(10)	
			20' Fostsida	10			(13)	P C
(6) (7)	WESTSID Use Region 6 ac	E SCALE: tual taper rule. Logs over 40'.	20 Eastside.	YES)]	PE NC ME	1) EL/ D DE ECH
(8)	LOCATI		Species	Yard	Truck	Weight		D-E HE
	nown on the ODF A	pproved Locations web-site)	Ś			^	(15)	R

- 9) SALE NAME: <u>East Ranch</u> COUNTY: <u>Tillamook</u>
- (10) STATE CONTRACT NUMBER: <u>341-13-88</u>
- (11) STATE BRAND REGISTRATION NUMBER:
- (12) STATE BRAND INFORMATION (COMPLETE):



(13) PAINT REQUIRED: YES ⊠ COLOR: <u>Orange</u>

(14) SPECIAL REQUESTS (Check applicable)	
PEELABLE CULL (all species)	\boxtimes
NO DEDUCTIONS ALLOWED FOR	\square
PENCIL BUCK	
ADD-BACK VOLUME - Deductions due to delay	\boxtimes
OTHER:	

(15) REMARKS

Operator's Name	(Optional	inclusion	by	District)):
-----------------	-----------	-----------	----	-----------	----

(16) SIGNATURES:

Purchaser or Authorized Representative

State Forester Representative

Date

Date

State Forester Representative PRINT NAME

Notify the District within one hour when branding or painting is inadequate for quick identification, the receipts are missing, not correctly or completely filled out, and/or when logs presented for scaling are impossible to scale accurately.

Distribution (See specific instructions on pg. 2): ORIGINAL: Salem / COPIES: TPSO, Approved Scaling Location, Purchaser, District, Mgmt. Unit

EXHIBIT C – SAWMILL GRADE INSTRUCTIONS FOR FORM 343-307a (rev. 11/11)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) Designate Third Party Scaling Organization (TPSO).

Columbia River Log Scaling & Grading Bureau P.O. Box 7002, Eugene, OR 97401 Phone: (541) 342-6007 Fax: (541) 342-2631 Email: <u>services@crls.com</u>

Southern Oregon Log Scaling & Grading Bureau P.O. Box 580, Roseburg, OR 97470 Phone: (541) 673-5571 Fax: (541) 672-6381 Email: <u>info@southernoregonlogscaling.com</u>

Northwest Log Scalers, Inc . 5526 NE 122nd Ave, Portland, OR 97230 Phone: (503) 254-0600 Fax: (503) 408-0919 Email: <u>info@nwlogscalers.com</u> Pacific Rim Log Scaling Bureau, Inc. 8288 28th Court North East, Lacey, WA 98516 Phone: (360) 528-8710 Fax: (360) 528-8718 Email: <u>office@prlsb.com</u>

Yamhill Log Scaling & Grading Bureau P.O. Box 709, Forest Grove, OR 97116 Phone: (503) 359-4474 Fax: (503) 359-4476 Email: <u>yamhill@attglobal.net</u>

Pacific Log Scaling & Grading Bureau, Inc. P.O. Box 23939, Portland, OR 97281 Phone: (503) 684-5599 Fax: (503) 639-4880 Email: <u>PacLogScale@aol.com</u>

- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- (5) Minimum Scaling Specifications. Scaling diameter inches is used for pencil buck minimum diameter.
- (6) Eastside Region 6 actual taper/taper table segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Northwest Log Rules Eastside). Items with * follow U.S. Forest Service Eastside rules.
- (7) Weight Scale Sample Check box if sale is to be a Weight Scale Sample. All specifics for handling, scaling and processing will be attached or explained in the Remarks section Item (15).
- (8) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.
- (9) Enter sale name and county.
- (10) Enter sale Contract number.
- (11) Enter Oregon's State Brand Registry Number (REQUIRED).
- (12) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (15).
- (13) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (14) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.
- (15) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (16) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive <u>\\WPODFFILL01\Transfer\ScalingInstructions</u> or e-mailed directly to <u>scaling@odf.state.or.us</u>. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

Distribution (See specific instructions on pg. 2): ORIGINAL: Salem / COPIES: TPSO, Approved Scaling Location, Purchaser, District, Mgmt. Unit

