

C2.35# (OPTION 1) - INDIVIDUAL TREE DESIGNATION. (06/2008)

DESCRIPTION

All live trees, **except as excluded below**, in all Subdivisions **except as stated below**, are designated for cutting if they are within **see below** of a live tree with a larger stump diameter.

ALL SUBDIVISIONS

Cut Trees: Cut tree species will be Western hemlock and Douglas-fir in subdivisions, gaps, and heavy thin areas. All other species are ghost trees (see C2.35# Individual Tree Specifications Table).

No western redcedar, Sitka spruce, Pacific silver fir, hardwoods, or orange painted tree will be cut unless designated by the Forest Service.

Stump Diameters: Minimum and maximum stump diameters vary for each cut tree species by subdivision (see C2.35# Individual Tree Specifications Table).

Stump diameter is measured at 10 inches perpendicular to the bole of the tree.

Minimum stump height is 10 inches above ground level on the uphill side of the tree.

Spacing Distance: Regardless of maximum stump diameter, all cut tree species will be used for the purpose of determining spacing distance (see C2.35# Individual Tree Specifications Table).

All distances are measured slope distance, outside bark stump height to outside bark stump height.

Ghost Trees: Boundary trees (marked with tags and orange paint) and **any additional orange painted trees within subdivisions**; as well as all species not designated as cut tree species for the subdivision are ghost trees (see C2.35# Individual Tree Specifications Table). Ghost trees are not to be used for spacing and are not to be cut or used to cut other trees.

Gaps: Center trees are marked with a painted letter "G." Trees larger than the maximum stump diameter, smaller than the minimum stump diameter, ghost tree species stated for the subdivision, and orange painted trees will not be cut (see C2.35# Individual Tree Specifications Table).

Heavy thin (HT): Boundaries are marked with pink tags facing toward the heavy thin, blue boundary tags facing out, orange paint, and a combination of blue and pink ribbon. Trees larger than the maximum stump diameter, smaller than the minimum stump diameter, ghost tree species stated for the subdivision, and orange painted trees will not be cut (see C2.35# Individual Tree Specifications Table).

Skips (No Cut Areas): Boundaries are marked with blue boundary tags facing away from the skip, orange paint, and a combination of blue and pink ribbon.

Windthrown Trees: No windthrown trees will be removed unless designated by the Forest Service. Windthrown trees are those with the root wad either exposed or partially exposed.

Individual boles of forked trees are considered to be separate trees if they fork below 10 inches above ground level and can be measured individually with a diameter tape at that height. They are considered to be a single tree if a diameter tape cannot be passed between them at 10 inches above ground level.

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

C2.35# Individual Tree Specifications Table

Subdivision	DxD Distance Specification (ft)	Lower Diameter Limit (stump diameter inches)	Upper Diameter Limit (stump diameter inches)	Cut Tree Species	Ghost Tree Species	Additional DxD Specifications
1	14	10	24	DF,WH	PSF, RA, SS, WRC	Gaps: None Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
1A, 1B	18	10	24	DF	WH,PSF, RA, SS, WRC	Gaps: None Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
2,2A,2B	12	9	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-24 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
2,2B HT	18	9	24	DF, WH	PSF, RA, SS, WRC	
3,3A,3B	14	9	23	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-23 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
3,3B HT	20	9	23	DF, WH	PSF, RA, SS, WRC	
4,4A,4B	10	9	23	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-23 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
4A HT	16	9	23	DF, WH	PSF, RA, SS, WRC	

C2.35# Individual Tree Specifications Table

Subdivision	DxD Distance Specification (ft)	Lower Diameter Limit (stump diameter inches)	Upper Diameter Limit (stump diameter inches)	Cut Tree Species	Ghost Tree Species	Additional DxD Specifications
4C	17	10	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
13,13A,13B,13C	12	9	24	DF, WH	PSF, RA, SS, WRC	No Gaps in subdivisions Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
14,14A,14B,14C,14D,14E	12	10	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.
15, 15A	12	9	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-24 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also. Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.

