

TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO B6.33 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Purchaser's Operations.

Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

<u>MINIMUM LETTER SIZE AND LEGEND</u>	<u>MINIMUM SIZE AND SHAPE</u>	<u>WHEN AND WHERE REQUIRED</u>
1. LOGGING OPERATIONS NEXT <> MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas, on roads listed in C5.31# and trails listed in Part II.
2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next <> Miles" and where work area is not continuous.
3. FOR LOGGING USE ONLY (3" letters)	24" (diamond) 24"	Required where roads listed in C5.31# and temporary roads intersect with C5.31# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads listed in C5.31# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next <> Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Purchaser road maintenance operations on roads listed in Schedule C5.31#.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - B6.33 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Purchaser shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in CT5.31# and temporary roads, Purchaser may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in C5.31#, if Purchaser's Operations cause the traveled way or road shoulders to be constricted overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Purchaser shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in C5.31#, Purchaser may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the subdivision being served by the road.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - BP6.33 SAFETY (continued)

Part II. Specific Requirements:

None

Purchaser and Forest Service agree to the above stated requirements of the Traffic Control Plan:

Name

Name

Title

Title

Date

Date

DESCRIPTION PURSUANT TO C2.35# (OPTION 1) - INDIVIDUAL TREE DESIGNATION
(08/2002)

Definitions and Requirements:

D x D: Designate by Description

D x D Stump Height: Measure at 4.0 inches above the ground on the uphill side of the tree. Minimum stump height left for inspection will be 4 inches.

D x D Diameter: Measure at the D x D specified stump height, outside the existing bark as is, with a diameter tape that is perpendicular to the bole of the tree. Trees with stumps missing all or part of their bark will be measured as presented. Measure to the nearest tenth of an inch.

D x D Spacing: Measured slope distance at 4.0 inches above the ground from the closest point between trees. This does not need to be measured on the uphill side of the tree.

Down Trees: a) A partial or entire tree lying on the ground with an attached root wad; b) a root sprung tree with broken and exposed roots showing above the ground (root sprung trees must remain identifiable as root sprung after logging).

All skyline corridors, tractor skid roads, temporary roads, and landing clearing limits shall be identified and approved per C6.42#, before this provision is implemented.

All Douglas-fir, True firs, Western red cedar, and Western hemlock leave trees with a D x D diameter 8.0 inches or greater, all other coniferous species leave trees, and all hardwoods trees shall remain standing after logging is complete, except those removed for operational purposes, i.e.: danger, guyline, and corridor trees.

Standing or Down trees outside the Subdivision boundaries shall not be used to determine cut trees within the Subdivision.

Criteria for All Subdivisions

Standing, live Douglas-fir, True firs, Western red cedar, Incense cedar, and Western hemlock, must have a D x D diameter of 8.0 inches or greater to qualify as a leave tree to cut other Douglas-fir, True firs, Western red cedar, Incense cedar, and Western hemlock trees.

DESCRIPTION PURSUANT TO C2.35# (OPTION 1) - INDIVIDUAL TREE DESIGNATION
(08/2002)

Designate by Description All Subdivisions:

Priority 1. In all Subdivisions, all coniferous trees, except Pacific Yew, not marked with orange paint that are within 60.0 feet slope distance, measured on the stump at 4.0 inches above the ground, of a conifer or hardwood tree with two complete bands of orange paint around the tree above stump height, and orange paint below stump height, are designated for cutting.

Priority 2. Douglas-fir, True firs, Western red cedar, Incense cedar, and Western hemlock that are within the designated spacing distance (see chart below) of a live, blue Boundary Cutting Unit carded, orange painted conifer or hardwood boundary tree that is 8.0 inches stump diameter or larger, are designated for cutting.

Priority 3. Douglas-fir, True firs, Western red cedar, Incense cedar, and Western hemlock that are within the designated spacing distance (see chart below) of a live tree that is painted orange above and below stump height are designated for cutting.

