

SPECIFICATIONS PURSUANT TO CT2.21# - UTILIZATION AND REMOVAL OF NON-  
SAWTIMBER PRODUCTS. (8/2006)

<b>Unit/Subdivision</b>	<b>Products to be Removed</b>
Sale Area	1. All limbs and tops that are attached after skidding to whole trees and portions of trees meeting specifications for Non-Sawtimber Products. Limbwood from Sawtimber is considered Logging Slash and shall be treated under CT6.7#.

SPECIFICATIONS PURSUANT TO CT2.35# - DESIGNATION OF TIMBER, CUTTING  
UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES

Timber Designation Table

Cutting Unit/ Subdivision/Area/ Payment Unit	Tree Paint Color	Designation or Specification
Sale Area	Blue or Green	<u>Hazard Tree</u> . Notwithstanding BT2.32 all dead and unstable live trees which are leaning towards a road or are otherwise hazardous to a road, and are sufficiently tall to reach Purchaser's landings or the roadbed of National Forest System roads within Sale Area, shall be felled by Purchaser when Marked in the specified paint color above and below stump height by Forest Service in advance of felling any other timber in the vicinity. Pieces meeting Utilization Standards from such dead and unstable live trees shall be removed unless Purchaser is notified in writing that removal would cause unacceptable damage to areas requiring special protection such as residual timber, roads, administrative sites, streamside management zones, and areas identified on Sale Area Map or on the ground.
		<u>Individual Tree Mark</u> . Individual trees are designated for cutting only if Marked above and below stump height with the specified paint color.
Units 113, 114, 115, 116 & 117	Orange	<u>Leave Tree Mark</u> . All live <u>Conifer</u> are designated for cutting unless Marked as leave trees. Leave trees are Marked above and below stump height with the specified paint color. Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.
Units 113, 114, 115, 116 & 117	Orange 'W'	<u>Wildlife Trees</u> . Notwithstanding the designation for cutting under BT2.31, BT2.33, BT2.34, or BT2.35, trees which are identified by standard Forest Service metal wildlife tree sign or painted with the specified paint color on the uphill and downhill side, shall be left uncut. In event such trees are destroyed in Purchaser's Operations, Forest Service may designate alternate trees to be saved.
Sale Area	Black	<u>Marked Out Trees</u> . When it is necessary to delete previously marked trees, an unique tree marking paint color will be Marked over or adjacent to the original mark, but will not obscure the original marking. Trees Marked with the original marking paint color and the unique tree marking paint color are not Included Timber.
All units 6.0"- 9.9" DBH		<u>Designation by Spacing CT2.351#</u>
All units with Juniper 6.0"-		<u>Designation by Species and Diameter, CT2.352#</u>

23.9" DBH		
		Designation by Damage Class, CT2.353#
		Designation by Row Spacing, CT2.354#

Subdivision/Payment Unit and Cutting Unit Boundary Designation Table

<u>Subdivision/Payment Unit</u>	<u>Boundary Paint Color</u>	<u>Boundary Designation</u>
<u>Cutting Unit</u>	<u>Boundary Paint Color</u>	<u>Boundary Designation</u>
All units	Orange	Vertical stripes on three faces of the bole at DBH with the center stripe facing into the unit and stump marks on 2 faces at ground level. Blue signs facing into the unit or yellow signs along travel routes.

**Tree Designation Table – CT2.352#**

<b>Subdivision(s) or Cutting Unit(s)</b>	<b>Designated Species <u>1/</u></b>	<b>More than Stump Diameter (inches) <u>2/</u></b>	<b>Less than Stump Diameter (inches) <u>2/</u></b>
All	Juniper	4	28