EXHIBIT C – PULP SORT

PROCESSING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

 CANCELLATION Date (Approved Pulp Processing Facility) (3) FROM: <u>Tillamook (06)</u> Phone (503) 842-2545 (State Forestry District) (4) PURCHASER: (III) STATE BRAND REGISTRATION NUMBER (III) STATE BRAND INFORMATION: (COMPLETE BELOW) (4) PURCHASER: (IIII) STATE DEFINITION OF Approved Pulp Sort: (5) SCAING Bureau (TPSO) Processing Weight receipts: (III) STATE DEFINITION of the tree (tops). (6) STATE DEFINITION of Approved Pulp Sort: (7) PULP FACILITY PROCESSING INSTRUCTIONS: (7) PULP bads shall be weight on the weight receipt. (14) SIGNATURES: (15) Purchaser or Authorized Representative Date (16) TESO PROCESSING INSTRUCTIONS 	(1)	ORIGINAL REGISTRATION Date REVISION NUMBER Date	(9)	SALE NAME: <u>East Ranch</u>
 (3) FROM: <u>Tillamook (06)</u> Phone (<u>503) 842-2545</u> (State Forestry District) (4) PURCHASER:	(2)		(10)	STATE CONTRACT NUMBER: <u>341-13-88</u>
(State Forestry District) (12) STATE BRAND INFORMATION: (COMPLETE BELOW) (4) PURCHASER:	(3)		(11)	STATE BRAND REGISTRATION NUMBER
 (5) Scaling Bureau (TPSO) Processing Weight receipts: Mailing Address:		· · · ·	(12)	STATE BRAND INFORMATION: (COMPLETE BELOW)
Phone Number: (6) STATE Definition of Approved Pulp Sort: • Top portion of the tree (tops). • All logs with a diameter (Big End) greater than inches marked with blue paint. (7) PULP FACILITY PROCESSING INSTRUCTIONS: • Pulp loads shall be weighed in lieu of scaling. • One Ton = 2000 lbs (Short Ton). • Pulp loads shall be weight for each load shall be machine printed on the weight receipt. • Weigher shall sign the weight receipt. • Weigher shall attach the Log Load Receipt number on the weight receipt. • Weigher shall attach the Weight receipt. • State Forester Representative Date		Scaling Bureau (TPSO) Processing Weight receipts:		
Sort: • Top portion of the tree (tops). • All logs with a diameter (Big End) greater than inches marked with blue paint. (13) REMARKS:				
 All logs with a diameter (Big End) greater than inches marked with blue paint. (7) PULP FACILITY PROCESSING INSTRUCTIONS: Pulp loads shall be weighed in lieu of scaling. One Ton = 2000 lbs (Short Ton). Pulp loads shall have a yellow Log Load Receipt attached. Gross weight and truck tare weight for each load shall be machine printed on the weight receipt. Weigher shall sign the weight receipt. Weigher shall record the Log Load Receipt number on the weight receipt. Weigher shall attach the Weight receipt. State Forester Representative Date 	(6)	Sort:		
 Pulp loads shall be weighed in lieu of scaling. One Ton = 2000 lbs (Short Ton). Pulp loads shall have a yellow Log Load Receipt attached. Gross weight and truck tare weight for each load shall be machine printed on the weight receipt. Weigher shall sign the weight receipt. Weigher shall record the Log Load Receipt number on the weight receipt. Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt. Operator's Name (Optional inclusion by District): Operator's Name (Optional		All logs with a diameter (Big End) greater	(13)	
 Gross weight and truck tare weight for each load shall be machine printed on the weight receipt. Weigher shall sign the weight receipt. Weigher shall record the Log Load Receipt number on the weight receipt. Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt. SIGNATURES: SIGNATURES: SIGNATURES: SIGNATURES: Date 	(7)	 Pulp loads shall be weighed in lieu of scaling. One Ton = 2000 lbs (Short Ton). Pulp loads shall have a yellow Log Load Receipt 	Oper	
number on the weight receipt.Purchaser or Authorized RepresentativeDate• Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt.State Forester RepresentativeDate		Gross weight and truck tare weight for each load shall be machine printed on the weight receipt.Weigher shall sign the weight receipt.	(14)	SIGNATURES:
		number on the weight receipt.Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the		·
	(8)	TPSO PROCESSING INSTRUCTIONS		State Forester Representative Date

- Mail to ODF weekly.
- Convert to mbf using 10 tons per mbf.

State Forester Representative PRINT NAME

Notify the District within one hour when branding is inadequate for quick identification, the logs are marked with orange paint, the receipts are missing, not correctly or completely filled out, and/or logs do not meet the specifications of the STATE definition of Approved Pulp Sort.

Distribution: ORIGINAL: Salem / COPIES: TPSO, Approved Pulp Processing Location, Purchaser, District, Mgmt. Unit

EXHIBIT C – PULP SORT

INSTRUCTIONS FOR FORM 343-307b (rev. 11/11)

- Must Complete. Check appropriate box. REVISION NUMBER requires comments in the Remarks Section (13). CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) **Must Complete**. Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp
- (3) Must Complete. State Forestry District and District Phone Number.
- (4) Must Complete. Purchaser's business name as it appears on the Contract.
- (5) **Must Complete.** Third Party Scaling Organization that will be processing the weight tickets, mailing address, and phone number.