After the first three priorities have been implemented, Priority 4 will be used to determine the remaining trees in the subdivision to be cut.

Priority 4. Douglas-fir, True firs, Western red cedar, Incense cedar, and Western hemlock that are within the designated spacing distance (see chart below) of a live Douglas-fir, True fir, Western red cedar, Incense cedar, or Western hemlock tree with a larger stump diameter are designated for cutting.

D x D Designated Spacing Distances:

16 feet - Subdivisions 9, 11, 12, 13, 14, 15, 18, 19.

20 feet - Subdivisions 1, 2, 3, 4, 4A, 5, 6, 7, 8, 10, 16, 17, 20, 21, 21A, and 21B.

REMOVAL SCHEDULE PURSUANT TO C3.47# - ABNORMAL DELAY (09/2004)

<u>Included Timber</u>		<u>Time Limits</u>
ALL	60	days after felling is started.
All timber decked during construction clearing.	NA	days after felling on each Specified Road constructed by Purchaser is initiated.
Timber decked during road construction	NA	days after Forest Service authorizes Purchaser to use roads pursuant to B5.2.

PLANS AND CRITERIA PURSUANT TO C5.1# (OPTION 1) -
TEMPORARY ROAD AND LANDING CONSTRUCTION (07/2001)
(Continued)

1. The Forest Service and Purchaser shall agree to temporary road locations and clearing limits prior to construction.
2. Temporary roads shall be constructed to a minimum width to accommodate logging equipment and shall be located to minimize the number of trees cut and minimize the extent of ground impacted by construction.
3. All trees to be cut by the purchaser shall be identified and designated for cutting by the Forest Service, prior to cutting.
4. On native running surfaces, hauling shall be restricted to when dry conditions exist, approximately May 1 to October 31. If temporary roads are to be used when wet conditions exist, enough rock surfacing shall be placed on the road to prevent sedimentation.
5. Straw bales and/or other agreed upon erosion control devices shall be placed along the road, as needed, to prevent sediment from entering streamcourses.
6. Clearing and grubbing debris shall be scattered in areas designated on the ground by the Forest Service.
7. At the end of each season, or if the road is not being used for an extended period of wet weather, purchaser shall install drivable drain dips and water bars, or other erosion control measures, to stabilize the road and prevent erosion (on slopes over 8%, this may require a structure approximately every 100 feet).
8. Culverts shall be placed in all stream courses, where crossed by temporary roads, and shall return the water to the same streamcourse. Culverts shall be corrugated metal pipe, and shall not be less than 18" in diameter, unless otherwise agreed to in writing.
9. Culvert installation in live streams shall take place between **July 1 and August 31**. During culvert installation in live streams, the streams will be temporarily diverted around the site and biodegradable geotextile cloth will be placed downstream from the site to minimize transport of sediment, unless other methods are agreed to in writing with the Forest Service.
10. At the end of temporary road use, culverts will be pulled and removed, the roadbed scarified to below the compacted layer, the roadbed recontoured to facilitate stream flow, water bars will be installed, and erosion control methods will be used to stabilize the road and prevent erosion.
11. Landings shall be designed in accordance with B6.422, shall be as small as operationally feasible, and shall be agreed to in writing by the Forest Service.
12. Areas to be covered with fill material shall be cleared of logs and cull woody material over 4 inches in diameter and/or 8 feet long.

13. Where side slopes exceed 45 percent, waste material shall be end-hauled to locations authorized in writing by the Forest Service.
14. Placement of rock ballast shall not take place unless mutually agreed to in writing by the Forest Service.
15. Rock ballast shall not exceed 4 inches in depth, unless mutually agreed to in writing by the Forest Service. Landing cut and fill slopes shall be left at no steeper than 1 ½ to 1 upon completion of sale operations.
16. After operations are done on any landings adjacent to road 19, all woody material shall be piled without dirt onto the landing slash pile, and the landing smoothed out.

