# PART III: EXHIBITS

State Timber Sale Contract No. 341-10-25 Ridge 77

# **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 Informat	ion (complete):	
(1)	Contract No.: <u>341-10-25</u>			
(2)	Sale Name: Ridge 77	<u></u>		_
(3)	Contract Expiration Date: October 31, 2011	Project Completion Dates:	No. 1 prior to	August 31, 2010
(4)	Purchaser:		<u> </u>	prior to August 31, 2009
(6)	Purchaser Representatives:			<u>.                                    </u>
(0)	•		Cell/Other	
	Projects:		Phone:	Home:
	Projects:		Cell/Other Phone:	Home:
	•		Cell/Other	
	Projects:	· · · · · · · · · · · · · · · · · · ·	Phone:	Home:
	Projects:		Cell/Other Phone:	Home:
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	Logging:		Phone:	Home:
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	Logging:		Phone: Cell/Other	Home:
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			Cell/Other	
	Logging:	Phone:	Phone:	Home:
(7)	State Representatives:			
(,)	State Representatives		Cell/Other	
	Projects:		Phone:	Home:
	Logging		Cell/Other	Цото
	Logging:	Phone:	Phone:	Home:
(8)	Name of Subcontractors & Starting Dates:			
	Projects: No(s)	Date:	Phone:	
	No(s)	Date:	Phone:	
	No(s)	Date:	Phone:	
	No(s)	Date:	Phone:	
	Logging: Felling	Date:	Phone:	
	Yarding:	Date:	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.

1	Cable Landing, with numbers for sequence.
A	Tractor Landing with alphabetical sequence.
	Approximate setting boundary.
	Spur truck roads.
~~	Tractor yarding roads.
X	Temporary stream crossings.

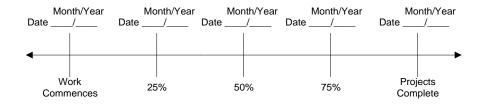
## **EXHIBIT B**

#### **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.

# **Projects**



#### **Harvest & Other Requirements**



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.

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: STATE OF OREGON - DEPARTMENT OF FORESTRY	SUBMITTED BY: PURCHASER
Title	Title

Original: Salem
cc: District File
Purchaser

Operations Plan.doc/Jaz B (TS)

## **EXHIBIT C**

# SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1)	REVISION NUMBER		☐ Dat	te te te		(12)	NOTICE OF CANCELLATION OF BRAND: Effective Date:	
(2)	TO:	(Third P						State Forester's Representative
,_\							(13)	SALE NAME Ridge 77
(3)		Astoria (04) State Forestry [		03) 325-	5451			COUNTY Clatsop
	•	)2219 Hwy. 2	,	ria, OR 9	7103		(14)	•
(4)	PURCHAS	SER:					(15)	STATE BRAND REGISTRATION NUMBER
	Mailing Ad	dress:					(16)	STATE BRAND INFORMATION:
	Phone Nu	mber:					(16)	\
(5)		SCALING					7	(COMPLETE)
	SPECIFIC	SCALING	*NET		CLASS	<u> </u>	4	
_		DIAMETER	SCALE	PER	**			
	SPECIES Conifers	INCHES 	VOLUME 10	MBF X	SUM	SUB	-	
	ardwoods		10	X			-	~
							(17)	PAINT REQUIRED: YES ⊠
**	Apply minimum v Sum (if indicated	volume test to whole ): see instructions a	logs over 40' Wand explain in Ite	estside; 20' E m (19).	astside.			COLOR Orange
(6)	WESTSID	E SCALE:		,	YES	NO	(18	) SPECIAL REQUESTS
	-	actual taper rule. Lo	ogs over 40'.					ELABLE CULL (all species)
(7)	EASTSIDI	E SCALE:						DEDUCTIONS ALLOWED
	Use Region 6	actual taper rule. Lo	ogs over 40'.		_			R MECHANICAL DAMAGE NCIL BUCK
(8)	_	ale Sample				$\boxtimes$		D-BACK VOLUME - Deductions due to delay
<b>(0)</b>		log load receipts						HER:
(9)	Weight Sa	ue					<u> </u>	
(10)	Per Load					$\boxtimes$	(19)	
	(9) and (10), y	yellow log load recei	pts					feet shall be scaled as "Utility." Hardwood logs greater than or equal to 30 net board feet shall be
(11)		ED SCALING	G					scaled as a sawlog.
	LOCATIO	NS		pecies	힏	Truck	6	
					Yard	Truck		
				Ø		[	Opera	ator's Name (Optional inclusion by District):
							(20)	SIGNATURES:
							_	Purchaser or Authorized Representative Date
					+		4	ruichaset of Authorized Representative Date
							=	State Forester Representative Date
					+++		+	

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.

