

R5 – CT Provisions for 2400-6T (6/19/2012)

R5-CT2.2#

CT2.2# - MINIMUM PIECE SIZE FOR SAWTIMBER. (2/2009) Purchaser is not required to pay for or remove minimum sawtimber pieces as described in AT2 if said pieces have a net scale of less than xx board feet.

INSTRUCTIONS: This provision is to be used in all sales where the unit of measure for the sawtimber product is MBF. For salvage sales being sold in MBF, use 20 for the board feet fill in. For green tree measurement sales being sold in MBF, use 10 for the board feet fill in.

R5-CT2.21#

CT2.21# – UTILIZATION AND REMOVAL OF NON-SAWTIMBER PRODUCTS. (8/2006) Notwithstanding BT2.2, Purchaser is required to pay for, cut, and remove the Non-Sawtimber Products of Included Timber listed in AT2 and those Non-Sawtimber Products listed in the following table, unless otherwise agreed.

If Purchaser can sufficiently demonstrate that no market exists within the normal delivery distance for specific Non-Sawtimber Products, Forest Service and Purchaser may agree to alternate removal requirements of such Non-Sawtimber Products as specified in the alternate removal agreement. See Agreement Example.

The agreement for alternate removal requirements shall be executed prior to removing any timber from the Unit(s) included in the agreement. Alternate removal requirements shall apply only to whole units and not to portions of units. All material meeting alternate removal specifications shall be cut and moved to locations designated in the agreement.

Volumes of material with alternate removal requirements will be determined from the cruise report for the sale.

Purchaser will be charged for the following:

- a) Stumpage value at current contract rates of the alternatively removed product;
- b) Plus the cost of other work required by the Forest Service to dispose of alternatively removed material;
- c) Plus the difference between the appraised transportation cost of the non-sawtimber material involved and the appraised transportation cost of the alternative;
- d) Minus any work required to be completed by the Purchaser associated with alternate removal requirements.

Charges will be debited to the Purchaser's timber sale account.

Upon acceptance of the alternative removal requirements, the affected Unit(s) will be removed from the Sale Area under BT6.36.

Title to material included in the alternate removal agreement shall remain with the Forest Service.

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

Unit/Subdivision	Products to be Removed
	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#.
	2. All tops that are attached after skidding to whole trees and portions of trees meeting specifications for Sawtimber products.

INSTRUCTIONS: This provision is needed to facilitate removal of products other than sawtimber from multi-product or biomass contracts. This clarifies what material is included for each of the product listed. Use only when there is a demonstrated market for this material. Do not include products that do not meet Regional Cruising standards and procedures.

Care must be taken when using this provision and CT2.11# - TIMBER SUBJECT TO AGREEMENT to ensure that the two provisions do not conflict.

In Unit column of table, insert subdivision or payment unit number(s), or Sale Area, as appropriate. In Product column, include and show optional items 1 and/or 2 as needed; delete those not needed. In AT2 show Sawtimber with a merchantability factor of 12 (equivalent to logs with 25% net scale).

This provision may be used in both 2400-3(T) and 2400-6(T) contract forms. Replace A(T)2 with "P.1" for 2400-3(T) contracts. Regional Office approval is needed for any changes in wording or other specifications.

For use with TIM, the schedule or table is inserted into the contract on the page following the provision. For example, if the provision is on page "21", the schedule will be numbered page "22" and titled "SPECIFICATIONS PURSUANT TO CT2.21# - UTILIZATION AND REMOVAL OF NON-SAWTIMBER PRODUCTS. (8/2006)". Enter Sale Name and Page number at top of page. Font is Courier New, size 10.

The written agreement shall contain at least the following items:

- Sale Name, Contract Number, and Purchaser***
- Rationale for the agreement***
- Subdivisions included***
- Product and Volume with alternative removal requirements***
- Specifications of material included in the agreement***
- Rates to be paid by Purchaser for material to be removed***
- Description of alternate removal requirements.***
- Costs to be Paid by Purchaser for alternate removal requirements.***
- Signatures of parties entering into the agreement, Contracting Officer for the Government***
- Map of alternate disposal site location as needed***
- Documentation of calculations and costs and any other back-up material***

Develop costs for the most likely disposal method.

This provision can be added to existing contracts with mutual agreement. Modification of the existing contract will be necessary to include this provision.

A copy of the completed agreement shall be sent to the RO for monitoring purposes.

The following is a sample agreement. Use this format in completing the agreement.