**CT5.31# - Contract Road Maintenance Requirements Summary**

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications									
	From	To		T801	T802	T803	T804	T805	T806	T807	T808	T809	T810
43N75	43N36	MP2.3	2.3			P							
43N75	MP2.3	Termini	2.7			P							
43N75A	43N75	Unit 115	0.6			P							
43N75D	43N75	Termini	0.4			P							
43N75E	43N75	43N75A	0.7			P							
43N75G	43N75	Termini	0.6			P							
43T75F	43N75	Unit 114	0.2			P							
43T75G	43N75	Termini	0.2			P							
46N10	HWY 139	53N36	4.5			P							
46N10E	46N10	Lime Pit	1.0			P							
43N36	46N10	43N75	1.6			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		T801	T802	T803	T804	T805	T806	T807	T808	T809	T810
43N75	43N36	MP2.3	2.3			P			P				
43N75	MP2.3	Termini	2.7			P			P				
43N75A	43N75	Unit 115	0.6			P			P				
43N75D	43N75	Termini	0.4			P			P				
43N75E	43N75	43N75A	0.7			P			P				
43N75G	43N75	Termini	0.6			P			P				
43T75F	43N75	Unit 114	0.2			P			P				
43T75G	43N75	Termini	0.2			P			P				
46N10	HWY 139	53N36	4.5			P			P				
46N10E	46N10	Lime Pit	1.0			P			P				
43N36	46N10	43N75	1.6			P			P				
All Temp	Start	Termini							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		T801	T802	T803	T804	T805	T806	T807	T808	T809	T810
43N75	43N36	MP2.3	2.3			P							
43N75	MP2.3	Termini	2.7			P						P	
43N75A	43N75	Unit 115	0.6			P						P	
43N75D	43N75	Termini	0.4			P						P	
43N75E	43N75	43N75A	0.7			P						P	
43N75G	43N75	Termini	0.6			P						P	
43T75F	43N75	Unit 114	0.2			P						P	
43T75G	43N75	Termini	0.2			P						P	
46N10	HWY 139	53N36	4.5			P							
46N10E	46N10	Lime Pit	1.0			P							
43N36	46N10	43N75	1.6			P							

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

SPECIFICATIONS PURSUANT TO CT5.35# - REQUIREMENTS OF ROAD AND WATER SUPPLY USE

Load Limitations	<p>Purchaser shall notify Forest Service in writing of the planned size and load distribution for equipment which exceeds the State of California Vehicle Code legal size and weight, and the National Forest System roads to be used. Such notice may be part of plan of operation under BT6.311. Within 15 days after receipt of the written notice Forest Service shall notify Purchaser in writing of any regulations or restrictions that may be needed to protect National Forest Transportation Facilities.</p> <p>A written permit shall be required for moving any vehicle which is in excess of the established legal size and weight which is not listed in the above plan, except as may be authorized in prior written agreements.</p>
Existing Non-National Forest System Roads	<p>Roads not shown on Sale Area Map may be used as Temporary Roads if there is agreement before use is started.</p>
Snow Removal	<p>If Purchaser removes snow from roads, such work shall be done with Forest Service approval and in a manner that will protect roads and adjacent resources.</p> <p>Snow berms shall be removed or placed to avoid accumulation of melt water on the road and prevent water concentration on erosive slopes or soils.</p> <p>Snow must not be removed to the road surface. A minimum &lt; &gt; inch snow depth must be left to protect the roadway. If the road surface is damaged, Purchaser shall replace lost surface material and repair structures damaged in blading operations prior to hauling, unless climatic conditions prevent necessary work from being accomplished or as otherwise agreed in writing.</p> <p>Single lane roads shall be plowed full width including turnouts. In event double lane roads are not plowed to full width, warning signs shall be required and plowing shall be no less than single lane (12 feet) with intervisible turnouts.</p>