<u>Distribution:</u> ORIGINAL: Salem / COPIES: TPSO, Approved Scaling Location, Purchaser, District, Mgmt. Unit

#### **EXHIBIT C**

## INSTRUCTIONS FOR FORM 343-307 (rev. 10/08)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (12). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO).
- (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. Review Section 2040 or 2045, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (16) thru (18)), and is required to show existence on the sale. **SUM** (lump sum material). **SUB** (submerchantable material). SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (Per MBF) entries. Per MBF, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. Per MBF and SUB require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, Per MBF and/or subspecies will always be scaled.
- (6) Westside Region 6 actual taper 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 (Westside).
- (7) Eastside Region 6 actual taper/taper table segment scale. 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.
- (8) 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 (19).
- (9) Weight Sale Check box if sale is to be sold as a weight sale. Processing procedures from approved locations to TPSO's will be explained in the Remarks section of Item (19).
- (10) Per Load Check box if volumes on sale are per load. Specific instructions for handling and processing will be fully explained in the Remarks section of Item (19).
- (11) 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.
- (12) When logging and hauling is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box in Item (1), and send to TPSO.
- (13) Enter sale name and county
- (14) .Enter sale Contract number.
- (15) Enter Oregon's State Brand Registry Number (required).
- (16) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (19).
- (17) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (18) Special Requests. These are requests that will be applied to ODF timber sales. If "Other" is indicated, it must contain a description and any necessary comments.
- (19) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling or processing requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (20) Require purchaser to sign and date completed form.

#### FOREST ROAD SPECIFICATIONS

SUBGRADE	SURFACED	POINT TO	STATION TO	DRAINAGE
WIDTH	WIDTH	POINT	STATION	
16 feet	12 feet	I1 to I2	0+00 to 52+80	DITCH

<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.

Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

All danger trees, leaners, and Snags outside the clearing limits which could fall and hit the road shall be felled.

GRUBBING. 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 debris shall not be left lodged against standing trees.

#### GRUBBING CLASSIFICATION.

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

Improvements and reconstructions - 4 feet back from the shoulder of the subgrade or ditch, whichever is widest, or as marked in the field.

<u>CLEARING AND GRUBBING DISPOSAL</u>. Scatter in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. Do not place clearing and grubbing debris on side slopes exceeding 50 percent. Grubbing debris shall be left in a stable location, and not left lodged against standing trees.

<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-engineered lines, grades, dimensions, and plans when provided.

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 D.

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.

ROAD WIDTH LIMITATIONS. 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.

## FOREST ROAD SPECIFICATIONS

#### **DRAINAGE**

Subgrade. Subgrade shall be crowned at 4 to 6 percent (1/2 inch per foot).

Ditch. Construct "V" ditch 3 feet wide and to a depth of 1 foot below subgrade.

Ditchouts. Construct ditchouts away from subgrade at locations marked in the field or as directed by STATE.

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 50 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: Intervisible but not greater than 750 feet apart and as marked in the field.

GRADING	Back Slopes	Fill Slopes
Rock	Vertical to 1/4:1	Not steeper
Common - side slopes 50% and over	<sup>3</sup> ⁄ <sub>4</sub> :1	than 1½:1
Common - side slopes less than 50%	1 :1	
Common - turnpike (level) section	2 :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 is to be crowned for drainage, with general grade no more than 3 percent. Surface as shown on Exhibit D.

<u>TURNAROUNDS</u>. Increase subgrade width an additional 20 feet for a length of 20 feet at locations marked in the field.

<u>SEASONAL WINTERIZATION</u>. All unrocked roads (Landings) or unfinished subgrades shall be waterbarred in accordance with Specifications in Exhibit F, and blocked from vehicular traffic prior to October 1, annually and as directed by STATE.