AGREEMENT EXAMPLE:

SPECIFICATIONS PURSUANT TO CT2.21# - ALTERNATIVE REMOVAL AGREEMENT.
(8/2006)

Sale Name:		Meadow Creek Timber Sale	
Contract No.:		12345	
Purchaser:		Joe Jippo Logging	
Haul Cost (from Appraisal):		\$2.87 / CCF	
Loading Cost (from Appraisal):		\$15.68 / CCF	
Current Contract Rate Non-Sawtimber:		\$0.65 / CCF	
<u>Rationale for the Agreement:</u>			
Market conditions have changed significantly since the sale was sold resulting in the closing of two local chip outlets for non-saw material. The next closest outlet is over 250 miles away. See attached letters documenting non-buying of non-sawtimber material.			
<u>Subdivisions:</u>			
2, 5, 12, and 14			
<u>Product and Volume (from cruise report) - Non-sawtimber from selected subdivisions:</u>			
<u>Subdivisions</u>		<u>All Species - Non-Sawtimber (CCF)</u>	
2		55	
5		12	
12		176	
14		589	
Total		832	
<u>Activity</u>		<u>\$/Unit</u>	<u>No. of Units</u>
Value Of Material Alternatively Removed		0.65/CCF	832 CCF
Haul Cost from Appraisal		\$2.87/CCF	832 CCF
Haul by Purchaser to the Alternate Disposal Site		\$1.28/ccf	832 CCF
Loading Cost from Appraisal		\$15.68/ccf	
Loading Cost of Alternative Material: No loading cost will be assessed due to Purchaser loading and hauling material to alternate location.		\$15.68/ccf	
Purchaser Work: Seed, scarify and close Road			\$1,200
<u>Specifications of Material with Alternate Removal Requirements:</u>			
		Minimum Specifications	
		Merchantable Tree	Piece Required to be Removed

Species	Product	Estimated Quantity	Unit of Measure	Diameter Breast High (d.b.h) (inches)	Number of Minimum Pieces per Tree	Length (feet)	Diameter Inside Bark at Small End (inches)	Net Measure in % of Gross Measure
All species in Units 2,5,12, and 14	Non-saw-timber	832	CCF	8.0	1	8.0	5.0	40

Description of Alternate Removal Requirements:

Purchaser shall cut and yard as originally planned for the units; and hauls the non-sawtimber to the large existing landing at the end of road 24N03. This is a 200 foot spur road that is currently closed. Purchaser is authorized to open the road and do maintenance for the haul, per FS requirements. This material shall be piled no closer than 20 feet from the dripline of any tree. Piles shall be tight and free of dirt, and covered with black plastic at least 4 mil thick to within 3 feet of the ground. Protruding pieces shall be severed to the edge of the pile. Purchaser shall, seed, scarify and close the road. Forest Service will burn the piles later.

Costs to be Paid by Purchaser for Additional Forest Service Disposal:

Stumpage	+	\$ 540.80
Burn Pile by Forest Service	+	\$ 750.00
Loading	+	0.00
Haul allowed in appraisal	+	\$2,387.84
Haul by Purchaser to Alternate Disposal Site	-	\$1,064.96
Purchaser seed, scarify, close Road	-	\$1,200.00
Total Owed by Purchaser (to be billed through TSA)		\$1,413.68

Name:	Name:
Title:	Title:
Date:	Date:

[R5-CT2.35#](#)

CT2.35# DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES (6/2012) Trees are designated for cutting under BT2.35 only if designated as shown in the Timber Designation table below. The boundaries of Subdivisions/Payment Units and Cutting Units are designated as shown in the Boundary Designation table below. Trees used for boundary designation are not to be cut.

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

		<p><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.</p>
		<p><u>Individual Tree Mark.</u> Individual trees are designated for cutting only if Marked above and below stump height with the specified paint color.</p>
		<p><u>Leave Tree Mark.</u> All live <u>< ></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.</p>
		<p><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.</p>
		<p><u>Marked Out Trees.</u> When it is necessary to delete previously marked trees, a 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.</p>
		<p><u>Designation by Spacing CT2.351#</u></p>
		<p><u>Designation by Species and Diameter, CT2.352#</u></p>
		<p><u>Designation by Damage Class, CT2.353#</u></p>
		<p><u>Designation by Row Spacing, CT2.354#</u></p>

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</u>	<u>Boundary Designation</u>

	Paint Color	

INSTRUCTIONS: (CT2.35#) INCLUDE IN ALL CONTRACTS. Use applicable National and Regional guidelines for the paint color and method of designating boundary trees, leave trees and cut trees. Clearly describe the type, color, and placement of boundary posters. Do not make BT2.3 inapplicable.