<p>Water Supply Deposits</p>	<p>If Purchaser utilizes the water site located at Lime Pit on forest road 46N10E in T42N, R9E, NE ¼ section 6, for any listed activity, Purchaser shall make deposit with Forest Service for that activity at the time and in the amount shown in the Water Supply Deposit Schedule table below.</p> <p style="text-align: center;"><b>WATER SUPPLY DEPOSIT SCHEDULE</b></p> <table border="1" data-bbox="418 415 1430 667"> <thead> <tr> <th data-bbox="418 415 618 506">Activity</th> <th data-bbox="618 415 821 506">Unit of Payment</th> <th data-bbox="821 415 1024 506">Unit Cost</th> <th data-bbox="1024 415 1227 506">Total Cost</th> <th data-bbox="1227 415 1430 506">Time of Payment</th> </tr> </thead> <tbody> <tr> <td data-bbox="418 506 618 558">N/A</td> <td data-bbox="618 506 821 558"></td> <td data-bbox="821 506 1024 558"></td> <td data-bbox="1024 506 1227 558"></td> <td data-bbox="1227 506 1430 558"></td> </tr> <tr> <td data-bbox="418 558 618 611"></td> <td data-bbox="618 558 821 611"></td> <td data-bbox="821 558 1024 611"></td> <td data-bbox="1024 558 1227 611"></td> <td data-bbox="1227 558 1430 611"></td> </tr> <tr> <td data-bbox="418 611 618 667"></td> <td data-bbox="618 611 821 667"></td> <td data-bbox="821 611 1024 667"></td> <td data-bbox="1024 611 1227 667"></td> <td data-bbox="1227 611 1430 667"></td> </tr> </tbody> </table>	Activity	Unit of Payment	Unit Cost	Total Cost	Time of Payment	N/A														
Activity	Unit of Payment	Unit Cost	Total Cost	Time of Payment																	
N/A																					
<p>Surface Replacement Deposits</p>	<p>Purchaser shall make Required Deposits for deferred surface replacement (16 U.S.C. 537) for use of existing surfaced roads. If applicable, such deposits shall be based upon the volume and distance hauled on the roads and at the applicable rates listed in the table below titled Surface Replacement Deposit Schedule. If Purchaser uses surfaced roads under jurisdiction of Forest Service other than those listed, Forest Service may establish applicable rates for such surfaced roads.</p> <p style="text-align: center;"><b>SURFACE REPLACEMENT DEPOSIT SCHEDULE</b></p> <table border="1" data-bbox="418 1045 1430 1262"> <thead> <tr> <th data-bbox="418 1045 618 1098">Road No.</th> <th data-bbox="618 1045 821 1098">From</th> <th data-bbox="821 1045 1024 1098">To</th> <th data-bbox="1024 1045 1227 1098">Miles</th> <th data-bbox="1227 1045 1430 1098">Rate</th> </tr> </thead> <tbody> <tr> <td data-bbox="418 1098 618 1150">43N36</td> <td data-bbox="618 1098 821 1150">43N63</td> <td data-bbox="821 1098 1024 1150">43N75</td> <td data-bbox="1024 1098 1227 1150">1.6</td> <td data-bbox="1227 1098 1430 1150">\$0.53/CCF</td> </tr> <tr> <td data-bbox="418 1150 618 1203">46N10</td> <td data-bbox="618 1150 821 1203">43N63</td> <td data-bbox="821 1150 1024 1203">HWY 139</td> <td data-bbox="1024 1150 1227 1203">4.5</td> <td data-bbox="1227 1150 1430 1203">\$1.49/CCF</td> </tr> <tr> <td data-bbox="418 1203 618 1262"></td> <td data-bbox="618 1203 821 1262"></td> <td data-bbox="821 1203 1024 1262"></td> <td data-bbox="1024 1203 1227 1262"></td> <td data-bbox="1227 1203 1430 1262"></td> </tr> </tbody> </table> <p style="text-align: center;">Sale Area Average Rate: \$2.02/CCF</p>	Road No.	From	To	Miles	Rate	43N36	43N63	43N75	1.6	\$0.53/CCF	46N10	43N63	HWY 139	4.5	\$1.49/CCF					
Road No.	From	To	Miles	Rate																	
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46N10	43N63	HWY 139	4.5	\$1.49/CCF																	

SPECIFICATIONS PURSUANT TO CT6.6# - EROSION PREVENTION AND CONTROL.

Vegetative Soil Stabilization Where soil has been disturbed by Purchaser's Operations and the establishment of vegetation is needed to minimize erosion, Purchaser shall take appropriate measures normally used to establish an adequate cover of grass or other vegetation acceptable to Forest Service or take other agreed stabilization measures. Forest Service shall designate on the ground such disturbed areas annually as logging and Temporary Road construction are completed.

Forest Service upon request shall provide advice as to soil preparation and the application of suitable seed mixtures, mulch and fertilizer and the timing of such work. In no event shall Purchaser be required to treat more acres than that shown in the legend of Sale Area Map.

Purchaser shall use the type of native seed mixtures, mulch, and fertilizer as listed below:

Seed Mix	Pounds/Acre	Type of Mulch	Fertilizer

Special Erosion Prevention Measures Purchaser shall give adequate treatment by spreading slash or wood chips or by agreement giving other treatment to portion of tractor roads, skid trails, landings, cable yarding corridors, tractor-end lined corridors and Temporary Road fills where necessary to supplement other erosion prevention measures required elsewhere in this contract. In no event shall Purchaser be required to treat more acres than that shown in the legend of Sale Area Map. The specific locations to be treated shall be designated on the ground by Forest Service. These special erosion prevention measures are to be done within the same date and time periods as stated above.