TABLE A PURSUANT TO C5.12# - USE OF ROADS BY PURCHASER (06/1999)

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
1930707		1930704	End of Road	R	*
1930706		1930704	End of Road	R	*
1930705		1930704	End of Road	R	*
1930704		1930403	Landing 1,5	R	*
1930703		1930	1930704	R	*
1930695		1930	Landing 4A	R	*
1930		1925	1930703	R	*
1928		1900	1930	R	*
1900057		1900	Landing 14	R	*
1900703		1900	End of Road	R	*
1900711		1900	End of Road	R	*
1900728		1900705	Landing 21	R	*
1900705		1900	1900728	R	*
1926639		1926	Landing 17	R	*
1900749		1900	Rock Pit	R	*

*Limited structural strength, will not support commercial haul during all weather conditions.

Title and Date of Governing Road Rules Document:

Road Rules for Commercial Haul
Willamette National Forest

January 1991

Commercial Road Rules

Effective Date

MATERIAL SOURCE TABLE PURSUANT TO C5.221# - MATERIAL SOURCES (04/2004)

Material	Type of Purchase	Owner(s)	Unit of Measure	Unit Price	Estimated Quantity	Total
N/A						

CONTRACT ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications								
	From	To		T-803	T-811	T-813	T-831	T-834	T-836	T-839	T-851	T-854
1930707	1930704	EOR	0.1	P						P		P
1930706	1930704	EOR	0.3	P						P		P
1930705	1930704	EOR	0.5	P		P				P		
1930704	1930703	Subdivision 1	0.2	P						P		P
1930703	1930	1930704	0.31	P						P		P
1930695	1930	Subdivision 4A	1.0	P						P		
1930	1928	1930703	0.1	P	P		P	P			P	
1928	1900	1930	0.5	P	D		D	D				
1900057	1900	Subdivision 14	0.1	P		P				P		
1900703	1900	EOR	2.1	P					P			P
1900711	1900	EOR	0.1	P						P		
1900728	1900705	Subdivision 21	0.4	P						P		
1900705	1900	1900728	0.2	P		P				P		
1926639	1926	Subdivision 17	0.2	P					P	P		P
1926	1900	Subdivision 18	0.5	P			D	D		P		
1900	Co. Rd. 6128	1900057	0.2	P			D	D		P		

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications								
	From	To		T-803	T-811	T-813	T-831	T-834	T-836	T-839	T-851	T-854
1930707	1930704	EOR	0.1	P						P		P
1930706	1930704	EOR	0.3	P						P		P
1930705	1930704	EOR	0.63	P		P				P		
1930704	1930703	Subdivision 1	0.2	P						P		P
1930703	1930	1930704	0.31	P						P		P
1930695	1930	Subdivision 4A	0.19	P						P		
1930	1928	1930703	0.1	P	P		P	P			P	
1928	1900	1930	0.3	P	D		D	D				
1900057	1900	Subdivision 14	0.1	P		P				P		
1900703	1900	EOR	2.1	P					P			P
1900711	1900	EOR	0.46	P						P		
1900728	1900705	Lndg. Subdv 21	0.2	P						P		
1900705	1900	1900728	0.2	P		P				P		
1926639	1926	Subdivision 17	1.05	P					P			P
1926	1900	Subdivision 18	0.77	P			D	D				
1900	County Road	1900057	15.05	P			D	D				

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications								
	From	To		T-803	T-811	T-813	T-831	T-834	T-836	T-839	T851	T-854
1930707	1930704	EOR	0.1							P		
1930706	1930704	EOR	0.1							P		
1930705	1930704	EOR	0.5							P		
1930704	1930703	Subdivision 1	0.2							P		
1930703	1930	1930704	0.2							P		
1930695	1930	Subdivision 4A	1.0							P		
1930	1928	1930703	0.1		P		P	P				
1928	1900	1930	0.3		D		D	D				
1900057	1900	Subdivision 14	0.1							P		
1900703	1900	EOR	2.1						P			
1900711	1900	EOR	0.1							P		
1900728	1900705	Subdivision 21	0.4							P		
1900705	1900	1900728	0.2							P		
1926639	1926	Subdivision 17	0.2						P			
1926	1900	Subdivision 18	0.5				D	D				
1900	Co. Rd. 6128	1900057	0.2				D	D				