For marking trees to be cut, the only allowable paint colors to use are blue and green.

For marking trees to be left (including boundary trees), use colors listed in FSH 2409.12, Chapter 71 for Leave Trees.

Use of any other colors for the above marking will be by Regional Office approval.

Do not make any changes to the wording in the Timber Designation table without Regional Office approval.

Hazard tree is not to be used as a way of applying incompletely marked timber to your sale.

Wildlife tree fill in, when dead or live cull trees are to be left uncut for use by wildlife, but such trees are not of the value that would justify collection of Liquidated Damages under CT2.3# for each tree damaged or destroyed. Different color paint must be used for wildlife trees in this provision and other wildlife trees accounted for in CT2.3#. Dead trees shall not be retained for wildlife in clearcutting and regeneration units when they will be a hazard to Purchaser's Operations.

For use with TIM, the table is inserted into the contract on the page following the provision. For example, if the provision is on page "21", the table will be numbered page "22", 22a, 22b, 22c, etc., and titled "SPECIFICATIONS PURSUANT TO CT2.35# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES AND SUBDIVISION/PAYMENT UNIT BOUNDARIES". Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

R5-CT5.11#

CT5.11# - REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS. (5/2008)
Contract requirements for Rights-of-Way and land use agreements are listed in the following table.

SPECIFICATIONS PURSUANT TO CT5.11# - REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS

RIGHTS-OF-WAY CONSTRUCTION CLEARING: Provisions of BT2.1 and BT2.2 notwithstanding, timber on listed rights-of-way is not Included Timber.

Grantor	Road Name & Number	Termini	Timber Requirements
			<p>Unless otherwise agreed or required by right-of-way document, said timber shall be bucked into standard log sizes and decked along the right-of-way. Forest Service shall designate limits of said work on ground prior to initiation of construction by Purchaser.</p>
			<p>Unless otherwise agreed or required by right-of-way document, said timber shall be bucked into standard log sizes and decked along the right-of-way. Forest Service shall designate limits of said work on ground prior to initiation of construction by Purchaser.</p> <p>Purchaser shall notify grantor in writing no less than ___ days prior to start of falling rights-of-way timber. Said timber shall be bucked into log lengths as specified by grantor. The logs shall be decked in loading areas designated on the ground and on Drawings, or other areas agreed to by grantor prior to skidding. Logs shall be decked parallel to one another and available for loading by a front-end loader within ___ days of falling.</p>
			<p>Purchaser shall make a lump sum payment of _____ to the _____ through Forest Service for an estimated _____ CCF of timber on listed rights-of-way. Volume of this timber is not included in AT2.</p> <p>Payment shall be made within 30 days of award of contract. Timber listed on rights-of-way is subject to the same requirements as Included Timber except the requirements of BT3.0, BT4.0, BT6.8 and CT8.66. Unless otherwise agreed in writing, products from listed rights-of-way shall not be mixed with Included Timber before or during removal from Sale Area.</p>

REQUIREMENTS OF RIGHTS-OF-WAY. Purchaser's obligations under BT5.11 shall apply to roads or road segments listed below

<u>Road Number</u>	<u>Road Name</u>	<u>Termini</u>	<u>Grantor</u>
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ENCROACHMENT CONSTRUCTION: Unless agreed otherwise in writing, construction of road covered by Encroachment Permit or Letter of County Approval, as shown in AT7, shall be completed according to Drawings and Specifications prior to use for log hauling other than hauling right-of-way logs that must be removed to complete the encroachment.

REQUIREMENTS OF TEMPORARY LAND USE AGREEMENT: Purchaser's Operations and use of identified land listed below shall be limited by the related easement and stipulations unless Purchaser makes other arrangements which will not infringe on or adversely affect the grantees rights. The land use agreement is available in the offices of the Forest Supervisor and District Ranger.

<u>Temporary Land Use Agreement</u>	<u>Grantor</u>
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INSTRUCTIONS: Use in contracts that have Rights-of-Way and Land Use Agreement requirements. Regional Office approval is needed for any changes in wording or other specifications. Note within the table, all sections are optional requirements. If an optional requirement is not needed for the sale, leave the title of the requirement, then delete all of the text from the requirement, and then type in "NA".

For use with TIM, the table is inserted into the contract on the page following the provision. For example, if the provision is on page "21", the table will be numbered page "22", 22a, 22b, 22c, etc., and titled "SPECIFICATIONS PURSUANT TO CT5.11# - REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS". Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

R5-CT5.125#

CT5.125# - SHARE COST ROAD LIABILITY INSURANCE. (8/2006) Purchaser is authorized to use cooperative roads constructed under provisions of (Name _____, Cooperator, and Forest Service, and subsequent easements, supplements, and agreements thereto, available for inspection at the Forest Supervisor's Office, _____, California, and subject to the following liability insurance requirements.