Soil Scarification. In addition to meeting the requirements of BT6.63 and BT6.64, Purchaser shall scarify the following areas; unless otherwise agreed:

- (a) Traveled Way of National Forest System roads used by Purchaser and listed in the legend of Sale Area Map.
- (b) Roadbeds of any Temporary Roads used for log hauling by Purchaser.
- (c) Landings or portions thereof located outside Roadbed limits of National Forest System roads not designated for scarification.

Scarification shall be to a depth of 6 inches, with intervals between striations not to exceed 12 inches, unless otherwise agreed.

Backblading Within recreation development sites and public use areas designated on Sale Area

Map, Purchaser shall, at Forest Service request, backblade skid trails in lieu of cross ditching.

Tillage In addition to meeting the requirements of BT6.64, unless otherwise agreed in writing, tillage shall be required on the areas listed in the following table.

Tillage shall be accomplished by equipment that will lift and fracture the soil by vertical and lateral shattering, leaving soil loosened through the full width and depth of the compacted layer with the topsoil remaining substantially in place rather than being inverted.

Tillage depth is shown in the following table. Agreement in writing may be made to a lesser depth if rocks or other limiting site conditions are encountered.

Tillage shall be limited to periods when soil dryness will result in crumbled soil, avoiding the formation of large clods. Purchaser and Forest Service shall agree in writing on the timing of completion of such work to coordinate with desirable soil moisture conditions.

Areas to Till	Tillage Depth (Inches)	Maximum Acres to Treat
Landings		
Main Skid Roads and Tractor Roads designated by Forest Service		
Temporary Roads		

SPECIFICATIONS PURSUANT TO CT6.7# - SLASH TREATMENT (8/2006)

Specified slash treatment methods shall be shown on Sale Area Map or listed in the following tables by the following symbols:

Slash Treatment Methods

<u>Symbol</u>	<u>Method</u>	<u>Definition</u>
Buck-L	"Bucking Large Logging Slash"	Tops and limbs over 4 inches diameter outside bark (d.o.b.), not to be otherwise treated, shall be bucked into lengths not to exceed 6 feet, unless agreed otherwise.
Buck-P	"Bucking and Piling"	Logging Slash smaller than < > inches and larger than 4 inches in large end d.o.b. shall be bucked into lengths not to exceed <> feet and left in place. Logging Slash 4 inches and smaller in large end d.o.b. shall be hand Piled within Required Disposal Strip for Forest Service disposal.
Bury	"Burying"	Logging Slash shall be buried where agreed in borrow areas, pits, trenches, or other locations reasonably near the area of origin. Logging Slash shall be matted down in layers and shall be covered with at least 2 feet of rock and soil so that the final surface is sloped to drain and relatively smooth.
Chip	"Chipping"	Chippable Logging Slash up to 4 inches in d.o.b. shall be processed through a chipping machine. Chips shall be scattered to a loose depth not exceeding 6 inches.
Deck	"Decking" large material	Logging Slash <> inches or larger in large end d.o.b. and <> feet or more in length shall be Decked for disposal by Forest Service by piling pieces parallel to each other.
Mach	"Machine Piling"	Concentrations of Logging Slash, excluding scattered individual pieces, shall be Machine Piled by tractor equipped with brush rake for disposal by Forest Service.
Pile	"Piling" small material	Logging Slash smaller than <> inches in large end d.o.b. and <> feet long shall be hand Piled for disposal by Forest Service.
Remove	"Removing"	Logging Slash shall be moved or hauled to locations shown on Sale Area Map and

designated on the ground where it shall be piled for disposal by Forest Service.

Scat 18" "Scattering"  
Scat 30"

Logging Slash shall be scattered to reduce slash concentrations with slash being generally left within 18 or 30 inches of the ground as shown on Sale Area Map. Logging Slash shall be scattered into openings away from and without unnecessary damage to residual trees. All scattered logs shall be limbed, placed away from trees and positioned so they will not roll. When Scattering is specified, another method may be used by agreement.

Stack "Stacking" small material

Logging Slash <> inches or smaller in large end d.o.b. and <> feet or more in length shall be stacked for disposal by Forest Service by piling pieces parallel to each other.

View "Visible Slash Treatment"

Designated on Sale Area Map with boundaries posted on the ground are <> with distance limitations for visible slash treatment. Within such units and the area of visible Logging Slash adjacent thereto, Logging Slash shall be treated by Purchaser. Primary treatment shall be by Removing, Burying, Chipping, Piling, Machine Piling, or a combination of these means unless a method is specified or prohibited on Sale Area Map. Logging Slash not readily treated by the selected or specified method shall be removed to designated areas or treated as agreed.