Columbia River Log Scaling & Grading Bureau P.O. Box 7002, Eugene, OR 97401 Phone: (541) 342-6007 Fax: (541) 342-2631 Email: <u>services@crls.com</u>

Southern Oregon Log Scaling & Grading Bureau P.O. Box 580, Roseburg, OR 97470 Phone: (541) 673-5571 Fax: (541) 672-6381 Email: <u>info@southernoregonlogscaling.com</u>

Northwest Log Scalers, Inc . 5526 NE 122nd Ave, Portland, OR 97230 Phone: (503) 254-0600 Fax: (503) 408-0919 Email: <u>info@nwlogscalers.com</u> Pacific Rim Log Scaling Bureau, Inc. 8288 28th Court North East, Lacey, WA 98516 Phone: (360) 528-8710 Fax: (360) 528-8718 Email: <u>office@prlsb.com</u>

Yamhill Log Scaling & Grading Bureau P.O. Box 709, Forest Grove, OR 97116 Phone: (503) 359-4474 Fax: (503) 359-4476 Email: <u>yamhill@attglobal.net</u>

Pacific Log Scaling & Grading Bureau, Inc. P.O. Box 23939, Portland, OR 97281 Phone: (503) 684-5599 Fax: (503) 639-4880 Email: <u>PacLogScale@aol.com</u>

- (6) **Must Complete.** Big end log not to exceed ______ inches. Big end of log is not to exceed 2 inches greater than the minimum removal specifications in the contract. Example: Minimum removal specifications 6 inches and 20 board feet, then the Big end of log not to exceed <u>8</u> inches. When conifer and hardwood removal specifications are different, use the smaller removal diameter to determine this specification.
- (9) **Must Complete**. Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (10) Must Complete. Enter sale Contract number.
- (11) Must Complete. Enter Oregon's State Brand Registry Number (REQUIRED).
- (12) **Must Complete**. Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (13).
- (13) Use this section to list any special instructions or the reason for any revisions in section item (1).
- (14) **Must Complete.** Purchaser required to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFFILL01\Transfer\ScalingInstructions or e-mailed directly to scaling@odf.state.or.us. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE	DITCH TOP WIDTH (Feet)	DITCH CONFIGURATION (U, V, TRAPAZOID)	DITCH DEPTH FROM SUBGRADE (Feet)
16 feet	12 feet	A to B	0+00 to 24+00	Ditch	3	V	2
16 feet	12 feet	A to B	24+00 to 27+60	Outslope			
16 feet	12 feet	A to B	27+60 to 45+80	Ditch	3	V	1
16 feet	12 feet	A to B	45+80 to 65+90	Outslope			
16 feet	16 feet	C to D	0+00 to 7+65	Outslope			
16 feet	16 feet	E to F	0+00 to 2+20	Outslope			
16 feet	12 feet	G to H	0+00 to 7+50	Ditch	3		1
16 feet	12 feet	G to H	7+50 to 11+70	Outslope			

<u>CLEARING</u>. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Trees outside the clearing limits shall not be felled unless approved in writing by STATE. All danger trees, leaners, and snags outside the clearing limits which could fall and hit the road shall be felled. Where clearing limits have not been marked, clearing limits shall be as follows:

New construction – 10 feet back from the top of the cut slope and 5 feet back from the toe of fill slopes.

Improvements - 10 feet back from the shoulder of the subgrade or the ditch, whichever is widest.

<u>GRUBBING</u>. This work shall consist of the removal or digging out of stumps and protruding objects. All stumps shall be completely removed within the limits of required grubbing. Stumps overhanging cutslopes shall be removed. Grubbing debris shall not be placed or permitted to remain in or under any road embankment sections.

Grubbing limits shall be as follows:

New construction - From the top of the cutslope to the toe of the fill.

Improvements - 4 feet back from the shoulder of the subgrade or the ditch, whichever is widest.

FOREST ROAD SPECIFICATIONS

<u>CLEARING AND GRUBBING DISPOSAL</u>. Clearing and grubbing debris shall not be left lodged against standing trees. Clearing and grubbing debris may be scattered through openings in the timber outside of the cleared right-of-way, except for the following areas, debris shall be fully contained and hauled to a designated waste area.

- Where end-haul is required;
- On side slopes exceeding 60 percent;
- On unstable areas;
- In any stream channel (Type F, N or D) or where material may enter the stream channel.

Clearing, grubbing, and associated disposal shall be completed prior to subgrade approval.

<u>EXCAVATION</u>. Excavation and grading shall not be done when weather and/or ground conditions are such that damage will result to existing subgrade or cause excessive erosion.

Excavation shall conform to STATE-specified lines, grades, dimensions, and plans when provided.

All suitable excavated material shall be used where possible for the formation of fills, shoulders, and drainage structure backfills. Embankment materials shall be free of woody debris, brush, muck, sod, frozen material, and other deleterious materials. All fills and drainage structure backfills shall be machine compacted according to the specifications in Exhibit E.