Purchaser shall provide a satisfactory certificate of insurance covering Purchaser's and all subcontractor's operations on cost share roads referred to above.

Purchaser shall present the certificate of insurance to Forest Service prior to use of cost share roads.

Insurance shall be of the following form and limits:

Comprehensive Automobile Bodily Injury/Property Damage Liability Insurance covering all owned, leased, hired and non-owned automobiles.

Minimum limits:	\$000,000	per person bodily injury or death
	\$000,000	per occurrence bodily injury or death
and	\$000,000	per occurrence property damage or a combined
single amount of	\$000,000	

In addition to above, Purchaser and Purchaser's assigns shall carry the following limits of insurance for the purpose of covering fire suppression expense, property damage to timber land due to fire, and property damage to non-owned automobiles and equipment due to fire.

Comprehensive General Liability Bodily Injury/Property Damage Insurance for minimum limits of:

	\$000,000	per person bodily injury or death
	\$000,000	per occurrence bodily injury or death
and	\$000,000	per occurrence property damage or a combined
single amount of	\$000,000	

Such Comprehensive General Liability policy shall include an endorsement covering fire suppression expense, property damage to timber land due to fire, and property damage to non-owned automobiles and equipment due to fire. Said endorsement shall have minimum property damage limits of \$_____ and be designated separately on the Certificate of Insurance.

The Certificate of Insurance shall require insurance carrier to notify Cooperator by mail ten (10) days prior to cancellation or expiration of above coverage. The Certificate of Insurance shall also name _____ as additional insured solely as respects operations conducted by or on behalf of the Purchaser involving use of the cost shared roads referred to above.

INSTRUCTIONS: (CT5.125#) USE THIS CLAUSE IN SALES CONTAINING COST SHARE ROAD. SUCH USE IS SUBJECT TO THIS LIABILITY INSURANCE REQUIREMENT. CHECK WITH FOREST COST SHARE COORDINATOR TO DETERMINE CORRECT AMOUNT OF INSURANCE FOR EACH AREA. FOR THE LAST FILL IN ENTER EITHER "NA" OR "THE COOPERATOR" DEPENDING ON WHETHER THE COOPERATOR WANTS THIS OPTION ADDED.

R5-CT5.207

CT5.207 - LARGE DRAINAGE STRUCTURE PROTECTION. (8/2006) To provide for large drainage structures and their permanent protection, Forest Service shall pay Purchaser the amounts stated in attached Large Drainage Structure Installation Plan upon Forest Service acceptance of performance by Purchaser of work listed in said Plan.

Upon delivery, acceptance by Forest Service, and receipt of billing from Purchaser for material delivered, Forest Service shall promptly pay Purchaser the amount stated in said Plan.

Forest Service shall make prompt payment of the balance due following acceptance of each individual installation and receipt of billing from Purchaser.

INSTRUCTIONS: (CT5.207) INCLUDE WHEN SUPPLEMENTATION FOR DRAINAGE STRUCTURES OVER 35 SQ. FT. IN CROSS SECTION, PLUS HEADWALLS OR SIMILAR APPURTENANCES ON SPECIFIED ROADS IS TO BE PAID IN CASH. DESCRIPTION OF PERFORMANCE AND AMOUNT TO BE PAID FOR EACH INSTALLATION MUST BE DESCRIBED SEPARATELY IN THE PLAN WHICH IS INSERTED IN CONTRACT AT THE END OF DIVISION CT. SEPARATE COST ALLOWED FOR MATERIAL, WHICH MAY BE SUBJECT TO EARLIER PAYMENT, FROM COST ALLOWED FOR HEADWALLS OR SIMILAR APPURTENANCES, WHICH WILL BE PAID FOR UPON ACCEPTANCE OF COMPLETED INSTALLATION.

DRAINAGE STRUCTURE INSTALLATION PLAN (CT5.207)

<i>1. ROAD NO.</i>	<i>CULVERT OR BRIDGE MATERIAL AMOUNT</i>	<i>\$</i>
<i>STATION</i>	<i>OTHER FOREST SERVICE SUPPLEMENTATION</i>	<i>\$</i>
	<i>TOTAL</i>	<i>\$</i>

DESCRIPTION OF WORK:

(EXAMPLES) FURNISH AND INSTALL 96" CULVERT, HEADWALLS AND WINGWALLS ACCORDING TO DRAWINGS.