YUMD "Yarding Unutilized Material-Decking"

All unutilized material developed by Purchaser's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized material shall be Yarded to landings and Decked. Where this is impractical, or other reasons, other locations shall be agreed upon.

Unit	Large End d.o.b. (in)	Length (feet)

YUME "Yarding Unutilized Material-Exterior Boundary"

All unutilized material developed by Purchaser's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized material shall be yarded to locations a minimum of 50 feet slope distance within the exterior boundaries of such units and positioned so the yarded material will not roll.

	Large End	
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Unit	d.o.b. (in)	Length (feet)

YUML "Yarding Unutilized Material-Landing"

All unutilized material developed by Purchaser's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized shall be yarded to locations within 100 feet slope distance of landing. Where this is impractical, or other reasons, other locations shall be agreed upon.

Unit	Large End d.o.b. (in)	Length (feet)

YUMR "Yarding Unutilized Material-Removal"

All unutilized material developed by Purchaser's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized shall be removed to locations shown on Sale Area Map and designated on the ground, or other agreed locations, and Decked.

Unit	Large End d.o.b. (in)	Length (feet)

Cover "Covering Piles"

All piles shall be covered with a durable waterproof covering as approved by Forest Service. The material shall be at least six feet in width. Piles shall not be less than fifty percent covered, with the covering extending not less than half way down all sides. Pieces of burnable material shall be placed on top of the durable waterproof covering to keep the covering from blowing off the pile.

Fell "Damaged Small Tress"

Unless treated under other provisions, all trees smaller than the minimum d.b.h. in AT2, over 5 feet in height, and damaged beyond recovery by Purchaser's Operations shall be felled. Such trees shall be limbed to a stem diameter outside bark of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and shall be bucked into lengths not exceeding 20 feet.

Fire-L "Firelines"

Shown on Sale Area Map and to be flagged on ground after logging by Forest Service are firelines to be constructed by Purchaser unless otherwise agreed in writing. Purchaser shall construct not more than <> chains of fireline by hand and not more than <> chains of fireline

by tractor.

Firelines constructed by hand shall be cleared of all vegetative debris larger than one inch in d.o.b. and three feet long. The width of firelines shall be at least <> feet, except across the top of cutting units where the width shall be at least <> feet. At least <> feet shall be scraped to mineral soil. In areas where there is potential for burning material to roll, the fireline shall be constructed in a trenched manner on the downhill side.

Tractor lines shall be cleared of all vegetative debris, larger than one inch in diameter and three feet long, to a width of at least <> feet, with at least <> feet to mineral soil. No slash, brush, or other vegetative debris shall be buried in or under berms created in the construction of firelines. All limbs overhanging into the fireline, shall be removed to a minimum height of 8 feet.

Firelines shall be completed on each unit in accordance with B6.311 unless otherwise agreed in writing.

In subdivisions <> and shown on Sale Area Map, Logging Slash shall be scattered within <> feet slope distance of the inside edge of firelines.

Fuel-B "Fuelbreaks"

Shown on Sale Area Map, with boundaries designated on the ground, are "Fuelbreaks" of varying width. Within such Fuelbreaks all Logging slash and Construction slash shall be treated by Purchaser. Primary treatment shall be by Removing, Burying, Chipping, Piling, Machine Piling, or a combination of these methods unless a method is specified or prohibited on Sale Area Map. Slash larger than treatment size requirements of selected or specified methods shall be scattered outside Fuelbreak, or treated as agreed.

PILING SPECIFICATIONS. All piles shall be reasonably compact and free of soil to facilitate burning and shall be constructed of such size and at such distance from trees so that burning shall not result in unnecessary damage to residual timber. Such Logging Slash shall be bucked into lengths not exceeding ten feet prior to piling. Maximum width of tractor, with brush rake attached, shall not exceed n/a inches. Machine Piling is not required on areas where use of tractors would cause undue damage to residual timber or where slopes exceed n/a percent. Piles shall be located a distance of at least twice their height in feet from the outer edge of tree crowns or snags.

Piles shall be no less than four feet in height or greater than 10 feet in height. Material extending three feet or more outside the edge of a pile shall be trimmed. An eight foot fuelbreak shall be cleared of all but fine material around each Machine Pile and an 18 inch wide fireline shall be cleared to mineral soil around the outer ring of the fuelbreak. For hand piles, Purchaser shall construct a fireline cleared to mineral soil and at least 3 feet wide around each pile. In areas where there is a potential for burning material to roll, firelines, including those for Machine Piles, shall be trenched on the downhill side of each pile to adequately prevent material from crossing firelines. Trenches shall be constructed by hand unless otherwise agreed.

