### PART III: EXHIBITS

State Timber Sale Contract No. 341-09-53 Panther Bowl

### **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 Inform	nation (complete):	}
(1)	Contract No.: 341-09-53	<u> </u>		
(2)	Sale Name: Panther Bowl	<u> </u>		
(3)	Contract Expiration Date: October 1, 2011	Project Completion Dat	es: Project No. 3 – Oct	ober 1, 2010
(4)	Purchaser:			
(6)	Purchaser Representatives:			
	Projects:	Phone:	Cell/Other Phone:	Home:
	Projects:	Phone:	Cell/Other Phone:	Home:
	Projects:	Phone:	Cell/Other Phone:	Home:
	110,000.	Thone.	Cell/Other	
	Projects:	Phone:	Phone:	Home:
	Logging:	Phone:	Cell/Other Phone:	Home:
			Cell/Other	_
	Logging:	Phone:	Phone:	Home:
	Logging:	Phone:	Cell/Other Phone:	Home:
	Logging:	Phone:	Cell/Other Phone:	Home:
(7)	State Representatives:			
(1)	Suite Representatives.		Cell/Other	
	Projects:	Phone:	Phone:	Home:
	Logging:	Phone:	Cell/Other Phone:	Home:
(8)	Name of Subcontractors & Starting Dates:			_
(0)	•	ъ.	D)	
	Projects: No(s)	Date: Date:		
	No(s)	Date:	Phone:	
	No(s)	Date:	Phone:	
	Logging: Felling Yarding:	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.

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

Original: Salem
cc: District File
Purchaser

Operations Plan.doc/Jaz B (TS)

### **EXHIBIT C**

### SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1) (2) (3) (4)	REVISION NUMBER Dat  CANCELLATION Dat  TO:  (Third Party Scaling Organization)  FROM: Coos (07) Phone (541) 267-(State Forestry District)  Address 63612 Fifth Road, Coos Bay, C			4130 OR 974	20	-	State Forester's Representative  (13) SALE NAME Panther Bowl  COUNTY Coos  (14) STATE CONTRACT NUMBER 341-09-53  (15) STATE BRAND REGISTRATION NUMBER  (16) STATE BRAND INFORMATION:  (COMPLETE)		
(5)		SCALING			CLASS				
	PECIES Conifers	SCALING DIAMETER INCHES	*NET SCALE VOLUME	PER MBF X	** SUM		JB	(17) PAINT REQUIRED: YES ⊠	
	ardwoods			X				COLOR <u>Orange</u>	
(6) (7) (8) (9) (10)	Sum (if indicated WESTSID Use Region 6 EASTSIDI Use Region 6 Weight So (6) – (8), pink Weight Sa Per Load (9) and (10), y	actual taper rule. Locale Sample log load receipts le	ogs over 40'.  ogs over 40'.	(19).	YES	NO		(18) SPECIAL REQUESTS  PEELABLE CULL (all species)  NO DEDUCTIONS ALLOWED  FOR MECHANICAL DAMAGE  PENCIL BUCK  ADD-BACK VOLUME - Deductions due to delay  OTHER:  (19) REMARKS	
(11)	APPROVI LOCATIO	ED SCALING		Secies	Yard	Truck	Weight	Operator's Name (Optional inclusion by District):  (20) SIGNATURES:	
								Purchaser or Authorized Representative Da  State Forester Representative Da	

### (12) NOTICE OF CANCELLATION OF BRAND:

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.

### **EXHIBIT C**

### INSTRUCTIONS FOR FORM 343-307 (rev. 01/09)

- (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.

# EXHIBIT D FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	12 feet	A to B	0+00 to 29+20	Ditch
14 feet	12 feet*	B to C	0+00 to 21+45	Outslope**
14 feet	12 feet*	C to D	0+00 to 31+21	Outslope**
14 feet	12 feet*	D to E	0+00 to 5+25	Outslope**
14 feet	12 feet*	H to I	0+00 to 29+20	Outslope**
14 feet	12 feet*	J to K	0+00 to 5+33	Outslope**

<sup>\*</sup>Surfaced width only applies if "WINTER AND WET WEATHER OPTION" is chosen.