C2.35# Individual Tree Specifications Table

Subdivision	DxD Distance Specification (ft)	Lower Diameter Limit (stump diameter inches)	Upper Diameter Limit (Stump diameter inches)	Cut Tree Species	Ghost Tree Species	Additional DxD Specifications
16	17	10	25	DF	WH, PSF, RA, SS, WRC	<p>Gaps: Remove all cut-tree species 10-25 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also.</p> <p>Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.</p> <p>Forked DF with oversize stumps have been marked with blue paint above and below stump height and are to be cut prior to implementing spacing specifications.</p>
16A, 16B, 16C	14	10	25	DF, WH	PSF, RA, SS, WRC	<p>Gaps: Remove all cut-tree species 10-25 inches stump diameter within 40 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also.</p> <p>Additional trees have been marked with orange paint above and below stump height, as "ghost" trees.</p>
49, 49A, 49B	15	10	24	DF, WH	PSF, RA, SS, WRC	Gaps: None

Species Abbreviations

DF - Douglas-fir

WH - Western Hemlock

PSF – Pacific Silver Fir

SS – Sitka Spruce

WRC – Western Red Cedar

RA – Red Alder

C3.47# - ABNORMAL DELAY. (09/2004)

Removal Schedule:

<u>Included Timber</u>	<u>Time Limits</u>
ALL	6 months after felling is started.
All timber decked during construction clearing	6 months after felling is started.
Timber decked during road construction	6 months 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
(01/2013)

General. Temporary roads shall facilitate the removal of Included Timber with minimum land impact during anticipated weather and soil conditions pursuant to C6.315#.

Purchaser may elect not to build all or segments of proposed Temporary Roads if purchaser can otherwise log Included Timber in accordance with contract provisions. In accordance with B5.1, Purchaser may also propose alternate locations and/or additional Temporary Roads. Such proposals must be submitted to Forest Service in writing and approved prior to the start of construction. Forest Service makes no guarantee regarding agreement to alternate locations and/or additional Temporary Roads.

Purchaser retains the final responsibility for determining the location, extent, feasibility, and suitability of all Temporary Roads. Forest Service shall not be liable for any variation in quantity, extent, location, materials, or specifications with regard to temporary roads.

Material Sources. All rock will be from a commercial source and certified weed free. Potential borrow source areas shall be identified by the Purchaser and approved on the ground by Forest Service prior to development. Borrow sources must be ripped and blasting is not allowed unless approved in writing by the Forest Service.

Design. Temporary Roads shall be single lane with a maximum surface width necessary to accommodate logging equipment. Clearing widths shall be agreed to prior to construction and shall be 16 feet excluding curve widening and turnouts unless otherwise designated by Forest Service. Turnouts do not need to be inter-visible, but shall be of sufficient quantity on longer roads to provide safe access.

Temporary Roads shall be planned for self-balance. Full bench construction is required on slopes greater than 40 percent.

Surfacing shall be applied as necessary to provide for erosion control and to allow safe and reasonable access pursuant to C6.315#.

Road surface drainage shall be sufficient to control water flow and provide erosion control. Drainage management may consist of ditches, ditch relief and cross drain culverts, insloping or outsloping, surfacing, drainage dips, water bars, silt fencing, sediment traps, or a combination of methods as needed or as directed by Forest Service in writing.

Right-Of-Way. All merchantable timber within clearing limits of Temporary Roads shall be designated by Forest Service prior to felling. Timber meeting Utilization Standards shall be utilized in accordance with A2 and B2.2.

Right-of-way timber shall be felled into right-of-way clearings whenever possible. Controlled felling shall be used to ensure the direction of fall when necessary to prevent damage to property, improvements, trees designated to remain, and/or traffic.

If needed for safety, Forest Service shall authorize the falling of snags and hazard trees outside of clearing limits. Felled snags and hazard trees shall not be removed unless Forest Service agrees to removal in writing.

Branches of remaining trees or shrubs inside designated clearing limits shall be limbed to a height of 14 feet above the roadbed.

Construction. All suitable material excavated within designated clearing limits shall be utilized in the construction of embankments, subgrades, shoulders, slopes, bedding, surfacing, and backfill for structures.