UNIT AND SUBDIVISION.SLASH TREATMENT SPECIFICATIONS.

	<b>SLASH TREATMENT</b>	
<b>Subdivision or Unit No</b>	<b>Specified Method</b>	<b>Prohibited Method</b>
All units	Fell	N/A
All units	Scat 18" trees > 24.0" dbh	N/A

LANDINGS AND DISPOSAL SITES. Unutilized logs accumulated at landings and disposal sites shall be Decked by Purchaser for disposal by Forest Service. The maximum height of decks is shown in the following table. Other slash accumulated at landings and disposal sites shall be kept separate from unutilized logs and treated by the method shown in the following table.

	<b>SLASH TREATMENT</b>		
	<b>Subdivision or Unit No.</b>	<b>Specified Method</b>	<b>Maximum Height of Decks</b>
<u>Landings</u>	All units	MACH	10 feet
<u>Disposal Sites</u>			

TREATMENT ALONG PERMANENT ROADS Permanent roads that require roadside slash treatment are listed in the attached table and shown on Sale Area Map. All Logging and Construction Slash within Required Disposal Strips shall be treated by Purchaser. "Required Disposal Strips" are those areas adjacent to permanent roads where slash treatment is required for resource objectives. The width of Required Disposal Strips is shown in the attached table and is measured in slope distance from Roadbed edges of permanent roads. By agreement, in Clearcutting Units and regeneration units slash from Required Disposal Strips may be treated with other Logging Slash. By agreement the location of Required Disposal Strips may be adjusted from side to side without materially changing the total work required.

Slash treatment in Required Disposal Strips shall be accomplished without affecting the proper functioning of channels leading to and from drainage structures.

Logging Slash larger than treatment size requirements of the specified method shall either be Scattered outside Required Disposal Strip, within Required

Disposal Strip or Decked at agreed locations as shown in the attached table.

			<b>SLASH TREATMENT</b>	
<b>Road No.</b>	<b>Subdivision and/ or Unit No. or Road Junctions (From To)</b>	<b>Width of Required Disposal Strip</b>	<b>Specified Method</b>	<b>Slash Larger Than Treatment Size Requirements of Specified Method</b>

TREATMENT ALONG TEMPORARY ROADS. Outside of Clearcutting Units or regeneration units, all trees felled or pushed over and trees damaged beyond recovery by Temporary Road construction shall be felled, limbed to a stem d.o.b. of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and stem shall be bucked into lengths not exceeding <> feet. Such slash shall be Scattered free of soil to reduce concentrations unless treatment is required by another specified method.

ADDITIONAL SLASH TREATMENT REQUIREMENTS. Within areas shown on Sale Area Map, Purchaser shall perform work according to the specifications in the attached Table, unless otherwise agreed in writing.

Subdivision, Payment Units, Roads and or Road Segments	Additional Slash Treatment Requirements
	<p>Yard all stem material to a top d.o.b. of 1 inch, from timber designated for cutting, with the following exception: broken portions of logs and tops less than 4 feet in length need not be yarded.</p> <p>Broken ends of merchantable logs shall not be bucked off in the units.</p> <p>Slash and Substandard Material accumulated at the landings shall be Decked or Machined Piled, in accordance with specifications above.</p> <p>Material accumulated at landings shall be considered as Timber Subject to Agreement under CT2.11#, described as Substandard Material and may be removed and paid for at Purchaser's option.</p>

ASSISTANCE IN SLASH BURNING. If Forest Service requests, Purchaser shall furnish equipment and equipment operators to assist in preparation for slash burning at agreed times prior to the normal slash burning season in the area.

Purchaser shall furnish equipment and equipment operators for burning and mop-up when requested. The amount and kind of equipment requested shall be that normally used in slash treatment work and reasonably available under the existing equipment organization of Purchaser. Forest Service shall reimburse Purchaser for such work at rates common in the area or at previously agreed rates.

## List of Volume Tables (CT6.8-1#)

Species	Name of Table	Date
Ponderosa Pine	R-5 Cubic Foot Volume Tables to a Utilization Top	9/97

Values listed in the table are in gross volumes to a utilization (utilizable) top. Use standard deduction methods described in the Timber Cruising Handbook (FSH 2409.12), Region 5 Supplements.