## SPECIFIC LANDING CONSTRUCTION INSTRUCTIONS

<u>Location</u> <u>Work Description</u>:

Point 1A Excavate a Landing within the posted Right-of-Way tags at an elevation 2 feet above the existing

road that is accessible for a large cable yarder. Haul excavated material to waste area shown

on Exhibit A.

## Waste Area Location

Station 20+50 on Road Segment I1 to I2.

# Waste Area Treatment

- (1) Place excess excavated materials in the waste areas shown on Exhibit A. All waste materials shall be deposited in stable locations as directed by STATE, spread evenly, compacted, and adequate drainage established.
- (2) Apply grass seed and straw mulch to all waste areas in accordance with Exhibit H.

#### FOREST ROAD SPECIFICATIONS

## GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) <u>Drainage Ditches</u>. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels. Install a culvert marker at each existing culvert that is missing a marker that could be reached by a grader blade.
- (2) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete drainage ditches, ditchouts, clean culvert inlets, and other specified work prior to the application of new surfacing rock.
  - (b) Cut out all potholes, sod, and washboard sections from the existing surfacing.
  - (c) Apply required patching and leveling rock, as directed by STATE.
  - (d) Process (grade and mix) the existing surface and added base rock. Provide for a crown of ½ inch per foot in road width (4 to 6 percent), and compact in accordance to Exhibit D.
  - (e) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with Exhibit D.

#### **ROAD SURFACING**

<b>ROAD SEGMEN</b>	T: I1 to I2		POINT		Sta. to Sta.			
						TOTAL		
	Dook Size		Depth of	Volume (CY) Per		0+00 to 52+80 Number Of		VOLUME (CY)
Application	Rock Size And Type	Location	Rock (inches)					
Leveling Rock	4"-0" Crushed	I1 to I2	N/A					100
Surfacing Rock	1 1/2"-0" Crushed	I1 to I2	3	Station	19	Stations	52.8	1,003
Turnaround	4"-0" Crushed	I1 to I2	3	Turnaround	20	TA's	2	40
Junctions	1 1/2"-0" Crushed	I1 to I2	3	Junction	10	Junctions	5	50
Turnouts	1 1/2"-0" Crushed	I1 to I2	3	Turnout	10	Turnouts	9	90
Landing Rock	1A, 1B, & 2A	N/A	Landing	50	Landings	3	150	
Total Rock for Ro	oad Segment:		I1 to	o I2			1,433	

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

#### **ROCK ACCOUNTABILITY**

PURCHASER shall obtain subgrade approval from STATE prior to rocking. Rocking shall be limited to periods when weather conditions are acceptable to STATE and when sediments will not enter streams.

Rock accountability shall be determined by the following methods, as directed by STATE. STATE shall be given 24 hours' notice prior to rocking.

Rock Checking. All rock spreading shall be done only when a STATE representative is present. STATE shall issue a receipt for each load delivered, and rock shall be measured without allowance for shrinkage or shakedown during hauling. Total truck measure volume for each road segment shall be as shown on Exhibit D. Deliver at least 500 cubic yards per 8-hour shift, unless otherwise approved by STATE. A penalty of \$10 for each 10 cubic yards which are not delivered during a single shift shall be billed, and payment shall be required prior to final acceptance of the project by STATE.

<u>Depth Measurement</u>. Rock shall be spread and compacted according to the depths specified in Exhibit D. 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 D. The average depth for each road segment shall be the specified depth or greater. Surfacing areas shall be staked by STATE.

<u>Load Records</u>. Notify STATE before spreading the rock and maintain a record of all rock delivered for spreading. Make the record available for STATE inspection. A report listing the amount of rock delivered the prior month must be submitted no later than the 15th of each month.