Excess excavation material shall be disposed of at locations designated on the Sale Area Map, or as agreed to in writing.

Woody debris from clearing and grubbing shall be disposed of in accordance with C6.74# or according to alternate methods agreed to in writing. Such debris shall not be disposed of or scattered in such a manner that the debris could enter stream courses.

Roller compaction is not required on Temporary Roads. Purchaser may elect to do so at their own expense.

Stream Crossings.

Drainages and stream channels shall be crossed by the use of culverts or bridges. Log puncheons and/or brush crossings are not permitted. Culverts or bridges shall be designed, installed and maintained to pass all anticipated stream flows, sediment, and wood likely to be encountered at the crossing during the period the structure will be in place.

Every effort shall be made to avoid crossing the stream channel with heavy equipment. Single round-trip equipment crossings of the stream channel shall be allowed for both installation and removal, if necessary.

The timing of in-stream work shall be in accordance with C6.315#.

De-watering is required prior to work in live streams. A written de-watering plan shall be prepared prior to the start of the in-stream work that describes the method of bypass, location and construction of any coffer dams or diversion dams, the number and size of pumps to be used, and backup plans in place in case of mechanical failure or unanticipated storm events.

The de-watering system shall be designed and installed to minimize erosion and sediment delivery to watercourses and to withstand all streamflows anticipated during the construction period. Water bypassed around the site shall be returned to the stream channel downstream of the work site. The bypass discharge point shall be designed to minimize erosion and scour of the stream channel, banks, and vegetation. Wastewater from project activities within the dewatered area shall be routed to an area outside the bankfull channel to allow removal of fine sediment and other contaminants prior to infiltrating back into waterbodies. Water shall be reintroduced back into the channel in a manner that minimizes the mobilization of fines and sediment into downstream waters. Any materials used to construct the de-watering system shall be removed prior to the completion of the project.

The minimum diameter for all ditch relief and cross drain culverts is 18 inches.

The minimum diameters for in-stream culverts may vary according to channel width and drainage area as well as length of time in place (single operating season vs. multiple operating seasons, refer to Table 1). If purchaser elects minimum diameters, all such culverts may be left in place for a single operating season only and shall be removed prior to end of inwater work period specified in C6.315# (Sale Operation Schedule).

If Purchaser wishes to leave in-stream culverts in place through multiple operating seasons, purchaser must install the larger of the two diameters specified in Table 1.

Culverts may be plastic, aluminum, or steel. Culverts shall be structurally sound, free of foreign material, and functional when installed. Culverts may be re-used within the Sale Area. Existing culverts may be utilized in place where appropriate.

Maintenance and Operation. Temporary Roads shall be maintained as necessary to prevent resource damage. Primary emphasis shall be placed on maintaining drainage systems and preventing erosion.

A temporary closure device, as agreed, shall be installed at temporary road entrances when the Sale Area is accessible to the general public (cable devices are not permitted).

Obliteration. Unless identified on the Sale Area Map, Temporary Roads and Landings constructed under this provision shall be scarified, water barred, blocked to traffic, and seeded and mulched in accordance with B6.63 and C6.6#. Cuts and fills shall be returned to slope and all end-hauled material shall be replaced as directed by Forest Service. Coarse woody debris shall be replaced as directed by Forest Service and may be utilized in lieu of seeding and mulching if agreed to in writing.

All Purchaser-installed culverts and other improvements on Temporary Roads shall be removed from National Forest lands prior to final acceptance of all contractually required work.