<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 "Road Brushing Specifications" in Exhibit D shall apply. 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 classifications are as follows:

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 through openings in the timber outside of the cleared Right-of-Way, except areas where end-haul is required.

<sup>\*\*</sup>Drainage shall be changed to Ditch if "WINTER AND WET WEATHER OPTION" is chosen.

### FOREST ROAD SPECIFICATIONS

<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.

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 F.

Unless road design plans show otherwise, all roads shall be on a balanced cross section, except when the slope is over 50 percent, the road shall be on full bench for the width specified.

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.

### DRAINAGE

<u>Ditch</u>. Construct "V" ditch 3 feet wide and to a depth of 1 foot below subgrade. 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: As marked in the field.

GRADING	Back Slopes	Fill Slopes
Rock	Vertical to 1/4:1	Not steeper
Common - side slopes 50% and over	3/4:1	than 1½:1
Common - side slopes less than 50%	1/2:1	
Common - turnpike (level) section	2:1	

Top of cutslope shall be rounded.

<u>LANDINGS</u>. Landings shall be constructed as directed by STATE. Surface is to be crowned for drainage, with general grade no more than 3 percent.

### ADDITIONAL ROAD IMPROVEMENT/CONSTRUCTION INSTRUCTIONS

- A to B This road shall be graded for haul traffic.
- B to C This road shall be graded for haul traffic.
- C to D Pullback of old sidecast material is required between STA 0+00 to 2+65 and STA 18+70 to 25+00. The slides between STA 0+00 to 2+65 shall also be removed from the road surface. The remainder of the road shall be re-opened by removing the brush in the road prism, removing any cutbank slough or small slides and grading the road surface for haul traffic. Waste material from the cutbank slough and slides may be taken to either waste areas at Point F or G. Two 18" x 50' culverts shall be installed at STA 4+65 and 25+20.
- D to E This is a new road and Landing to construct. The first portion of the road (0+00 to 2+25) shall be built up using the endhaul material from the remainder of the road and Landing (2+25 to 5+20). This shall improve the drainage at the beginning of the road.
- H to I This road shall be re-opened by removing the small trees and brush in the road prism and grading the road surface for haul traffic. There are trees in the old stream buffer approximately 600' below the Landing at Point I that may be available for guy line anchors. There are not any likely anchors directly below this Landing as the unit is approximately 12 years old.
- J to K This is a new road and Landing to construct. No endhaul will be necessary on this road, it will be balanced cut/fill construction.

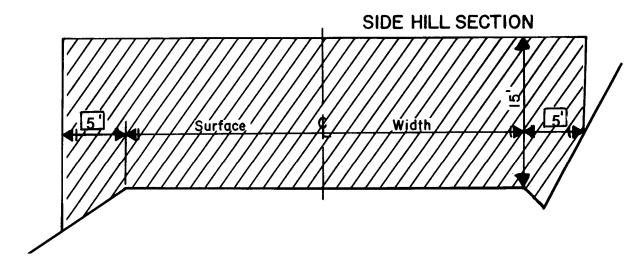
## ADDITIONAL ROAD IMPROVEMENT/CONSTRUCTION INSTRUCTIONS (WINTER AND WET WEATHER OPTION ONLY)

If the "WINTER AND WET WEATHER OPTION" is chosen, see the specifications in the following sections for changes:

- Drainage shall be changed according to Exhibit D, "Forest Road Specifications."
- Roads and landing shall receive crushed rock according to specifications in Exhibit E, "Rocking Specifications."
- Culverts shall be added as specified in Exhibit G, "Culvert Specifications."