Unless road design plans show otherwise, all roads shall be on a balanced cross section, except when the slope is over 60 percent, the road shall be on full bench for the width specified. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A.

Excess excavation shall not be sidecast where material will enter a stream course or where material will accumulate in areas deemed a high landslide hazard location by STATE.

<u>ROAD WIDTH LIMITATIONS</u>. PURCHASER shall obtain advance written approval from STATE to construct the road to a greater width than specified. Extra subgrade width shall be required for:

Fill Widening. Add to each fill shoulder 1 foot for fills 3 feet to 6 feet high; 2 feet for fills over 6 feet high.

<u>Curve Widening</u>. Widen the inside shoulder of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

<u>Ditch</u>. Construct ditch as specified in Exhibit D. Subgrade shall be crowned at 4 to 6 percent. Construct ditchouts away from subgrade at locations marked in the field.

Outslope. Road subgrade shall be outsloped at 4 to 6 percent.

<u>TURNOUTS</u>. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 25 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: Intervisible but not greater than 750 feet where not marked.

GRADING	Back Slopes	Fill Slopes
Rock	Vertical to 1/4:1	Not steeper
Common -	3/4:1	than 1 ½:1

Top of cutslope shall be rounded.

<u>LANDINGS</u>. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide. Surface shall be crowned for drainage.

FOREST ROAD SPECIFICATIONS

<u>TURNAROUNDS</u>. Increase subgrade width an additional 30 feet for a length of 16 feet with 20' radius returns at locations marked in the field.

ADDITIONAL ROAD INSTRUCTIONS

- <u>A to B</u> Ditch and cleanout culvert basins as specified in Exhibit D (0+00 to 24+00 and 27+60 to 45+80). Construct Turnout right (52+50 to 53+25). Construct Turnout right (60+55 to 61+30). Construct Turnaround right (64+32 to 64+38). Construct 60 Ft. diameter Landing from 65+30 to 65+90.
- <u>C to D</u> Construct Turnout left (2+05 to 2+80). Cut and drift from 2+80 to 5+10 and utilize material for fill. Construct fill from 5+10 to 6+05. Maximum fill height shall be 6 Ft. at 5+50. Construct 60 Ft. diameter landing from 7+05 to 7+65.
- <u>E to F</u> Construct Turnaround left 1+00 to 1+65. Construct 60 Ft. diameter Landing from 1+65 to 2+20.
- <u>G to H</u> Construct 60 Ft. diameter Landing from 11+10 to 11+70.

END-HAULING REQUIREMENTS

	STA. TO STA.	WASTE AREA LOCATION	WASTE AREA TREATMENT	
A to B	51+00 to 65+90	2	2	
C to D	0+00 to 7+65	2	2	

End-Haul Areas General Requirements

Material shall not be intentionally side cast. Clearing and grubbing debris shall be end-hauled. When blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain all material within the road prism.

Containment

Full containment: The amount of material lost over the outside edge of the road shall not exceed 6 inches in depth measured perpendicular to the natural ground slope. Pioneer excavation shall be removed by digging, loading, and hauling rather than by pushing or scraping methods.

Tree bases and stumps may have up to 12 inches of material directly above them. Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

- (1) As shown on Exhibit A and as marked in the field.
- (2) Road segment fills.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage. Pile woody debris separate from other waste material.
- (2) Spread and compact in layers, according to the specifications in Exhibit E, to form required road fills. Scatter woody debris in stable locations or pile separately at waste area.

Page 1 of 6

EXHIBIT E

ROAD SURFACING

ROAD SEGMENT:	A to B		STATIONS:		0+00	to 43+50		
Application	Rock Size and Type	Location	Compacted Depth		ne (CY) er	Number of Units	Curve Widening (CY)	Approx. Total (CY)
Road Rock	Crushed 1 1/2"-0"	0+00 to 14+50	3 "	station	15.172	14.50	10	230
Road Rock	Crushed 3"-0"	26+00 to 28+50	6 "	station	32.000	2.50	10	90
Road Rock	Crushed 3"-0"	39+60 to 43+50	6 "	station	30.769	3.90	10	130
Turnouts	Crushed 1 1/2"-0"	A to B	3 "	то	10	2		20
Turnouts	Crushed 3"-0"	A to B	6 "	то	20	1		20
Turnouts	Crushed 3"-0"	A to B	6 "	то	20	1		20
Application	Rock Size and Type	Location	Approx. Total (CY)		CY)			
Culvert Backfill	Crushed 1 1/2"-0"	10 CY/Culvert		70				
Spot Rock	Crushed 3"-0"	As Marked in Field		100				