REGION 5 CUBIC FOOT VOLUME TABLES TO A UTILIZATION TOP  
 NATIONAL CRUISE PROGRAM  
 PONDEROSA PINE  
 SEPTEMBER 1997

HEIGHT/DBH	8	10	12	14	16	18	20	22	24	26	28	30
20	0	0	0	5	6	9	11	12	15	18	21	24
30	0	3	6	8	10	15	17	22	26	31	37	40
40	0	4	8	12	15	21	25	31	36	41	52	57
50	3	6	9	14	19	24	32	39	47	55	65	72
60	3	7	12	17	24	30	39	48	57	65	80	90
70	4	10	14	22	27	37	44	55	67	78	92	108
80	4	11	15	24	30	40	53	64	77	89	106	119
90	5	12	16	26	37	46	57	72	87	100	119	138
100	6	14	20	30	40	49	65	80	97	113	131	152
110	6	15	23	33	43	60	69	89	105	124	145	166
120	7	16	24	36	48	63	78	96	118	134	163	186
130	8	17	26	38	51	70	82	105	126	143	174	203
140	8	20	28	43	55	75	90	114	134	155	187	218

SPECIFICATIONS AND TREATMENTS PURSUANT TO CT6.41# - FELLING, BUCKING  
AND LIMBING

Treatment Method and Applicable Map Symbol	Felling, Bucking and Limbing Specifications
Limbing	Outside of construction clearings, Clearcutting Units and regeneration units, unless otherwise provided by BT6.414, Purchaser shall, prior to skidding/yarding operations, cut exposed limbs from products which are to be skidded/yarded. Such limbing of stems shall be done to a top diameter of approximately 20 inches, at which point the top shall be cut from the remainder of the stem.
No Lop "No Lop"	Within units or subdivisions designated NO LOP on Sale Area Map, trees shall be skidded/yarded to agreed landing locations prior to lopping.
Whole Tree Yarding "Whole"	Notwithstanding the requirements above, within units or subdivisions designated "Whole" on Sale Area Map, trees smaller than 24 inches DBH shall be skidded/yarded to agreed landing locations prior to limbing, bucking, and lopping. Trees larger than or equal to 21 inches DBH shall be bucked into two or more pieces with the butt portion being no longer than 41 feet prior to skidding/yarding. The butt log shall not be limbed prior to skidding/yarding.
Directional Felling "DF"	Within areas designated DF on Sale Area Map, Included Timber shall be directionally felled away from fences, controlled areas, streamside management zones, property lines, travel routes and improvements with the use of specialized equipment. Such directional felling shall not be required when in the faller's judgment it is unsafe to do so, and shall be left standing.
Treatment of Stumps "TS"	<p>Within areas shown on Sale Area Map, Purchaser shall treat stumps of all live conifer and juniper trees equal to or greater than 14 inches stump diameter, (measured inside bark) unless otherwise agreed in writing. Treatment shall be with a borate compound registered by EPA in the State of California for prevention of annosus root disease.</p> <p>Treatment shall consist of removal of sawdust and other loose debris from the cut surface of the stump and application of a thin layer of the borate compound uniformly over the entire cut surface, including exposed wood surfaces on the stump sides, at the rate specified on the product label. Any</p>

surface irregularities on the stump preventing application of a uniform layer of borate compound shall be cut level prior to treatment. Unless waived in writing, Purchaser shall also apply an approved colorant mixed with the borate compound to insure complete coverage. Treatment should be done as soon as possible but shall be completed no later than 4 hours after felling, otherwise stumps shall be re-cut and treated.

Purchaser shall not apply borate compound during heavy rain fall or when such precipitation rate is predicted within 4 hours of application to cause borate compound to be flushed off the stump and become ineffective, in that case treatment shall be reapplied. Application shall be completed within 24 hours of the precipitation having ceased. Borate compound also shall not be applied to stumps located within 100 feet of live streamcourses and meadows/wetlands shown on Sale Area Map and/or 50 feet of sensitive plant location boundaries as flagged on the ground.

Purchaser shall provide the borate compound and colorant and apply it in compliance with the State of California laws and regulations pertaining to pesticides and pest control operations. Borate compound storage shall be located such that any spillage will not contaminate water. All spills shall be promptly cleaned up and spilled material disposed of according to the product label. All spills occuring in water or over 25 pounds shall be reported to Forest Service within 24 hours.