## ROAD BRUSHING SPECIFICATIONS FOR ROAD IMPROVEMENT





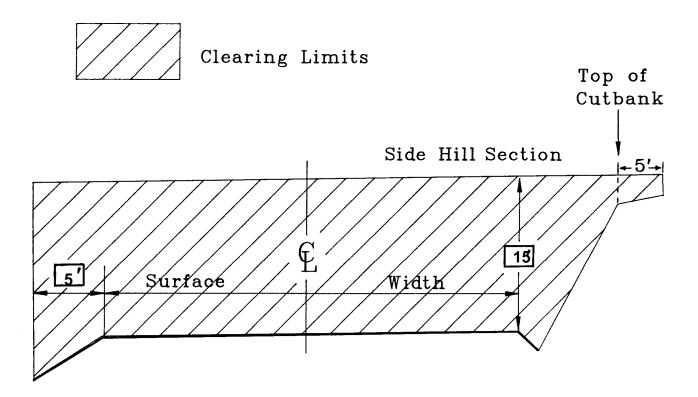
### **REQUIREMENTS**

Unless otherwise approved in writing by STATE, brush and trees shall be cut to a height of 6 inches or less above the ground surface or obstructions such as rocks or existing stumps.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, and water courses within 72 hours and may be scattered downslope from the road or placed in other stable locations, unless otherwise approved by STATE.

**EXHIBIT D** 

## ROAD BRUSHING SPECIFICATIONS FOR ROAD CONSTRUCTION



### **REQUIREMENTS**

Unless otherwise approved in writing by STATE, brush and trees shall be cut to a height of 6 inches or less above the ground surface or obstructions such as rocks or existing stumps.

PURCHASER is required to **either** clear up to the designated clearing height as shown on the above diagram **or** clear the designated distance past the top of the cutbank as shown on the above diagram.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, and water courses within 72 hours and may be scattered downslope from the road or placed in other stable locations, unless otherwise approved by STATE.

### **END-HAULING REQUIREMENTS**

POINT TO POINT	STA. TO STA.	CONTAINMENT	WASTE AREA LOCATION	WASTE AREA TREATMENT
C to D	0+00 to 2+65	Full	1	1, 2, 3
	18+70 to 25+00			
D to E	2+50 to 4+00	Full	2	1, 2, 3

### **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 as much material as possible 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.

Trees 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) Points F and G
- (2) Points D to E, Between STA 0+00 to 2+25

### Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.
- (2) Pile woody debris separate from other waste material.
- (3) Exhibit D, "Additional Road Improvement/Construction Instructions."

### EXHIBIT E ROAD SURFACING

TYPE OF ROCK	SIZE OF ROCK	AMOUNT	APPLICATION	LOCATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	1 ½"-0"	1000 CY	Stockpile	Cougar Pass	1200 CY

## ROAD SURFACING (WINTER AND WET WEATHER OPTION ONLY)

TYPE OF ROCK	SIZE OF ROCK	COMP. DEPTH	YDS/ STA	POINT TO POINT	STATION TO STATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	1 ½"-0"	3	17	A to B	0+00 to 29+20	504 CY
Hard Crushed Quarry	2 ½"-0"	6	35	B to C	0+00 to 21+45	756 CY
Hard Crushed Quarry	2 ½"-0"	8	48	C to D	0+00 to 31+21	1548 CY*
Hard Crushed Quarry	2 ½"-0"	10	61	D to E	0+00 to 5+25	360 CY*
Hard Crushed Quarry	2 ½"-0"	6	35	H to I	0+00 to 29+20	1044 CY*
Hard Crushed Quarry	2 ½"-0"	10	61	J to K	0+00 to 5+33	324 CY
LANDINGS	SIZE OF ROCK	COMP. DEPTH	YDS/ LND	NO. OF LNDGS	POINTS	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	6" Jaw Run	6"	54	3	E, I, K	162 CY

<sup>\*</sup> Extra volume has been added for turnouts and wide portions of road.

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.

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.

Turnouts and turnarounds shall be rocked concurrently with the road.

PURCHASER may substitute a non-spec base rock for a portion of the 2 ½"-0" rock in the "WINTER AND WET WEATHER OPTION", as approved in writing by STATE.