ROAD SEGMENT:	G to	н				STATIONS:		0+00	to	9+00		
Application	Rock Si Typ		Lo	ocatio	on	Compacted Depth		ne (CY) ber		mber of Units	Curve Widening (CY)	Approx. Total (CY)
Road Rock	Crushed	3"-0"	0+00	to	4+00	6 "	station	32.500		4.00	10	140
Road Rock	Crushed	3"-0"	5+30	to	9+00	6 "	station	32.432		3.70	10	130
Turnouts	Crushed	3"-0"	C	G to ⊦	ł	6 "	то	20		1		20
Turnouts	Crushed	3"-0"	C	G to F	4	6 "	то	20		1		20
Application	Rock Si Typ		Lo	ocatio	on	Approx.	Total (CY)				
Culvert Backfill	Crushed	1 1/2"-0"		6+20			10]			

TOTAL ROCK	1 1/2"-0" CRUSHED	3"-0" CRUSHED
1000 CY	330 CY	670 CY

Roads shall be uniformly graded and approved by STATE prior to rocking.

Additional rock for curve widening is required and has been included in the volume estimates. Turnouts, turnarounds, landings and junctions shall be rocked concurrently with the road. End-dumping of riprap shall not be allowed, unless otherwise approved in writing by STATE. Any additional turnarounds or turnouts created during any operation associated with this timber sale shall be rocked at PURCHASER's expense and as instructed by STATE.

Roads shall be uniformly graded and approved by STATE prior to rocking. For typical cross section, turnout and turnaround see Forestry Department Drawing Nos. 351-C, 351-D and TOTA-1 at the Forestry Department district office.

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be well graded and consistent.

<u>Quality and Grading Requirements</u>. The stone base materials shall be crushed rock. River gravel shall not be used.

If material is specified as durable, it must meet the following test requirements:

- Hardness Test Method AASHTO T 96: 30% Maximum
- Durability Test Method ODOT TM 208 Passing No. 20 Sieve: 30% Maximum

For 3"-0" & 1 ¹/₂"-0" Crushed Rock

Sieve size	Percent Passing						
	3 inch	1.5 inch					
4	100						
3	95-100						
2		100					
1.5	70-90	95-100					
1		70-90					
3/4	50-70	70-90					
1/4 or #4		40-60					
#10	0-30	25-40					
#40	0-10	8-16					

The referenced sieve shall have square openings as set forth in AASHTO M 92, Woven Cloth Series. The determinations of size and gradings shall be as set forth in AASHTO T 27.

ROCK ACCOUNTABILITY

PURCHASER shall obtain STATE approval for subgrades prior to rocking. Rocking must be done only when weather conditions are acceptable to STATE, and must be suspended when muddy water could enter streams.

Rock accountability shall be determined by depth measurement. STATE shall be given 24 hours' notice prior to rocking.

<u>Depth Measurement</u>. Road rock shall be spread and compacted according to the depths specified in Exhibit E. Truck measure volumes are given, but shall not limit the amount of rock spread.

Depth shall be determined in the most compacted area of the surface cross section. If additional rock is required because of insufficient depth, it shall be added by truck measure to those areas that were slighted. The conversion from compacted yardage to truck yardage is 1.3 multiplied by the compacted yardage equals truck yardage.

The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in Exhibit E. The average depth for each road segment shall be the specified depth or greater.

Turnouts shall have a surfaced area of at least 44 square yards each at the depths shown in Exhibit E.

Turnarounds shall have a surfaced area of at least 73 square yards each at the depths shown in Exhibit E.

Landings shall have a surfaced area of at least 220 square yards each at the amounts shown in Exhibit E.

<u>Curve Surfacing</u>. Extra surface width shall be required for the inside of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width to be surfaced at the depths shown in Exhibit E.

COMPACTION AND PROCESSING REQUIREMENTS

<u>Subgrade</u>. Subgrade surfaces of the road segments listed below shall be graded and compacted prior to rocking. Compaction shall be accomplished by traveling all surfaces from shoulder to shoulder until visible deformation ceases, or in the case of a sheepsfoot roller, the roller "walks out." At least 3 passes shall be made over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B (47+15 to 65+90)	Vibratory Rollers
G to H (8+00 to 11+70)	Vibratory Rollers
C to D and E to F	Vibratory Rollers

<u>Fills</u>. Embankments and fills shall be placed in (approximately) horizontal layers not more than 8 inches in depth. Each layer shall be separately, and thoroughly, compacted. Compaction equipment shall be operated over the entire width of each layer until visible deformation of the layers ceases or, in the case of a sheepsfoot roller, the roller "walks out." At least 3 passes shall be made over the entire width and length of each layer. A pass is defined as traveling a fill layer in one direction and then back over that same layer again.