TABLE 1

Road Name	Station (Approx.)	Purpose	Single Season Diameter (Inches)	Multi-Season Diameter (Inches)	Rock Source (Fill)
					PIT RUN
N/A					

C5.12# - USE OF ROADS BY PURCHASER. (6/99) Purchaser's use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

<u>Code</u>	<u>Use Limitations</u>
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by Purchaser to inform the public of use restrictions. Purchaser's use of roads coded R, A, or W shall be in accordance with the following restrictions:

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
2200	Donkey Creek	13.1	21.5	A, U	Unsuitable for hauling prior to completion of agreed reconstruction and prehaul maintenance. Public Use Restricted during skyline yarding <u>2/</u>
2200	Donkey Creek	0.0	21.5	R	<u>1/</u>
2206		0.0	2.4	A, U	Unsuitable for hauling prior to completion of agreed reconstruction Public Use Restricted during skyline yarding <u>2/</u>
2206010		0.0	1.5	A, U	Unsuitable for hauling prior to completion of agreed reconstruction Public Use Restricted during all operations
2206020		0.0	0.3	A, U	Unsuitable for hauling prior to completion of agreed reconstruction Public Use Restricted during all operations
2200025		0.0	0.25	A, U	Unsuitable for hauling prior to completion of agreed reconstruction Public Use Restricted during all operations
2281		0.0	0.1	R	Haul is restricted until pre-haul maintenance has been completed.

1/ An approved bridge overload permit is required for any vehicle which exceeds the gross vehicle weight of 80,000 pounds (established by the Federal bridge formula), if single or tandem axle loads exceed 20,000 or 34,000 pounds respectively, or if the vehicle exceeds the posted load limits of a bridge. Issuance of a USDA Forest Service permit does not authorize the use of the permit vehicle on public highways of the state or other roadways and vice versa.

2/ Public Use Restricted when skyline landings are located on the road. Traffic cannot be delayed for longer than 30 minutes and must be left open on weekends.

C5.31# - ROAD MAINTENANCE REQUIREMENTS. (7/01) Purchaser shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications									
	From	To		T-811	T-813	T-831	T-832	T-834	T-838	T-842	T-851	T-854	
2281000	0.00	0.10	0.10	P	P	P	P	P	P	P	P	P	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-832	T-834	T-838	T-842	T-851	T-854
2200000	12.8	21.5	8.7	P	P	P	D	D	D	P	D	P	P
2206000	0.00	2.38	2.38	P	P	P	P	P	P	P	P	P	P
2206010	0.00	1.5	1.5	P	P	P	P	P	P	P	P	P	P
2206020	0.00	0.29	0.29	P	P	P	P	P	P	P	P	P	P
2200025	0.00	0.25	0.25	P	P	P	P	P	P	P	P	P	P
2281000	0.00	0.10	0.10	P	P	P	P	P	P	P	P	P	P

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-811	T-813	T-831	T-834	T-835	T-838	T-839			
2200000	12.8	21.5	8.7	P	P								
2206000	0.00	2.38	2.38	P	P	P	P		P				
2206010	0.00	1.5	1.5	P	P	P	P		P	P			
2206020	0.00	0.29	0.29	P	P	P	P	P	P	P			
2200025	0.00	0.25	0.25	P	P	P	P	P	P	P			
2281000	0.00	0.10	0.10	P	P	P	P		P				

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

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

1 Road No. and Termini	2 Special Project Specifi- cation	3 Travel Way			4 Brush And Log Out	5 Surfacing	7 Wet Weather Haul	6 Snow Removal	8 Post Haul	
		Width	X Slope	Comp					Block	Treat
2200000 MP 12.8 to 21.5		EX			Log Out Only during haul	Aggregate Base, Grading F	WW Aggregate Base, Grading F Additional Erosion Control Measures	JU		P
2206000 MP 0.0 to 2.38		EX			Brush Left & Right Log Out	Aggregate Base, Grading F	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2206010 MP 0.00 to 1.5	Post Haul install 3 Drain Dips at staked locations	EX			Brush Left & Right Log Out	Aggregate Base, Grading D	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2206020 MP 0.00 to 0.29	Post Haul install Closure Berm at 0+00 & Drain Dips at 4+15 & 7+45	EX			Brush Left & Right Log Out	Aggregate Base, Grading D	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU	P	P
2200025 MP 0.0 to 0.25	Post Haul install Closure Berm at 0+00	EX			Brush Left & Right Log Out	Aggregate Base, Grading D	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU	P	P
2281000 MP 0.0 to 0.1		EX			Brush Left & Right Log Out	Aggregate Base, Grading F	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P