P = Purchaser Performance Item D = Deposit to Forest Service D3 = Deposit to Third Party

Description of work required by the above listed T-specs is shown in the following ROAD MAINTENANCE REQUIREMENTS SPECIFICATION table, and included in the timber sale contract.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

1		2		3			4	5	6			7	8	9	
Road No. And Termini		Specifi- cation	Travel Way			Brushing And Log Out	Surfacing	Dust Abatement			Seasonal Mainte- nance	Snow Removal	Post Haul		
			Width	X Slope	Comp			Product	Applic Rate	Width			Block	Treat/ *	
1930707			EX	Al			OPT					TS	PR	PR/3*	
1930704	EOR														
1930706			EX	Al			OPT					TS	PR	PR/3*	
1930704	EOR														
1930705			EX	Al	A		OPT	Grading A				TS	PR	PR/6*	
1930704	EOR														
1930704			EX	Al			OPT					TS		PR	
1930703	Subdivision 1														
1930703			EX	Al			OPT					TS		PR	
1930	1930704														
1930695			EX	Al			OPT					TS		PR	
1930	Subdivision 4A														
1930			EX	Al	B		OPT					TS		PR	
1928	1930703														
1928			EX	Al			OPT					JU			
1900	1930														
1900057			EX	Al	A		OPT	Pit Run**				TS		PR	
1900	Subdivision 14														
1900703			EX	Al			OPT					TS		PR	
1900	EOR														
1900711			EX	Al			OPT					TS	PR	PR/5*	
1900	EOR														
1900728			EX	Al			OPT					TS		PR	
1900705	Landing 21														
1900705			EX	Al	B		OPT	Grading A				TS		PR	
1900	1900728														
1926639			EX	Al			OPT					TS		PR	
1926	Subdivision 17														
1926		**	EX	Al			OPT					TS			
1900	Subdivision 18														
1900			EX	Al			OPT					JU			
Co. Rd. 6128	1900057														

*Number of waterbars to be constructed when logging is complete. Waterbars will be placed as staked by CO.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

Column No.	Heading	Entry	Explanation
	Any	Blank	Except as otherwise described, no entry indicates Purchaser is not authorized or required to perform the work item(s).
	Any	RC	This work requirement applies only when haul of sale related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX	Purchaser shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work.
		Numbers	Purchaser shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance.
		IS, C, OS, F, or AI	Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is).
		A or B	If compaction is required.
4	Brush and Log Out	Numeric & R and or L	Purchaser shall remove brush for specified width on either or both the right (R) side or left (L) side of road.
		As Staked	Limits of brushing are as staked or marked in the field.
		OPT	Purchaser may use hand or mechanical means of brushing.
		H	Only hand brushing may be used.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

Column No.	Heading	Entry	Explanation
5	Surfacing	Aggregate Grading	Purchaser shall place surfacing on roads listed according to the grading indicated.
		D	Contractor is to make deposits for listed road maintenance, including surface rock replacement.
6	Dust Abatement	OPT	Product selection is Purchaser's choice from those listed in Section T-812.
		Product Abbr.	Unless otherwise agreed, Purchaser is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts.
		EX	Purchaser shall abate dust on the existing width
		Numbers	Purchaser shall abate dust to the width indicated by entry.
7	Seasonal Maintenance	W	Waterbars and/or crossditching shall be required prior to expected seasonal precipitation.
		B	Entrance barriers shall be installed by Purchaser prior to nonuse periods.
8	Snow Removal	TS	Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements.
		JU	Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements.
		Blank	Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
9	Post Haul	PR	PR denotes that work is Purchaser's Responsibility to perform.