Purchaser shall submit at the end of each month a "Monthly Summary of Pesticide Use Reports" to the appropriate County Agricultural Commissioner with a copy to the District Ranger.

Maximum Log Length

Cut trees shall be bucked prior to skidding so that resulting logs shall not exceed the maximum log length including trim allowance shown in following table:

Unit Number	Maximum Log Length
All	41'

Minimum Stump Height

Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason
All	4.0"	Accountability



## Ground-Based Skidding Table - CT6.42#

Map Symbol	Requirements
<b><u>TRAC</u></b>	<p>Skid road pattern shall be agreed in advance of felling and main skid roads shall be flagged on the ground in advance of felling. Purchaser shall stage-log by felling and skidding Included Timber in two or more separate operations when necessary to prevent undue damage to the resources or residual stand. Needed tractor trails shall be constructed in advance of skidding.</p> <p>Products shall be end-lined as needed to protect resources or residual timber from unnecessary damage. The number of chokers shall be limited as necessary to avoid unnecessary damage to resources or residual timber. By agreement, tractors may be used to separate products to prevent stain.</p>
<b><u>SUSP</u></b>	Products shall be skidded with leading end clear of ground.
<b><u>SPACE</u></b>	Skid roads will average _____ feet from center to center, except where converging.
<b><u>ENDL</u></b>	Endlining shall not be required for distances in excess of 75 feet uphill, and 75 feet downhill.
<b><u>MAX</u></b>	Tractors used for skidding outside Clearcutting Units, regeneration units or other authorized clearings, shall be of the type (rubber-tired or track-laying) shown on the Sale Area Map and shall not exceed the overall width designated on Sale Area Map.
<b><u>MH</u></b>	<p>Purchaser shall cut Included Timber and move it to designated skid trails using equipment with a boom having an operating radius of at least 20 feet for bunching trees, capable of severing, lowering and placing trees up to 21 inches diameter at stump height on the ground prior to skidding. Such equipment must be capable of operating on slopes up to <u>30</u> %.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources from unnecessary damage.</p> <p>Trees which exceed capability of specified equipment may be felled, bucked and skidded in a manner consistent with the requirements of BT6.41 - Felling and Bucking, C(T)6.41# - Felling, Bucking, and Limbing Requirements and the above "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.</p>
<b><u>CTL</u></b>	Included Timber shall be felled, limbed and bucked by a self-propelled mechanical harvester capable of producing finished sawlogs or chippable boles. Limbs of Included Timber shall be placed evenly in the machinery skid trail prior to product removal. The harvester shall be an all-wheel drive machine with at least 3 axles and a processing head mounted on a boom having a minimum-operating radius of 20 feet.

	<p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources or residual timber from unnecessary damage.</p> <p>All Products shall be removed by an all-wheel drive forwarder with at least 3 axles capable of self-loading and unloading. The forwarder shall carry all products free of the ground during removal. The loading crane shall have a minimum-operating radius of 15 feet. Log landings and transfer points shall be agreed in advance of harvesting.</p> <p>Included Timber exceeding the harvester's capability may be felled by conventional chainsaw methods, forwarded to nearest skid trail and processed into a finished Product with harvester or chainsaw, consistent with the requirements BT6.61 - Meadow Protection, BT6.41 - Felling and Bucking, CT6.41# - Felling, Bucking, and Limbing and the above "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.</p>
<b>PB</b>	<p>Purchaser shall cut Included Timber and move trees to pre-approved skyline corridors to facilitate skyline yarding using equipment with a boom having an operating radius of at least ___ feet for bunching trees, capable of severing, lowering and placing trees up to _____ inches diameter at stump height on the ground prior to yarding. Such equipment must be capable of operating on slopes up to __ %. Bundles shall not exceed yarder capability or cause unnecessary damage to residual stand.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources from unnecessary damage. Such trees shall be felled away from the corridor in a manner that minimizes residual stand damage during yarding.</p> <p>Included Timber exceeding the feller's capability may be felled by conventional chainsaw methods</p>
<b>HCTL</b>	<p>Included Timber shall be felled, limbed and bucked by a self-propelled mechanical harvester capable of producing finished sawlogs or chippable boles. Such equipment must be capable of operating on slopes up to ___ %. The harvester shall be an all-wheel drive machine with at least 3 axles, or track mounted, and a processing head mounted on a boom having a minimum-operating radius of 20 feet.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources or residual timber from unnecessary damage.</p> <p>Included Timber exceeding the harvester's capability may be felled by conventional chainsaw methods</p>