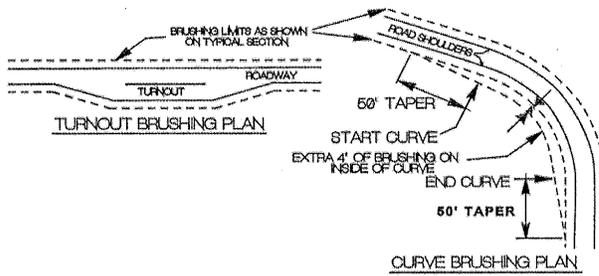
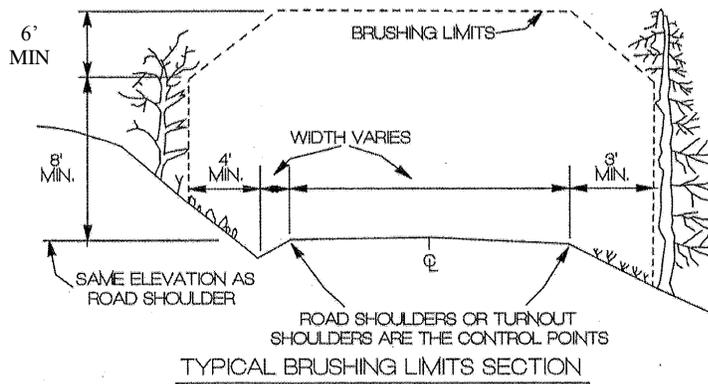
ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

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	Brush Left & Right	Using mechanical brushing equipment Purchaser shall remove brush from the right (R) side and left (L) side of road in accordance with the Brushing Detail.
		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 (07/2001)

Column No.	Heading	Entry	Explanation
5	Surfacing	Aggregate Grading D	Purchaser shall place surfacing on roads listed according to the grading indicated. Contractor is to make deposits for listed road maintenance, including surface rock replacement.
6	Wet Weather Haul	WW	Wet Weather Haul Agreement applies to all activities. Additional Erosion control features shall be in place prior to haul between November 1 st and May 31 st . Features include but are not limited to: straw wattles, weed free straw bales, silt fencing, & check dams. Purchaser shall place surfacing on roads listed according to the grading indicated.
7	Snow Removal	TS JU Blank	Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements. Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements. Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
8	Post Haul	P D	P denotes that work is Purchaser's Responsibility to perform. D denotes that work is USFS Responsibility to perform.

BRUSHING DETAIL



APPLICATION SCHEDULE PURSUANT TO C6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER
(04/2014)

PAYMENT UNIT OR UNIT NUMBER	AREAS A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	SEED		FERTILIZER		MULCH	
		APPLICATION		APPLICATION		APPLICATION	
		SPECIES MIXTURE <u>1</u> /	LBS/AC	TYPE <u>2</u> /	LBS/AC	TYPE <u>3</u> /	LBS/AC
All	A, C, D, E	Furnished by the Government	15			Straw or Wood	4,000

The Purchaser will be required to pay a co-op deposit of \$0.02/Ton for the cultivation and harvest of replacement seed of native species for use on future contracts.

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.

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

<u>FELLING METHODS</u>	<u>SUBDIVISIONS</u>
Directional felling away from adjacent ownerships, land survey monuments, residual and adjacent stands, when within 66 feet of timber edge along streamcourses, FSR 2200, 2206, 2206010, and 2281. Timber designated to be cut shall be felled in a manner to maximize protection of residual trees and facilitate all yarding operations, unless otherwise agreed to in writing by the Forest Service.	All
<u>FELLING EQUIPMENT</u>	<u>SUBDIVISIONS</u>
Wedges, or jacks as needed	All

C6.42# - TABLE PURSUANT TO 6.42# - YARDING/SKIDDING REQUIREMENTS (02/2002)