SCHEDULE PURSUANT TO C6.315# - SALE OPERATION SCHEDULE (06/1994)

<u>Subdivision</u>	<u>Operating Conditions</u>	<u>Purpose</u>
All	Permanent and temporary road reopening and construction/reconstruction shall occur during the dry season (approximately between May 1 and October 31).	Avoid potential surface erosion of exposed soil.
All permanent and temporary roads	No live stream culvert work from September 1 to June 30.	Minimize input of sediment into streams.
All permanent and temporary native surfaced roads	Native surfaced roads are restricted during the wet season (approximately November 1 through April 30) unless rocked.	Minimize input of sediment into streams.
All native surfaced landings	Use is restricted during the wet season (approximately between November 1 and April 30) unless rocked.	Minimize input of sediment into streams.
All Ground-Based yarding and felling areas	Ground based yarding/felling operations are restricted during the wet season (approximately November 1 to April 30).	Minimize reduction of soil productivity (minimize additional soil compaction and puddling).

TABLE PURSUANT TO C6.41# - SPECIFIC REQUIREMENTS (01/2000)
(Continued)

FELLING METHODS

SUBDIVISIONS

Trees shall be felled away from designated Streamcourses, wet areas, and the Areas To Protect (ATP) as shown on Sale Area Map. Direction of felled trees shall also be to the lead, which shall facilitate the yarding operation so damage to residual trees is kept to a minimum. Exceptions to these objectives apply only where safety, or protecting improvements, terrain features, or felling within Subdivision boundaries preclude felling to lead.

All

Flaggers may be needed when falling trees adjacent to road 1926, 1928, and 19.

FELLING EQUIPMENT

SUBDIVISIONS

Wedges

All

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)
(Continued)

<u>YARDING/SKIDDING REQUIREMENTS</u>	<u>SUBDIVISION</u>
1. Except during lateral yarding, the yarding system must keep one end of the log suspended above ground during in-haul.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
2. The carriage shall be positioned such that during lateral yarding, logs are yarded away from stream courses and wet areas.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
3. Ground-lead yarding is permitted within 100 feet of Subdivision boundaries, 100 feet of tail trees, and 100 feet of the tower position.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
4. Skyline roads will be spaced no further apart than 150 feet at the back end of the road when radial road are used and 150 feet center to center where parallel roads are used.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
5. Skyline corridors shall be only wide enough to allow free passage of the carriage and turn of logs. The corridors shall normally not exceed 12 feet in width after yarding has been completed.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
6. When skyline, haulback, or other cables pass through areas of residual trees or reproduction more than 18 inches in height, lines shall be pulled out of the residual trees or reproduction area prior to restringing the next skyline road.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
7. Location of all skyline roads shall be agreed upon with the Forest Service prior to felling.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
8. A slackpulling carriage able to maintain a fixed position on the skyline during lateral yarding and be able to pass over intermediate supports is required. The carriage must be capable of lateral yarding up to 75 feet from skyline.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
9. Tailtrees, multi-stump anchors, equipment anchors, and intermediate supports may be necessary to achieve suspension requirements.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)
(Continued)