(OR) FURNISH AND INSTALL GABION FORD ACCORDING TO DRAWINGS.

(OR) FURNISH AND INSTALL TREATED TIMBER BRIDGE, INCLUDING FOOTINGS ACCORDING TO DRAWINGS.

R5-CT5.208#

CT5.208# - TEMPORARY FACILITY INSTALLATION AND REMOVAL. (8/2006) Unless agreed otherwise in writing, Purchaser shall construct facilities as listed below and [indicated on Sale Area Map] or [as shown on attached drawings] prior to hauling Timber.

<i><u>Location</u></i>	<i><u>Facility</u></i>	<i><u>Required Action</u></i>
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Purchaser shall before operations cease annually, and when Purchaser's use of facility is completed, remove facility and restore the site to original condition.

INSTRUCTIONS: (CT5.208#) For optional use when temporary facilities are needed. Select option desired in brackets. Location of temporary facility must be identified.

R5-CT5.255

CT5.255 - AMOUNT OF BITUMINOUS MATERIAL COSTS. (8/2006) When by written agreement it is found that the bituminous material to be applied under Construction Specifications, Section 400 must be varied in amount or type from that shown on Schedule of Items because of physical requirements of surface aggregate or mix design, Purchaser Timber Sale Account shall be adjusted to reflect such changes in accordance with B5.253 – Design Change. Adjustments shall be made using unit rates consistent with those used in the preparation of Schedule of Items or revision of Schedule of Items at time of rate redetermination under BT3.3. Current unit rates shall be used for the amounts by which the revised quantity estimates exceed quantity estimates in the most recent Schedule of Items.

INSTRUCTIONS: (CT5.255) Required in all contracts when Construction Specifications under Section 400 are used.

R5-CT5.35#

CT5.35# – ROAD AND WATER SUPPLY USE. (5/2008) National Forest water supply locations, access, method of filling trucks, period of water availability and procedures designed to maintain water quality at each location shall be agreed in advance of use. Such use shall at no time reduce water supplies to the level that further use may be detrimental to aquatic resources or other established use. Waterholes and other improvements relating to said water supplies shall be put into condition, prior to expected seasonal periods of precipitation or runoff, to avoid resource damage.

Damage to resources at such locations caused by Purchaser's Operations, other than fire suppression activities, shall be repaired by Purchaser in a timely and agreed manner to the extent practicable to restore and prevent further resource damage.

Unless otherwise agreed, Purchaser's use of roads and other water supply requirements shall conform to the following table.

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

Load Limitations	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. 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.
Existing Non-National Forest	Roads not shown on Sale Area Map may be used as Temporary Roads if there is agreement before use is started.

System Roads

Snow Removal

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.

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.

Snow must not be removed to the road surface. A minimum < > 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.

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.

Water Supply Deposits

If Purchaser utilizes the water site located < >, 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.

WATER SUPPLY DEPOSIT SCHEDULE

Activity	Unit of Payment	Unit Cost	Total Cost	Time of Payment

Surface Replacement Deposits

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.

SURFACE REPLACEMENT DEPOSIT SCHEDULE

Road No.	From	To	Miles	Rate

Sale Area Average Rate: \$ /MBF, CCF or Ton

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INSTRUCTIONS: Include in all new contracts. Regional Office approval is needed for any changes in wording or other specifications. Note within the table, all sections are optional requirements. If an optional requirement is not needed for the sale, leave the title of the requirement, then delete all of the text from the requirement, and then type in “NA”.

Surface replacement deposits are not to be collected for roads specified for construction, specified for reconstruction, or requiring performance of maintenance work when such work includes purchaser's share of surfacing or surface replacement. The table surface replacement deposits will be prepared in the following format and inserted in the contract following the provision. Insert n/a in table if there are no surfaced roads requiring collection of deposits.

Water Supply Deposits. For optional use in any timber sale where deposits are necessary to use or maintain water supply developments. This provision can be used to collect or reimburse a third party supply water under a cooperative agreement. The water supply deposit schedule will be prepared in the following format and inserted in the contract following the provision. Insert n/a in the provision and in the table if there are no water supply developments requiring deposits.