YARDING/SKIDDING REQUIREMENTS	SUBDIVISIONS
Ground based equipment, single span skyline and helicopter required, as indicated on the Sale Area and Slash Disposal Map.	As shown on the Sale Area and Slash Disposal Map (SAM)
Dedicated ground based skidtrails/roads shall be no closer than 110 feet apart center to center (except where converging), and will not exceed 12 feet in width.	As shown on the SAM
Dedicated ground based skidtrails/roads shall utilize a sufficient layer of slash and unmerchantable material to minimize rutting.	As shown on the SAM
Use existing skidtrails/roads where they meet spacing guidelines.	As shown on the SAM
Groundbased landings adjacent to any haul roads will be a minimum of 50 feet off the road surface, if feasible, unless otherwise agreed to in writing by the Forest Service.	As shown on the SAM
Dedicated ground based skidtrails/roads shall be no closer than 60 feet from subdivision boundary unless otherwise agreed to by the Forest Service.	As shown on the SAM
Ground based yarding operations with tractors will not operate on slopes exceeding 30%, unless otherwise agreed to by the Forest Service.	As shown on the SAM
Skidtrails/roads shall minimize disturbance to existing large down logs and felled hazard trees. If such logs are moved, they will be replaced as directed by the Forest Service.	As shown on the SAM
Skidtrails/roads/landings shall impact less than 20% of the sale area.	As shown on the SAM
Leading end of logs shall be suspended above ground during yarding and/or loader swing operations.	All
Log lengths shall not exceed 40 feet plus trim and may be reduced if damage occurs to the residual stand. Log lengths may be increased only when approved in writing by the Forest Service.	All
Severely damaged rub trees shall not be cut until skidding operations are completed. Rub trees shall be designated to be cut by the Forest Service.	All
All yarding operations shall result in no more than 15% of the residual trees receiving damage per subdivision. No more than 10% of the residual trees may have damage exceeding 16 square inches. Damage is defined as exposure or breakage of the cambial layer of the bole or root collar.	All

<p>No trees over the maximum stump diameter, as stated in C2.35#, will be cut during skid road construction (ground based), unless designated by the Forest Service.</p>	<p>All</p>
<p>Skyline corridors will be no closer than 120 feet apart center to center and will not exceed 12 feet in width. Skyline corridors will be parallel to each other where feasible.</p>	<p>As shown on the SAM</p>
<p>Skyline corridors will be no closer than 150 feet apart center to center at the tailhold or tailtree and will not exceed 12 feet in width.</p>	<p>As shown on the SAM</p>
<p>Protect all snags. However, if logging safety is jeopardized, snags may be felled and then left in the stand as coarse woody debris.</p>	<p>All</p>
<p>Felling leave trees to free hung up trees will not be allowed.</p>	<p>All</p>
<p>Logging plan maps designed by the Forest Service are for establishing average yarding distances for appraisal purposes only and are not part of this contract.</p>	<p>All</p>
<p>The locations of all skidtrails and skyline corridors will be approved prior to felling operations.</p>	<p>All</p>
<p>All helicopter landings (log and service), use of mechanical felling equipment (processor, feller/buncher, etc.) and access roads for equipment must be approved in writing by the Forest Service.</p>	<p>1A,1B,49,13C</p>
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SPECIFICATIONS PURSUANT TO C6.74# - SLASH TREATMENTS REQUIREMENTS
(02/2002)

Slash Plan

Definitions

Slash outside subdivision boundaries
System road slash
Landing slash
Temporary road slash
Leave tops in subdivisions
Directional felling and pull back slash
Limb logs in subdivisions

I. Definitions:

Slash: Material with a diameter of 1 inch to 5 inches and 3 feet in length or greater remaining in treatment strips. Material greater than 5 inches in diameter does not have to be treated if all limbs have been removed.

Landing and Hand Piles:

- a) Minimum of 8 feet from adjacent timber.
- b) Height shall be at least two-thirds that of the width and be free of non-combustible material including soil.
- c) Covered with Kraft 30-30-30 paper or polyethylene plastic or equivalent having a minimum of 0.012 inch thickness.
- d) Covering shall be placed midway vertically on the pile in one continuous sheet covering not less than 60 percent of the surface area of the pile. Slash shall be placed on top of cover material to hold it in place. Covering shall be concurrent with piling.