YARDING/SKIDDING REQUIREMENTS	SUBDIVISION
10. The haulback line that is attached to the carriage shall be positioned so that it remains within the skyline corridor. The objective is to reduce lateral movement in the skyline.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
11. Trees outside the boundary which are felled in order to raise the skyline, or trees that are damaged by line whip, shall not be designated as included timber by the Forest Service.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
12. A skyline system capable of transporting logs at least 2000 feet slope distance uphill and downhill is required. A yarder with a minimum block height that will meet suspension requirements, and will also keep the lines under the canopy, is required.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
13. Maximum block height on the yarder will be 55 feet.	2, 4, 4A, 11, and the skyline portions of 1, 3, 5, 6, 7, 9, 12, 16, 17, 18, 19, 20
14. Deadmen or cat anchors may be required.	6, 7
15. Trees shall not be yarded across streams and stream buffers, but away from them.	All
16. In subdivisions along road 19, landings shall be located so as not to be visible from road 19 where ever possible.	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 20
17. Trees shall be yarded away from areas shown on the Sale Area Map as ATP.	16, 18, 19
18. Operations conducted during rainy periods shall have agreed upon erosion control devices installed, where needed, to prevent sediments from entering stream courses.	All
19. Equipment assist may be necessary.	Temporary road in 6,7
20. Ground based skidding equipment shall be restricted to designated trails at all times, and is permitted on slopes 30% or less, except within 25 feet of an intermittent stream and within 60 feet of a perennial stream, as approved by the Forest Service.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
21. Logs yarded with a tractor shall have the leading end of the log suspended free of the ground.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)
(Continued)

<u>YARDING/SKIDDING REQUIREMENTS</u>	<u>SUBDIVISION</u>
22. Tractor skid roads shall not exceed 12 feet in width over 90% of the length of the trail when skidding operations are completed.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
23. Trees adjacent to tractor skid trails will be left as rub trees until surrounding timber removal is complete.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
24. The maximum overall width of the tractor shall be 10 feet or less.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
25. Location of all tractor skid trails/skid roads shall be agreed upon with the Forest Service prior to felling.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
26. Tractor skid trails shall not be less than 80 feet apart, and shall be located as much as possible on skid trails used in previous logging operations.	13, 14, 15, and the ground based portions of 1, 3, 5, 9, 12, 18, 19, 20
27. Tractor skid roads, and Harvester and Feller/Buncher roads should be oriented at right angles to swales and dry draws where runoff or snowmelt could be concentrated and run into streams.	All units where ground based equipment is used.
28. Harvesters or Feller/Bunchers may be used on slopes less than 45 percent, as approved by the Forest Service	All units where ground based felling equipment is used.
29. Ground based felling equipment shall be restricted to designated trails at all times, and is permitted on slopes 45% or less, except within 25 feet of an intermittent stream and within 60 feet of a perennial stream, as approved by the Forest Service.	All units where ground based felling equipment is used.
30. Helicopter Yarding specified. Logs must be broken free of their beds vertically and totally suspended during the in-haul portion of the yarding cycle. A tagline of at least 250 feet in length may be required during yarding.	8, 10, 21, 21A, 21B, and the helicopter portions of 6, 7, 16, 17
31. A yarding system capable of lifting 6915 pounds at an elevation of 3,600 feet above sea level at 69 degrees F., and transporting logs fully suspended at least 4,000 feet horizontal distance uphill and downhill.	8, 10, 21, 21A, 21B, and the helicopter portions of 6, 7, 16, 17
32. Flaggers may be needed on road 19 during helicopter operations	8, 10, and helicopter portions of 6, 7

APPLICATION SCHEDULE PURSUANT TO C6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER
(07/2001)

SUBDIVISION OR UNIT NUMBER	AREAS	SEED		FERTILIZER		MULCH	
	A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	APPLICATION		APPLICATION		APPLICATION	
		SPECIES <u>1</u> / MIXTURE	LBS/AC	TYPE <u>2</u> / LBS/AC	LBS/AC	TYPE <u>3</u> / LBS/AC	LBS/AC
All	C) TEMP ROADS D) LANDINGS	4/,5/	4/,5/	N/A	N/A	7/	1500
All	E) System road cut and fill slope	4/,5/	4/,5/	N/A	N/A	7/	1500

1/ For sales in Oregon, the seed shall meet the State certification specifications. Seed must be packaged in containers carrying official certification labels sewn in, glued to, or printed upon the container, with the following information:

1. Variety (if certified as to variety) and kind.
2. Quantity of seed (pounds or bushels).
3. Class of certified seed (blue tags for certified seed).
4. Inspection or lot number traceable to the certifying agency's records.