For use with TIM, the table is inserted into the contract on the page following the provision. For example, if the provision is on page “21”, the table will be numbered page “22”, 22a, 22b, 22c, etc., and titled “SPECIFICATIONS PURSUANT TO CT5.35# - ROAD AND WATER SUPPLY USE”. Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

R5-CT6.22#

CT6.22# - PROTECTION OF IMPROVEMENTS. (5/2008) Purchaser shall notify Forest Service at least <*> days prior to any operations in the vicinity of improvements identified on Sale Area Map. Purchaser shall protect such improvements from damage and shall be

responsible for their timely restoration if damaged by Purchaser's Operations. If relocation or removal of said improvements is necessary to avoid foreseeable damage by Purchaser's Operations, work and cost shall be borne by the party listed in the table below. If Purchaser is required to move or relocate the improvements, they shall move or relocate the improvements listed in the following table to locations and in a manner as specified in drawings or in specifications attached hereto. Improvements shall be returned to their original locations following Purchaser's Operations.

See table below for improvements to be protected.

SPECIFICATIONS PURSUANT TO CT6.22# – PROTECTION OF IMPROVEMENTS.

<u>Improvement</u>	<u>Owner's or Permittee's Name</u>	<u>Timing</u>	<u>Specifications</u>	<u>Work and Cost of Removal or Relocation Borne by</u>

INSTRUCTION: Include in contracts containing improvements where relocation or removal of said improvements is necessary to avoid foreseeable damage by Purchaser's Operations. Insert between 10-30 days of notice in provision.

For use with TIM, the table is inserted into the contract on the page following the provision. For example, if the provision is on page "21", the table will be numbered page "22", 22a, 22b, 22c, etc., and titled "SPECIFICATIONS PURSUANT TO CT6.22# - PROTECTION OF IMPROVEMENTS". Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

R5-CT6.314

CT6.314 - RELEASE OF PAYMENT UNITS. (8/2006) Except for Specified Road Payment Units, Forest Service shall not Release for Cutting more Payment Units than can be logged within 60 calendar days at Purchaser's normal rate of logging. Unless otherwise agreed in writing, upon completion of all contract requirements in a Payment Unit, additional Payment Units may be Released for Cutting.

INSTRUCTIONS: (CT6.314) REQUIRED IN ALL CONTRACTS.

R5-CT6.315#

CT6.315# - SALE OPERATIONS SCHEDULE. (8/2006) Unless otherwise agreed in writing, Purchaser's operations shall be performed in accordance with the following schedule:

Subdivision/ Area/Unit	Conditions of Operation	Purpose
<Insert subdivision(s), payment unit(s), special treatment areas>	<Describe operations and limits of operations>	<State rationale or accomplishment objective>

INSTRUCTIONS: Use this provision to show all restrictions, permitted periods and required completion dates for Purchaser Operations on this sale except those covered in the CT5.12# - ROAD USE LIST. List only required restrictions. The purpose is to eliminate conflicts with Forest Resource values as prescribed in the Forest Plan and documented in the NEPA decision and document. Schedule must spell out if the condition is a restriction during which operations are not allowed or a time period during which operations must be completed. Include all conditions for each payment unit in one entry.

For use with TIM, the schedule is inserted into the contract on the page following the provision. For example, if the provision is on page “21”, the schedule will be numbered page “22”, and titled “SCHEDULE PURSUANT TO CT6.315# - SALE OPERATIONS SCHEDULE. (8/2006)”. Enter Sale Name, Page number, and schedule data. Font is Courier New, size 10.

Following are some examples for completing the schedule:

SCHEDULE PURSUANT TO CT6.315# - SALE OPERATIONS SCHEDULE (8/2006)

<u>Subdivision/ Area/Unit</u>	<u>Conditions of Operation</u>	<u>Purpose</u>
<i>2</i>	<i>Included Timber shall be cut and removed from Sale Area by August 1, 2008 unless waived in writing by Forest Service.</i>	<i>Captures the value of salvage timber before it deteriorates.</i>
<i>5</i>	<i>Unless otherwise agreed to in writing, Included Timber shall be cut and removed from Sale Area prior to cutting Included Timber from other units.</i>	<i>Captures the value of salvage timber before it deteriorates.</i>
<i>1, 3</i>	<i>All operations must be completed between July 1 and September 30.</i>	<i>Protect big game habitat</i>
<i>4</i>	<i>Yarding will be restricted to periods when there is a snow cover of at least 24 inches</i>	<i>Protect residual vegetation</i>
<i>Sale Area</i>	<i>Included Timber must be removed from the Sale Area within: - Four weeks of felling from March 1 to June 30. - Six weeks of felling from July 1 to September 30. - Eight weeks of felling from October 1 to December 31.</i>	<i>Control of slash breeding insects</i>

If the Forest Service agrees in writing to allow Included Timber to remain on site from the end of the Normal Operating Season to March 1, material must be removed from the Sale Area before March 1. Logging slash must be treated in accordance with CT6.7# – Slash Treatment, within:

*Four weeks from March 1 to June 30,
Six Weeks from July 1 to September 30,
Eight Weeks from October 1 to February 29*

Sale Area All Included Products felled in the woods or decked at landings must be removed within 30 days of cutting from June 1 - September 30 inclusive. Outside of this time period, felling shall be limited to the amount of Included Products that can be removed from the Sale Area within 8 weeks or prior to March 1, whichever is sooner.