Placing individual rocks or boulders with more depth than the allowed layer thickness shall be permitted, provided the embankment will accommodate them. Such rocks and boulders shall be at least 6 inches below the subgrade. They shall be carefully distributed and the voids filled with finer material, forming a dense and compacted mass. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
C to D (0+90 to 2+60) & (7+00 to 7+65)	Crawler Tractors
C to D (5+00 to 6+00)	Tampingfoot Compactors
E to F (0+85 to 2+20)	Crawler Tractors

COMPACTION AND PROCESSING REQUIREMENTS

<u>Crushed Rock</u>. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of crushed rock shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 6 inches in depth. When more than 1 layer is required, each shall be shaped and compacted before the succeeding layer is placed. Any irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Each layer shall be compacted with a minimum of 3 passes over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE.

Rock shall be compacted and processed during the same project period it is spread, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B (Rocked sections & Spot rock locations)	Vibratory Rollers
G to H (Rocked sections & Spot rock locations)	Vibratory Rollers

<u>Existing Crushed Rock</u>. The existing rock shall be unearthed to a depth that removes sod on surface and shoulders, potholes, and surface unevenness. The existing rock shall then be uniformly mixed and moistened or dried to a uniform moisture content suitable for maximum compaction and compacted. Any irregularities or depressions that develop during compaction shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. The existing rock shall be compacted with a minimum of 3 passes over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE.

Existing crushed rock shall be compacted and processed after completion of all project work and log hauling, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B (0+00 to 47+15)	Vibratory Rollers
G to H (0+00 to 8+00)	Vibratory Rollers

COMPACTION EQUIPMENT OPTIONS

<u>Vibratory Rollers</u>. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 miles to 1.8 miles per hour, as directed by STATE.

<u>Vibratory Compactors</u>. Vibratory compactors shall consist of multiple or gang type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.

<u>Vibratory Hand-Operated or Backhoe-Mounted Tamper</u>. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts (and/or bridge approach embankment materials around abutments). The tamper shoe dimensions shall be a minimum of 10" X 13" and capable of a centrifugal force of 2,250 pounds.

<u>Rock Trucks</u>. Rock spreading shall begin at the nearest point to the rock source and progress toward the end of the project. Rock trucks shall be routed over the entire cross section of rock layers.

<u>Tampingfoot Compactors</u>. Tampingfoot or sheepsfoot compactors shall exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet. The compactor shall cover a minimum width of 60 inches per pass and weigh a minimum of 16,000 pounds.

<u>Grid Rollers</u>. Pit-run rock shall be processed by grid rolling with a Hyster Grid Roller Model D or equivalent, fully equipped with 32,000 pounds or more of ballast weights. Twenty passes shall be made with a grid roller over the entire length and width of the road, unless STATE requires fewer passes. A grader weighing at least 20,000 pounds shall work the pit-run surface during grid rolling so that all pit-run rock comes in contact with the grid roller. Grid rolling shall be performed when the subgrade is dry and firm. Road surface shall be uniformly shaped and graded prior to and during grid rolling.

<u>Vibratory Grid Compactors</u>. The roller shall have a grid surface and have an operating weight of 32,000 pounds or more. The rock shall be worked with a grader weighing at least 20,000 pounds during the grid rolling process. All rock shall come in contact with the vibratory grid compactor. A minimum of 10 passes shall be made with the grader and vibratory grid compactor over the entire length of the road, unless STATE requires fewer passes.

Crawler Tractors. D-7 Caterpillar or larger.

<u>Rubber-Tired Skidders</u>. A rubber-tired skidder weighing a minimum of 20,000 pounds shall be operated over the fill layers so that the entire layered surface comes in contact with the tires. Skidders with oversized tires (high flotation) are not acceptable for compaction.

EXHIBIT F

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Culverts shall be constructed of corrugated polyethylene. Culverts shall conform to the material and fabricating requirements of the "Standard Specifications for Highway Construction" prepared by the Highway Division of the Oregon State Department of Transportation. Polyethylene culverts shall also be double walled and meet the requirements of AASHTO M-294-901, Type S. Corrugation types and shapes other than those meeting the above minimum Highway requirements shall be approved in writing by STATE.

Culverts shall be located according to the alignment and grade as shown on the Plan and Profile, and/or as staked in the field, or as stipulated in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

Culvert grade shall slope away from ditch grade at least 5 percent unless otherwise specified.

The foundation and trench walls for all culverts shall be free from logs, stumps, limbs, stones, and other objects which would dent or damage the pipe. The culvert trench shall be excavated 3 pipe diameters wide to permit compaction and working on each side of the pipe. Tamping shall be done in 6-inch lifts, 1 pipe diameter each side of the pipe to 95 percent density or over. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert. Minimum bedding depth shall be 6 inches.

A bedding of granulated material or crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the pipe.

Backfill shall consist of granulated material, crushed rock, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the pipe.

Transporting of the pipe shall be done carefully. Dragging or allowing free fall from trucks or into trenches shall not be permitted.

Joining shall be done with bands of like material and corrugations. Manufacturers' instructions shall be followed for prefabricated pipe assembly.

Polyethylene joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the pipe joint.