For sales in Washington, the seed shall be labeled as "Prohibited and Restricted Noxious Weed Free for the State of Washington." The purchaser shall furnish a copy of the seed analysis.

For state of California lands in Region 6, seed must be certified by the state of California, or by an independent agency or company that is approved by the state of California for "prohibited and restricted noxious weed free for the state of California."

For mixtures of seed, each ingredient in excess of 5 percent must be listed with its percentage by weight and its germination percentage.

Legumes must be inoculated with nitrogen fixing bacteria before planting. The label must show the expiration date of the inoculant.

All seed treated with a fungicide or pesticide must be labeled that it is "treated" giving the name of the chemical used, and an appropriate warning or a caution statement.

2/ Fertilizer shall be a standard commercial fertilizer with guaranteed analysis of contents clearly marked on containers.

3/ Mulch shall meet the appropriate State's certification specifications, with evidence of its certification traceable to the certifying agency's records.

APPLICATION SCHEDULE PURSUANT TO C6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER
(07/2001)

(Continued)

<u>GRASS</u>	<u>SPECIES MIXTURE</u>	<u>POUNDS/ACRE</u>
4/	Native Seed Mixture: Blue wildrye grass Slopes: 0 - 25%	20
5/	Native See Mixture: Blue wildrye grass Slopes: 26% or greater	40
<u>FERTILIZER</u>	<u>TYPE</u>	<u>POUNDS/ACRE</u>
6/	N/A	N/A
<u>MULCH</u>	<u>TYPE</u>	<u>POUNDS/ACRE</u>
7/	Wood Fiber Mulch	1500
	OR Straw (Organic-Weedfree)	1500

DETAILED SLASH DISPOSAL PLAN
Willamette National Forest

In accordance with Contract Provision C6.74#, SLASH TREATMENT REQUIREMENTS, the following is the detailed Slash Disposal Plan:

I. Yarding Tops and Limbs Left Attached to Logs

In all subdivisions except 8, 10, 21, 21A, 21B, and the helicopter portions of 6, 7, 16, 17, tops and limbs will be left attached to all logs and will be yarded to landings. For safe and efficient operations at the landing and to keep landing size small, the larger unutilized material (over 2 inches DOB small end and at least 6 feet long) shall be limbed, severed and stacked in a parallel position in a separate pile, unless otherwise agreed to in writing by the Forest Service. The location of piles and method of piling shall be in accordance with the specifications listed below in section II (Machine Piling of Landing and Roadside Clean-up Slash).

II. Machine Piling of Landing Slash and Roadside Clean-up Slash

A. Slash to be Piled

The purchaser is responsible for machine piling all unutilized material resulting from logging operations at all landings, and within 30 feet from the edge of all system roads adjacent to subdivisions. The machine used to grapple pile the slash shall stay on the road surface. Material to be piled will include all material at least 1 inch in diameter on the small end, and at least 3 feet in length. This may include chunks, broken tops, limbs, branches, rotten wood, brush, damaged or destroyed reproduction, and saplings or poles created by any type of vegetative cutting or clearing. To keep landing size small, larger unutilized material (over 2 inches DOB on the small end, and at least 6 feet long) on landings shall be stacked in a parallel position in the same pile as the larger top material, unless otherwise agreed to in writing by the Forest Service.

B. Location of Piles

Piles will be located so as to minimize damage to standing green trees during burning. Unless otherwise approved by Forest Service, piles will be constructed to be equal distance between the boles of standing green trees. Piles will not be placed where they will interfere with functioning of drainage structures, ditches, or stream channels.

C. Construction and Size of Piles

Piles shall be constructed using a 'lift and stack' method using equipment with a hydraulic attachment mechanism capable of constructing piles that are compact and free of dirt and rocks. Completed piles shall be approximately equal in height and width, and shall not exceed 10 feet in height.