II. Slash outside subdivision boundaries

All slash that is created outside the subdivision boundaries shall be pulled back into the subdivisions and scattered outside the pull-back areas as shown on the Sale Area and Slash Disposal Map.

III. System road slash

Purchaser shall clear all slash created by harvest operations from the surfacing of the 2200, 2206, and 2206010 roads. Ditches shall be cleared of all harvest operation slash.

IV. Landing slash

All skyline landing slash at landings located on the 2200 and 2206, roads shall be piled and covered as described above.

All skyline landing slash at landings located on temporary roads shall be removed from landing areas and distributed evenly over skyline corridors concurrent with yarding operations. Any slash remaining at the landing shall be lopped and scattered to a depth of 2 feet or less.

All ground-based landing slash shall be removed from landing areas and distributed evenly over skid roads concurrent with skidding operations. Any slash remaining at the landing shall be lopped and scattered to a depth of 2 feet or less.

V. Temporary roads

Slash created by opening existing or constructing temporary roads within 100 feet (slope distance) of the timbered edge along the 2200, 2206 and 2206010 roads shall be pulled back 100 feet from road junctions and evenly distributed to a depth of 2 feet.

Stumps shall be scattered outside clearing limits as not to interfere with yarding operations or protection of residual trees.

C6.74# Slash treatment cont.

VI. Leave tops in subdivisions

Top unmerchantable portion of all included timber shall be bucked and left within subdivisions, unless agreed to by the Forest Service, except in areas designated for pull back as shown on Sale Area and Slash Disposal Map. Ground based equipment may use this material within skid trails/roads and processor paths to reduce ground impacts.

VII. Directional felling, and Pull Back Slash

Within 100 feet (slope distance) of the treated edge along the 2200, 2206 and 2206010 roads, timber shall be directionally felled. Any remaining slash, as described above, shall be pulled back as shown on the Sale Area and Slash Disposal Map.

Material larger than 5 inches does not need to be pulled back provided all limbs are removed and pulled back 100 feet (slope distance).

VIII. Limb logs in subdivisions

Logs must be limbed on 3 faces prior to yarding unless agreed to by the Forest Service.

C6.315# - SALE OPERATION SCHEDULE. (6/94) Unless otherwise agreed to between Purchaser and Forest Service, Purchaser's Operations shall be performed in accordance with the following schedule:

Subdivisions	Operation Conditions	Purpose
All, except 4C	All operations shall occur only between September 24 and February 28 (inclusive) unless waived in writing by the Forest Service.	Prevention of disturbance to Marbled Murrelet and Spotted Owl
4C	All operations shall occur only between June 1 and October 31 (inclusive) and shall occur only between 2 hours after sunrise and 2 hours before sunset between June 1 and September 23 (inclusive).	Prevention of disturbance to Marbled Murrelet and Spotted Owl Prevention of soil damage
All	Road construction, reconstruction, and obliteration (temporary and specified) are allowed only between June 1 and October 31, and shall occur between 2 hours after sunrise and 2 hours before sunset between Jun 1 and September 23, inclusive unless otherwise agreed to by Forest Service.	Reduction of sedimentation.
All	Haul operations that occur between November 1 and May 31 (inclusive) require a Wet Weather Haul agreement between the Purchaser and Forest Service. Some requirements may include additional silt fencing, straw wattles, straw mulch, spot rocking, and other forms of sedimentation reduction devices and/or purchaser self suspension of haul.	Reduction of sedimentation.
All	All instream culvert work is allowed between July 1 and September 30, inclusive, unless agreed to by the Forest Service.	Reduction of potential impact to fish.
4C, 13, 14, 14A, 14B, 14C, 14E15, 15A, 16, 16A, 16C	Grays Harbor PUD and 811 must be notified 2 weeks prior to construction of any temporary road that exits FSR 2200.	Protection of improvement (buried powerline)
4C, 13, 14, 14A, 14B, 14C, 14E15, 15A, 16, 16A, 16C	Forest Service must be notified 2 weeks prior to any activity that will block FSR 2200. Traffic must not be blocked longer than 30 minutes and must be left open on weekends.	Public Safety