Fuels reduction during period of high fire danger.

R5-CT6.331

CT6.331 - LOG TRUCKING. (8/2006) To promote safe operations on National Forest roads and on Specified Roads, loads shall be safely secured before trucks move from the landing or loading location.

INSTRUCTIONS: (CT6.331) REQUIRED IN ALL CONTRACTS.

R5-CT6.343

CT6.343 - CLEANING OF EQUIPMENT TO PREVENT ROOT ROT. (8/2006) To prevent the spread of *Phytophthora lateralis* root rot in Port-Orford-cedar, Purchaser shall clean before use on Sale Area any vehicles or equipment from the natural range of Port-Orford-cedar in Oregon or the Smith River drainage in California. Cleaning shall consist of the removal of soil by steam cleaning or use of a high pressure hose. Cleaning shall be inspected and approved by the Forest Service.

INSTRUCTIONS: (CT6.343) Include in sales where Port-Orford-cedar is present and not currently infected with Phytophthora lateralis root rot. This provision is authorized for use on the Klamath, Six Rivers, and Shasta-Trinity National Forests.

R5-CT6.37

CT6.37 - SUBSTITUTE METHODS. (8/2006) Notwithstanding other provisions herein, for minor changes such as changes in logging systems for areas smaller than 5 acres, Purchaser and Forest Service may agree in writing that use of substitute methods or equipment will achieve Forest Service objectives under this contract and may be used in lieu of those specified for Purchaser's Operations.

INSTRUCTIONS: (CT6.37) Required in all contracts. This provision is for minor changes only. For major changes, such as changes in logging systems for areas larger than 5 acres or other significant environmental impacts, a supplement to the EA shall be prepared by the interdisciplinary method. Such major changes will be made by contract modification and not under this provision.

R5-CT6.41#

CT6.41# - FELLING, BUCKING, AND LIMBING. (8/2007) Unless otherwise agreed in writing, Purchaser's felling, bucking, and limbing operations shall be conducted as specified in the table below.

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

<u>Treatment Method and Applicable Map Symbol</u>	<u>Felling, Bucking and Limbing Specifications</u>
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 < > inches, at which point the top shall be cut from the remainder of the stem. <i>Mandatory</i>
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 < > inches DBH shall be skidded/yarded to agreed landing locations prior to limbing, bucking, and lopping. Trees larger than or equal to < > inches DBH shall be bucked into two or more pieces with the butt portion being no longer than < > feet prior to skidding/yarding. The butt log <shall/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 < > 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"	Within areas shown on Sale Area Map, Purchaser shall treat stumps of all live < > trees equal to or greater than < > 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.

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 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 < 6/ > 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 < > 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 < > feet of live streamcourses and meadows/wetlands shown on Sale Area Map and/or < > 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 < > pounds shall be reported to Forest Service within < > 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.

Optional 6/ This is a mandatory fill-in and the number entered shall be 24 or less.

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

Minimum Stump Height	<table border="1"> <thead> <tr> <th>Unit/Subdivision</th> <th>Minimum Stump Height (inches)</th> <th>Purpose or Reason</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason												
Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason														

INSTRUCTIONS: Include in all contracts.

For use with TIM, the table is inserted into the contract on the page following the provision. For example, if the provision is on page "21", the table will be numbered page "22", 22a, 22b, 22c, etc., and titled "SPECIFICATIONS PURSUANT TO CT6.41# - FELLING, BUCKING AND LIMBING". Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

Select felling, bucking and limbing treatment requirements from the options in table. Fill in the blanks and tables as needed but Regional Office approval is needed for any changes in wording or other specifications. Note within the table, if an optional requirement is not needed for the sale, leave the title of the requirement, delete all of the text from the requirement, and then type in "NA". Instructions are specific to each treatment option:

1/ Include only in those contracts when it is necessary to protect structures, utility lines, roads, streamcourses, private land, etc. Show following symbol and reference on Sale Area Map: DF Directional Felling Required, CT6.41#.