## 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. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments that require rock surfacing.	1

<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 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 one or more of the approved equipment options listed below:

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
All road segments requiring crushed rock.	1

#### 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.

#### **EXHIBIT E**

#### **ROCK QUARRY DEVELOPMENT AND USE**

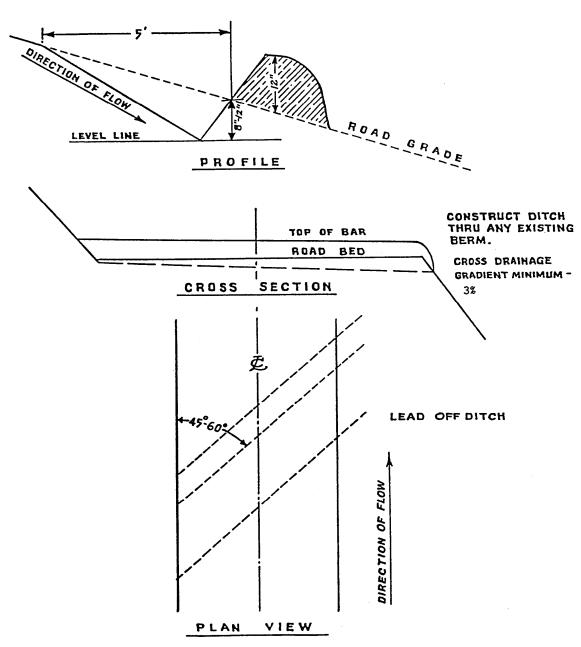
- (1) PURCHASER shall prepare written development plans for the quarry areas. The plans shall be submitted to STATE for approval prior to conducting any operation in the quarry areas. The plans shall include, but not be limited to:
  - (a) Location of benches and roads to benches.
  - (b) Disposal site for debris and overburden.
  - (c) Time lines for rock quarry use.
  - (d) Erosion Control measures.
- (2) PURCHASER shall develop 150 cubic yards of 6"-0" pit-run rock to be used for Landings.
- (3) PURCHASER shall schedule and coordinate quarry and stockpile usage with other existing or planned activity requiring quarry or stockpile usage. PURCHASER shall notify STATE 2 days prior to the start of quarry use activities.
- (4) PURCHASER shall conduct the operations relative to the disposal of waste material in such manner that silt, rock, debris, dirt, or clay shall not be washed, conveyed, or otherwise deposited in any stream.
- (5) Controlled blasting techniques shall be utilized for any blasting operations, and shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain as much material as possible within the quarry development area. PURCHASER shall maintain a comprehensive blasting log that contains all pertinent data for all blasting operations. The blasting log shall be submitted to the STATE after the completion of all blasting activity. The blasting log is intended for STATE record keeping purposes only.
- (6) Benches shall be constructed at intervals of 40 feet or less in height and shall be a minimum of 20 feet in width. Any gravel or talus slopes shall be left with a working face at an angle of 60 degrees or less. There shall be a minimum of one bench with an access road to it. Said bench shall be easily accessible with tractors.
- (7) Quarry face shall be developed in a uniform manner. All quarry backslopes shall be left in a stable condition.
- (8) Proper winterization and storm-water control measures such as water barring, drainage, utilization of filter bales, mulching and/or blocking access shall be utilized and such measures maintained to protect the watershed and project work, as directed by STATE.

## PIT-RUN ROCK SPECIFICATIONS

For 6"-0" Pit-Run	Passing	10" sieve	100%
	Passing	6" sieve	65%

Control of gradation shall be by visual inspection by STATE.

EXHIBIT F
WATERBAR SPECIFICATIONS



WATERBAR SPECIFICATIONS FOR CROSS DITCHING #298

#### **EXHIBIT G**

#### TEST DRILLING REQUIREMENTS

- (1) PURCHASER shall notify STATE a minimum of 48 hours prior to beginning any operations. A STATE Representative shall be present during test drilling to monitor results, issue instructions, determine test hole locations and depths.
- (2) Work scheduling shall provide for continual operation until contract work is completed, unless interrupted by poor weather, fire closures, or other uncontrollable circumstances, Equipment breakdowns shall be repaired without undue delay, and provision shall be made for replacement of equipment to prevent prolonged delays. Any exception to these instructions must be authorized in writing by STATE.
- (3) The hydraulic rock drill shall be a crawler-type in the 40,000 pound class or greater, with a minimum penetration rate of 120 feet per hour while drilling a 3½"-6" bore hole, in overburden, fractured rock and solid rock.
- (4) The operator shall be experienced in operating the required equipment and be able to operate the equipment proficiently and efficiently. If STATE determines that an operator(s) or other personnel is/are not operating in a proficient and efficient manner, STATE considers the operator(s) or personnel not approved and not acceptable and may require the PURCHASER to do one or more of the following measures:

Replace operator(s) and/or personnel; Replace equipment;

- (5) Support including transport, other equipment, replacements, supplies, maintenance, and repairs shall be furnished as required to complete work; and shall be furnished without cost to STATE.
- (6) Test holes shall be drilled to determine mass attitudes of rock strata, rates of drill advancement, depths of overburden and other pertinent information.
- (7) Each test hole shall be staked and assigned an individual number. Test holes shall be drilled for various depths, as directed by STATE.
- (8) STATE may elect to change the test drilling locations at the drilling sites. However, no more than a total of 60 hours of hydraulic rock drill time and 46 hours of excavator time will be utilized.
- (9) Equipment trail construction will be required. Trails shall be constructed by PURCHASER using a small excavator. All routes and location of access roads shall be flagged and approved by STATE prior to construction. Cutting of trees may be necessary for access for test drilling. Trees shall be approved by STATE, properly accounted for prior to felling, decked as directed by STATE, and shall remain the property of the STATE.
- (10) Trails constructed will be waterbarred and blocked, as directed by STATE.
- (11) <u>Lowboy Mobilization</u>. Mobilization to the Northrup Quarry site and Knob Point Quarry site will have mobilization by lowboy approved. All other mobilization shall be by equipment travel.
- (12) Record Keeping. PURCHASER shall keep an accurate log of operating time (exclusive of standby time, repair delays, down time, etc.) and invoices for all equipment, and submit it to the STATE Representative upon request. STATE shall provide the form for recording the required log. If the log is determined by STATE to not be complete or accurate, then PURCHASER will not get credited for all or a portion of the work, as determined by STATE.

#### **EXHIBIT G**

#### TEST DRILLING REQUIREMENTS

- (13) <u>Verification</u>. The STATE representative shall provide direction for the conduct of work according to the specifications, verify hours of operation, verify required record keeping, and determine credits for project work.
- (14) <u>Site Priority</u>. Test drilling priority shall be as listed and shall be completed prior to August 31, 2009.

<u>Priority</u>	Site Location
1.	Knob Point Quarry
2.	Northrup Quarry

- (15) Penalty. A penalty of \$250 per day shall be assessed for any 8-hour work day that either equipment, personnel, or supplies are not operating or available due to failure to supply approved and acceptable equipment, personnel, or supplies in order to continue the project for priority sites one and two in an efficient and progressive manner.
- (16) <u>Credit Rates</u>. Rates credited toward completion of the project will be applied for periods of active operation on the project work only and exclusive of initial move in of equipment or supplies. The method of crediting PURCHASER will be determined by applying the following credit rates for equipment and mobilization.

(a) C315 excavator, or equivalent, and operator.
 (b) Hydraulic drill (3½"-6" bore hole), and operator.
 (c) C315 mobilization with lowboy.
 (d) Hydraulic drill mobilization with lowboy.
 (e) S4 per operating hour
 (f) \$267 per operating hour
 (g) \$699 per approved move
 (hydraulic drill mobilization with lowboy.
 (hydraulic drill mobilization with lowboy.

(17) <u>Credit for Project Work</u>. Final credit for Project No. 2 shall not exceed \$13,000 per Section 2630, "Credit for Project Work," in the Timber Sale Contract. STATE may adjust the credit in Section 2630 in the event that the work is completed prior to using all available credit rates.

#### **EXHIBIT H**

#### SEEDING AND MULCHING

This work shall consist of preparing seedbeds and furnishing and placing required seed, fertilizer, and straw mulch. Straw mulch shall consist of straw that is free of noxious weeds. Apply grass seed, fertilizer, and straw mulch to all waste areas resulting from Project No. 1.

<u>Seeding Seasons</u>. Seeding shall be performed only from <u>March 1</u> through <u>June 15</u> and <u>August 15</u> through <u>October 31</u>. 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.

#### APPLICATION METHODS FOR SEED

<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 in the amounts and mixtures specified. Hand-operated seeding devices may be used when seed is applied in dry form.