### **EXHIBIT E**

### CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be well graded and consistent.

Quality and Grading Requirements. 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

Sediment Height: 6" Maximum

For 1½"-0"	Passing	2" sieve	100%
	Passing	1½" sieve	95-100%
	Passing	3/4" sieve	55-75%
	Passing	1/4" sieve	35-50%

Of the fraction passing 1/4" sieve, 40% to 60% shall pass the No. 10 sieve.

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.

### (WINTER AND WET WEATHER OPTION)

For 2½"-0"	Passing	3" sieve	100%
	Passing	2½" sieve	95-100%
	Passing	1¼" sieve	55-75%
	Passing	1/4" sieve	30-45%

Of the fraction passing 1/4" sieve, 40% to 60% shall pass the No. 10 sieve.

For Jaw-Run	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

### **EXHIBIT E**

### **ROCK ACCOUNTABILITY**

The rock shall meet the quality and size specifications in Exhibit E. A sample of the rock shall be supplied to STATE for testing and approval prior to rocking. 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.

<u>Depth Measurement</u>. 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.

<u>Stockpile Measurement</u>. Volume determination for rock stockpiles will be based on measurement by the STATE. Stockpiles shall be shaped for accurate measurement as directed by STATE.

### **EXHIBIT F**

### COMPACTION AND PROCESSING REQUIREMENTS

<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
D to E, J to K, Waste Areas at F and G	Crawler Tractor, Dump Trucks

### **COMPACTION EQUIPMENT OPTIONS**

Crawler Tractors. D-7 Caterpillar or equivalent or larger.

<u>Dump Truck</u>. Dump Trucks shall be routed over the entire cross-section of fill layers.

### **EXHIBIT F**

## COMPACTION AND PROCESSING REQUIREMENTS (WINTER AND WET WEATHER OPTION)

<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:

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS	
C to D, D to E, J to K	Vibratory Roller	

<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, B to C, C to D, D to E, H to I, J to K	Vibratory Roller

### 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 mile to 1.8 miles per hour as directed by STATE.

State Timber Sale Contract No. 341-09-53 Panther Bowl

### **EXHIBIT G**

### **CULVERT SPECIFICATIONS**

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Culverts shall be constructed of corrugated galvanized or aluminized steel. Corrugated polyethylene may be used for sizes up to 36 inches in diameter. All 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. 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 2 percent unless otherwise specified.

Culverts less than 36 inches in diameter shall be installed with the lock seam on the inlet end placed within 45 degrees of the bottom of the trench.

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.

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.

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

### **EXHIBIT G**

### **CULVERT SPECIFICATIONS**

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" and 18" for culverts 42" to 96" (add 6" for roads which will not be rocked). 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 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 a half round or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Following are the minimum standard gauges for pipe and coupling bands. Some culverts may require different gauges and may be found in the culvert listing.

			Ba	and Wid	ths (")	Hugger Bar	nd Widths (")
<u>Dia.</u>	Steel Pipe Gauge	Band Gauges	<u>Annula</u>	<u>ır Helica</u>	<u>Dimpled</u>	<u>Annular</u>	<u>Helical</u>
12-15	16	16	7	12	12	13 1/8	10 1/2
18-24	16	16	12	12	12	13 1/8	10 1/2
30-36	16	16	12	12	12	13 1/8	10 1/2
42	14	16	12	12	N/A	13 1/8	10 1/2
48	14	16	24	24	N/A	13 1/8	10 1/2
54	14	16	24	24	N/A	13 1/8	10 1/2
60	12	16	24	24	N/A	13 1/8	10 1/2
66-72	12	16	24	24	N/A	13 1/8	10 1/2
78	12	16	24	24	N/A	13 1/8	10 1/2
84	12	16	24	24	N/A	14 3/4	10 1/2
90-120	12	16	26	26	N/A	N/A	N/A

Culverts larger than 60" in diameter shall have 3" x 1" corrugations.

Polyethylene culverts shall be double walled and meet the requirements of AASHTO M-294-901, Type S.