When joints are employed, the longest length of pipe shall be placed at the outlet end.

A manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the State's Contract Administrator upon request.

EXHIBIT F

CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be 12" Minimum vertical cover for other designs shall be as specified by STATE.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions. The shortest culvert section length shall be placed at the inlet end.

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water. The intake end of relief culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with an approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

EXHIBIT F

CULVERT LIST

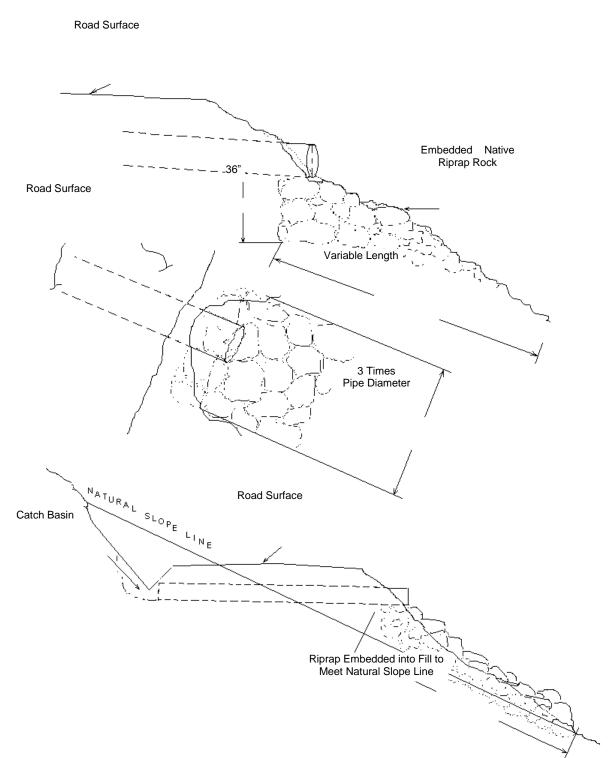
CULVERT	DIAMETER	LENGTH	ROAD SEGMENT	
NO.	(Inches)	(Feet)	Point to Point	STATION
1	18	32	A to B	0+05
2	30	40	A to B	2+50
3	18	30	A to B	20+60
4	24	40	A to B	27+60
5	18	30	A to B	33+20
6	24	40	A to B	41+15
7	24	40	A to B	42+20
8	24	30	G to H	6+20

The intake end of culverts shall be marked by installing a 5 foot long, painted steel fence post two feet into the ground, within 6 inches of the inlet on the downgrade side.

All culverts scheduled for replacement shall become property of PURCHASER and be removed from State land in the same project period in which replacement occurred.

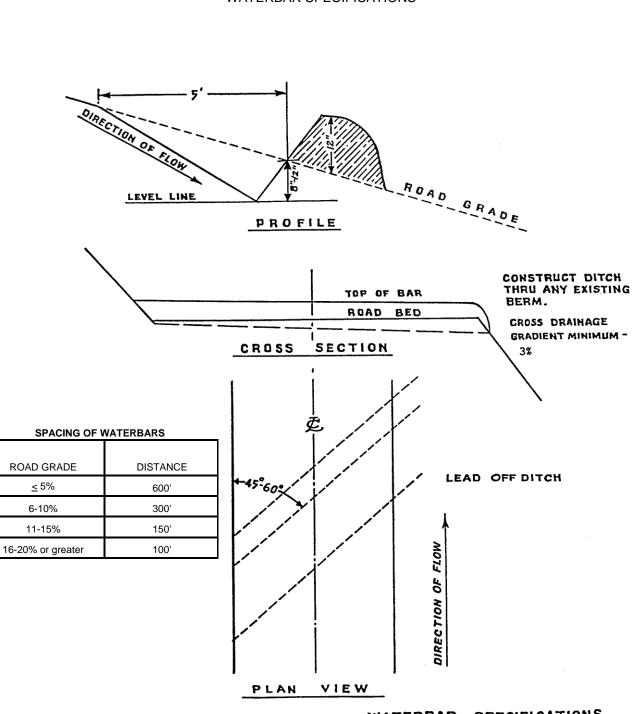
TOTAL LENGTHS BY DIAMETER		
18 INCH	24 INCH	30 INCH
92 Feet	150 Feet	40 Feet

EXHIBIT G



TYPICAL EMBEDDED ENERGY DISSIPATOR

EXHIBIT H

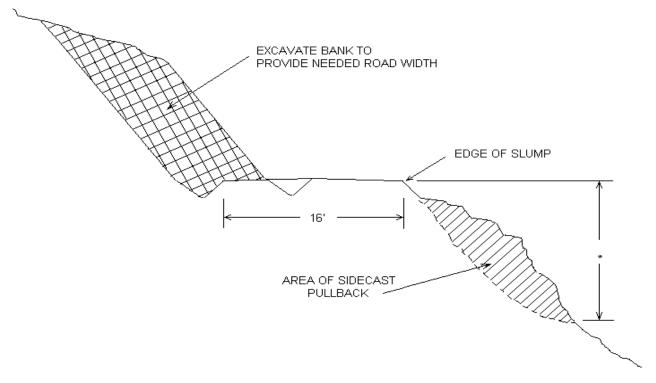


WATERBAR SPECIFICATIONS

WATERBAR SPECIFICATIONS FOR CROSS DITCHING #298

EXHIBIT I

TYPICAL CROSS SECTION VIEW OF SIDECAST PULLBACK AND ROAD REALIGNMENT



(No Scale)

^{* 10} to 20 feet depending on sidecast configuration.