## APPLICATION RATES FOR SEED AND FERTILIZER

The seed mixture listed below shall be applied at 100 lbs. per acre. The seed mixture shall be comprised of the following:

SPECIES	MIXTURE	PURE LIVE SEED	POISON AND/OR REPELLENT	GERMINATION
Annual Rye	33%	95%	0	>90%
Orchard Grass	33%	95%	0	>90%
Perennial Rye	34%	95%	0	>90%

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at a the rate of 200 pounds per acre.

Mulching Period. Straw mulch shall be applied within 24 hours of spreading grass seed and fertilizer.

## APPLICATION RATES FOR MULCH

Place straw mulch to a reasonably uniform thickness of 1½ to 2½ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

## **APPLICATION LOCATIONS**

All waste areas resulting from Project No. 1.

#### **EXHIBIT I**

#### SPECIFICATIONS FOR BRUSH AND SLASH SHOVEL PILING

#### Description of Work to be Done

Areas designated for work under the contract shall be treated according to the specifications given below:

<u>Clearing</u> - Brush, logging Slash, and other debris shall be cleared from planting sites and piled in windrows or piled so that 80 percent or more of the soil organic layer is exposed. All woody vegetation (other than conifer trees) is defined as brush in this exhibit.

<u>Piles</u> - shall be located at least 75 feet apart and shall be no more than 75 feet long. Piles shall be located inside the project area designated for piling and shall be more than 75 feet from any edge or standing conifer tree. Piles shall be built to a height of 3 to 4 feet and then covered to prevent water from reaching the Slash. STATE <u>shall supply</u> the materials used for covering the Slash. Additional woody debris shall be piled on top of the covered piles to complete the piling, as directed by STATE. Logs and chunks which are suitable for firewood shall be piled separately from Slash, near roads and Landings and alongside the road in locations designated by STATE.

Conifer Trees - shall be saved, unless otherwise directed by STATE.

Residual Logs – An average of 600 cubic feet of hard conifer logs per acre. Log shall contain a minimum of 10 cubic feet of volume and be no shorter than 6 feet in length. Two logs per acre shall be at least 24 inches in diameter, on the large end, where available. Hard conifer logs must be in decay class one or two as indicated by intact bark and original wood color. Trees or logs shall be left well distributed across the unit.

<u>Protective Measures</u> - shall comply with Oregon Forest Practice Rules issued per ORS 527.610 to 527.992. Examples of protective measures are: (1) waterbarring tractor trails where necessary to prevent runoff toward streams; (2) not windrowing in streams or streamways; and (3) leaving Stream Buffers along designated streams.

Work specifications may be modified or waived only upon written notice from STATE.

#### **EXHIBIT I**

#### SPECIFICATIONS FOR BRUSH AND SLASH SHOVEL PILING

#### Equipment Type, Equipment Operation, and Conduct of Work

The specifications given below are requirements for equipment type, equipment operation, and conduct of work under the contract.

<u>Shovel</u> - shall be a track-mounted machine with a ground-pressure rating of not more than <u>6.8</u> PSI and a net horsepower of <u>85</u> or more. The machine shall be capable of a minimum horizontal reach of <u>26</u> feet and a minimum vertical reach of 16 feet.

- Excavator-shovel: Bucket shall be a hydraulically controlled, 4 to 5-foot wide, "clamshell-style bucket with rake arms," with a 360-degree continuous rotation, and tooth length on rake arm shall be greater than 14 inches long, unless otherwise approved in writing by STATE. "Clamshell-style bucket with rake arms" shall be hydraulically controlled to operate bucket in a horizontal position (fixed position: positive control) for piling Slash.
- Log Loader shovel: Bucket shall be a hydraulically controlled, 4 to 5 foot wide, "clamshell-style bucket with rake arms," with a 360-degree continuous rotation, and tooth length on rake arm shall be greater than 14 inches long, unless other wise approved in writing by STATE. "Clamshell-style bucket with rake arms" shall be hydraulically controlled to operate bucket in a vertical position (free swinging) for piling Slash.

Equipment	Rate	Hours	Appraised Value
Excavator	\$ 120.00 / hour	20	\$ 2,400.00
Log Loader	\$ 87.50 / hour	27.4	\$ 2,400.00

<u>Operator</u> - must be experienced in operating similar equipment on land clearing operations, be able to operate the equipment proficiently, and pile the debris on the area as directed by STATE.