### **EXHIBIT G**

### **CULVERT LIST**

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	ROAD SEGMENT POINT TO POINT	STATION
1	18	50	C to D	4+65
2	18	50	C to D	25+20

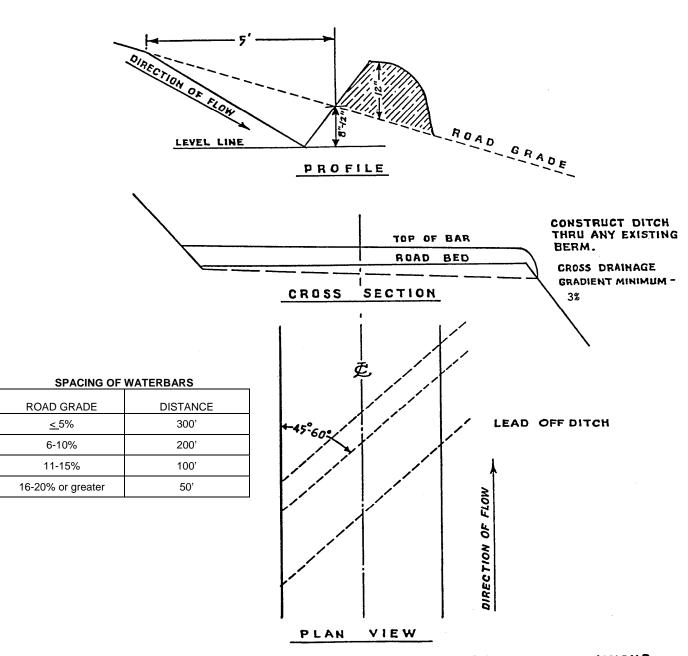
Tamping is required.

## CULVERT LIST (WINTER AND WET WEATHER OPTION ONLY)

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	ROAD SEGMENT POINT TO POINT	STATION
4	18	40	B to C	As Directed
5	18	40	C to D	As Directed
6	18	40	C to D	As Directed
7	18	40	C to D	As Directed
8	18	40	C to D	As Directed
9	18	40	D to E	As Directed
10	18	40	H to I	As Directed
11	18	40	H to I	As Directed
12	18	40	H to I	As Directed
13	18	70	J to K	As Directed
14	18	40	J to K	As Directed

Tamping is required.