EXHIBIT J

SPECIFICATIONS FOR LANDING SLASH PILING

<u>Piling Slash/Covering Piles</u>: All piles shall be as compact as possible. The diameter of the pile shall be a minimum of 3 to 4 feet. During pile construction, place a sheet of polyethylene plastic that is 10 feet by 10 feet wide and no more than 4 mil. thick, 1 foot from the top of the pile on the southwest side. The plastic shall then be weighed down by piling additional Slash materials on top of the pile to a height of no more than 15 feet.

<u>Placement of Piles</u>: Piles shall be placed in a location to minimize damage from burning to standing green trees and Snags. Piles shall be placed as follows:

- (a) No less than 30 feet from any Snags or green trees, unless otherwise approved by STATE.
- (b) Cull log segments suitable for firewood shall be piled separately from Slash at a distance of no closer than 20 feet from the Slash piles.

EXHIBIT K

SEEDING AND FERTILIZING

This work shall consist of preparing seedbeds and furnishing and placing required seed and fertilizer.

<u>Seeding Seasons</u>. Seeding shall be performed only from March 1 through June 15 and August 15 through October 15. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started. PURCHASER shall notify STATE 24 hours prior to seeding.

<u>Soil Preparation</u>. Areas to be seeded that have been damaged by erosion or other causes shall be restored prior to seeding. All areas to be seeded shall be finished and then cultivated to provide a reasonably firm, but friable seedbed. A minimum of 1/2 inch of surface soil shall be in a loose condition.

Application Methods for Seed and Fertilizer

<u>Dry Method</u>. Mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders or other approved mechanical seeding equipment shall be used to apply the seed and fertilizer in the amounts and mixtures specified. Hand-operated seeding devices may be used when seed and fertilizer are applied in dry form.

Application Rates for Seed and Fertilizer

Seed listed below shall be applied at the following rates per acre:

<u>Species</u>	Lb./Acre	Mixture	Pure Live <u>Seed</u>	Poison and/or <u>Repellent</u>
Fine Fescue	12	40%	98%	0
Annual Ryegrass	6	20%	98%	0
Perennial Ryegrass	9	30%	98%	0
White Dutch Clover	3	10%	98%	0

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 300 pounds per acre.

Seeding will be considered acceptable when all other specified requirements in Exhibits L have been completed and a healthy, uniform, close stand of grass has been established, unless otherwise approved in writing by STATE.

NOTICE OF TRANSFER OF STATE TIMBER

Instructions

629:-Form-301-010

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

SECTION 1

On ______, state timber sale purchaser (Transferor)______, sold, exchanged or otherwise transferred to ______, (Transferee) state timber originating from State

Timber Sale Contract No. _____

Transferee hereby certifies that they:

- (a) Will not export the unprocessed state timber which is the subject of this transaction;
- (b) Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person; and
- (c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

SECTION 2

- Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.
- This is a sale of hardwood logs for domestic processing.
- This is a sale of Western Red Cedar for domestic processing.
- This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.

SECTION 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:	Transferee:
Signed	Signed
Title	Title
Dated	Dated
Noto: For the nurness of this form th	a definition of upproceed timber is the same as in

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester 2600 State Street Salem, OR 97310

Notice of Transfer of State Timber Form 301-010.doc/Jaz B (SF)



WRITTEN PLAN

"STEWARDSHIP IN FORESTRY"

SALE NAME:	East Ranch	341-13-88	
PROTECTED WATERS:	East Creek, a large Type 'F' Stream and a small Type F tributary of it.		
		nitions: Stream buffer: at least 100 feet horizontal distance the high water mark on each side of the stream.	
LOCATION:	Portions of Sections 16 and 21, T3S, R8W, W County, Oregon.	/.M., Tillamook	

Protection measures:

- All trees in the RMA are reserved from cutting.
- Cable yarding lines will be pulled out of the RMA prior to rigging the next yarding road.
- If trees or logs fall or slide into a stream channel they will not be limbed, bucked, or removed without prior approval from ODF.
- Cable lines will be an average of at least 150 feet apart where they extend over or through the Type F stream and buffer.

Date: 11/6/2012

Prepared by: Nick Stumpf