<u>Support</u> - including transport, other equipment, replacements, supplies, maintenance, and repairs shall be furnished as required to complete work; and shall be furnished without cost to STATE, other than as agreed under the contract terms.

<u>Work Scheduling</u> - work shall be accomplished only during dry weather conditions, and started within 14 calendar days after completion of Yarding activities on **Area 1**. Operations shall provide for continual operation until contract work is completed, unless interrupted by poor weather, fire closures, or other uncontrollable circumstances. Equipment breakdowns shall be repaired without undue delay, and provision shall be made for replacement of equipment to prevent prolonged delays. Piling operation shall not be allowed when operations might damage sites or affect stream flows. Any exception to these instructions must be authorized in writing by STATE.

STATE Representative - shall provide directions for the conduct of work according to specifications.

# PART IV: OTHER INFORMATION

State Timber Sale Contract No. 341-10-25 Ridge 77

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

# NOTICE OF TRANSFER OF STATE TIMBER

Instruc	tions		629:-Form-301-010		
	ete Section 1. Mark the box which a signatures.	applies to you/your company in Section 2.	Complete Section 3 and		
SECTION	ON 1				
On		, state timber sale purchaser (Transfo	eror)		
		, sold, exchanged or otherwise transferred	l to		
		, (Transferee) state timber origina	ating from State		
Timber	Sale Contract No				
Transfe	eree 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.				
(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	ON 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 Ce	dar for domestic processing.	ar 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	ON 3				
certifica		g into this certification, or failure to comply servation and Shortage Relief Act of 1990 enalties contained therein.			
Transfe	eror:	Transferee:			
Signed		Signed	1		
Title		Title			
Dated		Dated	4		
[No:		e definition of unprocessed timber is the sa	ame as in OAR 629-31-		
Mail To	State Forester 2600 State Street Salem, OR 97310				

#### OREGON DEPARTMENT of FISH and WILDLIFE

#### FISH SCREENING PROGRAM

#### SMALL PUMP SCREEN SELF CERTIFICATION

The Oregon Water Resources Department in coordination and cooperation with the Oregon Department of Fish and Wildlife includes screen requirements on pumps to protect fish as a condition of many surface water and/or reservoir water right permits. This is done in accordance with ORS 537.153.

The Oregon Department of Fish and Wildlife does not usually inspect small pump screens at pumped diversions less than 225 GPM (Gallons per Minute), but furnishes the following fish screening criteria information to the water right permit tee:

**Screen material open area** must be at least 27% of the total wetted screen area.

**Perforated plate:** Openings shall not exceed 3/32 or 0.0938 inches (2.38 mm).

Mesh/Woven wire screen: Square openings shall not exceed 3/32 or 0.0938 inches (2.38mm)

in the narrow direction, e.g., 3/32 inch x 3/32 inch open mesh.

**Profile bar screen/Wedge wire:** Openings shall not exceed 0.0689 inches (1.75 mm) in the

narrow direction.

NB: ODFW logo is 129% of logo on HQ mail label

**Screen area** must be large enough to cause fish impact. Wetted screen area depends on the water flow rate and the water approach velocity. **Approach velocity** is the water velocity perpendicular to and approximately three inches in front of any part of the screen face.

An Active pump screen is a self cleaning screen that has a proven cleaning system. The screen approach velocity for active pump screens shall not exceed 0.4 fps (feet per second) or 0.12 mps (meters per second). The wetted screen area in square feet is calculated by dividing the maximum water flow rate in cubic feet per second (1 cfs = 449 gpm) by 0.4 fps.

**A Passive pump screen** is a screen that has no cleaning system other than periodic manual cleaning. **Screen approach velocity for passive pump screens** shall not exceed 0.2 fps or 0.06 mps. The wetted screen area in square feet is calculated by dividing the maximum water flow rate by 0.2 fps.

For further information on fish screening please contact:

Bernie Kepshire, Oregon Department of Fish and Wildlife, 7118 NE Vandenberg Avenue, Corvallis, OR 97330-9446 (541) 757-4186 x 255

As evidence of having met fish screen installation requirements, please sign the certification and send to: Oregon Water Resources Department, Water Rights Section, 725 Summer St. NE, Suite A, Salem, OR 97301-1271

**Certification:** I certify that my small pumped diversion of less than 225 gpm meets fish screening criteria, and that I will maintain it to comply with regulatory criteria. I also understand that should fish screening standards change, I may be required to modify my installation to meet applicable standards.