EXHIBIT H
WATERBAR SPECIFICATIONS



WATERBAR SPECIFICATIONS FOR CROSS DITCHING #298

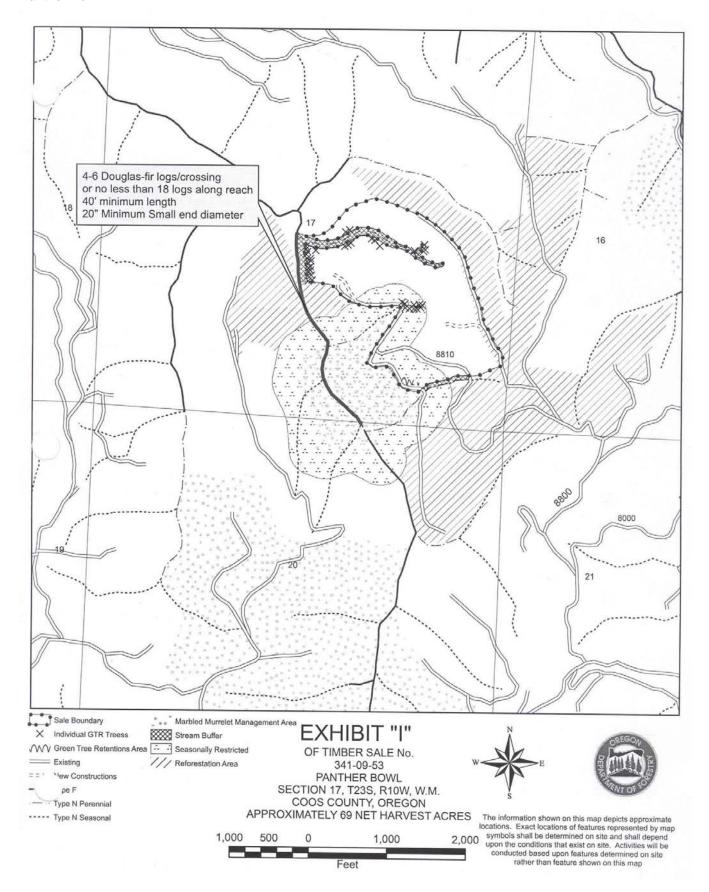
### **EXHIBIT I**

### SPECIFICATIONS FOR LOG PLACEMENT IN STREAMS

<u>Tree Selection Criteria</u>: PURCHASER shall select Douglas-fir trees from within the posted Timber Sale Area boundary. Trees shall be felled, bucked, and yarded into the Type F stream (Panther Creek), where skyline corridors cross the stream reach. These Operations shall occur during normal felling and Yarding Operations. Trees shall not be obtained from Stream Buffers or Green Tree Retention Areas. Logs must meet the size specifications below.

<u>Log Size Specifications</u>: Within The timber sale area, there shall be no less than 18 logs at least 20 inches in diameter on the small end with a minimum log length of 40 feet, totaling about 12.5 MBF. PURCHASER may select low quality or deformed standing live trees as a source of logs. Down Wood or Snags shall not be used as the source for logs.

<u>Log Placement Specifications</u>: Logs shall be placed in the stream in groups of four to six logs per group (dependant on the number of crossing). Groups shall be placed where cable roads cross the stream in the course of normal logging activities and as indicated on the Exhibit I map. The large end of each log shall be placed in the active stream channel. Orientation of logs in the stream shall be determined by the PURCHASER; however, the objective is to place as much of the log within the active channel to provide for in-stream habitat.



### PART IV: OTHER INFORMATION

State Timber Sale Contract No. 341-09-53 Panther Bowl

### **WRITTEN PLAN**

SALE NAME: Panther Bowl

**LOCATION:** Section 17, T23S, R10W, Coos County, OR. 97420

LANDOWNER: Oregon Department of Forestry; 63612 Fifth Road, Coos Bay, Or.

**CONTRACT PURCHASER:** 

**NOTIFICATION NO:** 

### SITUATION AND PROTECTED RESOURCE

The protected resource is Panther creek a Type F Stream adjacent to the timber sale area.

### **LAYOUT**

Landings have been provided to enable best possible deflection for suspension of logs while yarding the sale area.

### **STREAM BUFFER**

A minimum 100 foot horizontal distance no harvest buffer has been posted on the ground.

### **FELLING AND BUCKING**

- 1. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
- 2. High stumps shall be left as needed to minimize accumulation of logs in stream channels.

### **YARDING**

- Operator will use a machine and logging system capable of fully suspending logs through the Type F buffer.
- 2. Operator will fully suspend logs when sufficient deflection is available.
- 3. Any corridors needed within the RMA will be spaced a minimum of 100 feet apart.

### **OPERATIONS PLAN.**

Purchaser shall attach a yarding plan indicating landing locations, machinery and procedures to be used to obtain adequate suspension in the sale area and to minimize impacts during the felling process.

PREPARED BY: Matthew L. Wells State Land Forester January 8, 2009

]	DATE:
PURCHASER REPRESENTATIVE	
[	DATE:
OPERATOR REPRESENTATIVE (if listed on notification)	)

### NOTICE OF TRANSFER OF STATE TIMBER

Instruct	ions 629:-Form-301-010					
	e Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and ignatures.					
SECTIO	DN 1					
On	, state timber sale purchaser (Transferor)					
	, sold, exchanged or otherwise transferred to					
	, (Transferee) state timber originating from State					
Timber	Sale Contract No					
Transfer	ree 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.					
SECTIO	DN 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 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.					
SECTIO	DN 3					
certificat	ies understand that falsely entering into this certification, or failure to comply with the terms of this ion is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, 31, and is subject to any and all penalties contained therein.					
Transfer	or: Transferee:					
Signed	Signed					
Title	Title					
Dated	Dated					
[Not 005]	e: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-					
Mail To:	State Forester 2600 State Street Salem, OR 97310					
Notice of Trans	fer of State Timber Form 301-010 doc/Jaz B (SF)					