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**<u>Landowner:</u>** Oregon Department of Forestry

92219 Highway 202 Astoria, Oregon 97103 (503) 325-5451

## **Protected Resources:**

One High Landslide Hazard Locations (HLHL) with Intermediate downslope public safety risk has been identified by the Area Geotechnical Specialist as being located within Area 1 (portions of Sections 15 and 22, of T6N, R6W, W.M., Clatsop County, Oregon). It has been determined that there is some potential for a rapidly moving landslide to occur in the sale area, although most of the potential landslide initiation sites are deep-seated. Given the uncertainty in how forest practices would affect the landslide potential and the uncertainty in how far landslides would travel down slope, the Division 623 Rules have been interpreted and applied conservatively.

<u>Area 1</u> One HLHL has been identified in Area 1 along the small seasonal stream with intermediate downslope public safety risk to one structure along Old Vesper 77 County Road (Shown as Pt. "C" on attached Exhibit "B"). One HLHL has been identified in Area 1 along the small seasonal stream with low downslope public safety risk to one structure along Old Vesper 77 County Road. (Shown as Pt. "D" on attached Exhibit "B")

<u>Area 2</u> One HLHL has been identified in Area 2 along the small seasonal streams with low downslope public safety risk to one structure along Old Vesper 77 County Road. (Shown as Pt. "F" on attached Exhibit "B")

## **Specific Site Characteristics:**

- The sale area is located on slopes along the north side of the Nehalem River valley.
- The entire hillside is part of a large landslide complex that appears to be related to the river undercutting the slopes.
- Portions of this landslide complex have been more recently active than others. The west end of the sale area is
  currently being undercut by the river and accordingly has been the most recently active portion of the
  complex. There is an extensive expanse of river terrace between the river and the rest of the sale area and
  accordingly this portion of the complex appears to be ancient and has not been active for some time.
- The sale area has been mapped as mudstones and sandstones of the Sager Creek Formation (Niem and Niem, 1985). This is supported by observed sedimentary rock outcrops in the area. Landslides are common in these weak, marine sediments.
- High landslide hazard locations, as defined by slope steepness, exist in only a few isolated portions of the sale area where slopes exceed 70% to 80%.
- Although they do not meet the standard slope thresholds, portions of the landslide complex near the ridge top with the potential to fail rapidly into channels below have also been determined to be high landslide hazard locations.
- There are numerous channels incised into the hillside. In general, these channels become more defined and more deeply incised from east to west across the sale area.
- There are numerous structures along the Vesper 77 Road below the sale area.

# **Tree and Vegetation Retention:**

<u>Area 1</u> There are four streams within Area 1. Three of the streams have a 25 feet posted no-touch buffer. Harvesting activities will not be performed in these unposted buffers, except for cable corridors. One stream has a posted buffer. Harvesting activities will not be performed in this posted buffer. Cable corridors will not be allowed in this posted buffer. Area 1 will be thinned to a target Basal Area of 120 square feet, leaving a Relative Density range of 25 to 30.

**Area 2** Wildlife trees are concentrated in the seasonal channels, as shown on Exhibit "A".

## **Practices:**

Along the above mentioned HLHL channels that are within Area 1, as well as all other seasonal Type N streams not listed, the following practices are required under the timber sale contract:

- No trees will be felled within stream buffers (RMA's), except where required for cable corridors where allowed.
- Trees adjacent to the stream buffers (RMA's) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- No ground based logging equipment will be permitted within 50 feet of the RMA's.
- Target Basal Area for Area 1 is 120 square feet throughout the sale area.
- Cable corridors must be at least 100 feet apart where they are permitted to cross the RMA's.

When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging. During rigging, the lines must be pulled out of the Type N RMA's when changing corridors.

I, the unders	gned, submit this written plan in compliance with the req	uirements in the Forest Practices Act
regarding the	operations conducted within 100 feet of Type F streams.	I agree to the protection measures listed
on this plan:		
Submitted: _		Date:
	Purchaser/Operator Contract Representative	