2/ Include in sales where necessary for the control of annosus root rot. Purchaser must provide borate compound and maintain appropriate records. Show following symbol and reference on Sale Area Map: TS Treatment of Stumps, CT6.41#.

3/ Use only where damage to residual trees will occur without a limitation on maximum log length.

4/ For optional use in timber sales when needed to limit skidding damage to the residual trees from protruding limbs and excessively long logs while providing effective slash treatment.

5/ Include minimum stump height in expected timber sales, where mechanical harvestors are to be used. This section may be used to: 1) facilitate timber accountability, 2) lessen the risk of fire starting from the cutting saw operating in the duff and creating sparks when rocks are struck, or 3) assist in the stump application of borate compound to prevent root rot disease.

R5-CT6.42#

CT6.42# - GROUND BASED SKIDDING. (8/2006) Unless otherwise agreed in writing, the method of skidding Included Timber shall be as shown on the Sale Area Map, by areas, with

symbols defined in the following table:

Ground-Based Skidding Table - CT6.42#

Map Symbol	Requirements
<u>TRAC</u>	<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>
<u>SUSP</u>	<p>Products shall be skidded with leading end clear of ground.</p>
<u>SPACE</u>	<p>Skid roads will average _____ feet from center to center, except where converging.</p>
<u>ENDL</u>	<p>Endlining shall not be required for distances in excess of _____ feet uphill, and _____ feet downhill.</p>
<u>MAX</u>	<p>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.</p>
<u>MH</u>	<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 ___ feet for bunching trees, capable of severing, lowering and placing trees up to _____ inches diameter at stump height on the ground prior to skidding. Such equipment must be capable of operating on slopes up to __ %.</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>
<u>CTL</u>	<p>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> <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>
PB	<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>
HCTL	<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>

INSTRUCTIONS: Use in sales that involve ground skidding. Map Symbols:

"TRAC" – Use in contracts where ground skidding will be utilized in steep, erosive or unstable ground or where needed to protect resource values. The term "resource values" encompasses a wide range of concerns and could include, water, soil, residual timber, cultural resource sites, or sensitive plants but is not limited to these listed resources.

"ENDL" – Insert the maximum distance of end-lining, up and downhill. (pulling line up hill is difficult and adversely affects logging production.)

“SUSP” – Use on subdivisions or units that require one end log suspension.

“SPACE” – Enter the minimum skid road spacing. Apply to units with a skid trail spacing requirement.

“MAX” - Use only in contracts where skidding tractors are to be limited by width or type (rubber-tires or track-laying). Show in sale area map legend the maximum width and type. Example: “max -- rubber-tired-96” width. Units 1,2,3”. Primarily applicable to sales of small or young-growth timber.

“MH” - For optional use in timber sales when needed to minimize soil disturbance and compaction caused by normal tractor harvest operations and when feller-bunchers with booms and self-leveling cabs will produce an acceptable result. Insert minimum boom radius, maximum stump diameter, and maximum slope %. Note reference to sale area map.

“CTL” - For optional use in timber sales which require that low-impact tree harvesting cut-to-length equipment is used on specific harvest units within watersheds having cumulative watershed (cwe) concerns. Sensitive areas as used herein mean steep slopes, streamside zones, cultural resource sites, or other areas where necessary to minimize ground disturbance. Note reference to sale area map.

“PB” - For optional use in timber sales when NEPA specifies trees to be mechanically felled and pre-bunched along skyline corridors prior to yarding.

“HCTL”- Use Cut to Length equipment when NEPA requires helicopter logging on sensitive soils and low ground pressure equipment is acceptable.

R5-CT6.425

CT6.425 - CABLE AND SKYLINE YARDING. (8/2007) Unless otherwise agreed in writing, requirements for cable and skyline yarding equipment are shown on Sale Area Map, by areas, with the following symbols:

CS - Cable yarding specified.

CR - Be capable of yarding from roadway with additional landing excavation to accommodate the yarder held to a minimum consistent with safe yarding operations.

CW - Meet all of above requirements using a swing-boom type yarder.

SY - All yarding except lateral yarding, shall be accomplished by a skyline system, which supports products clear of the ground across Buffer Strips and in other areas yard with one product end suspended.

SL - Meet all of above requirements, have lateral yarding capability to hold skyline carriage stationary until products are yarded to skyline corridor.

SR - Meet all of above requirements and be capable of yarding from roadway with additional landing excavation to accommodate the yarder held to a minimum consistent with safe yarding operations.

SW - Meet all of above requirements using a swing-boom type yarder.

For SL, SR, and SW areas, locations of all skyline corridors shall be by agreement and designated on the ground. Such agreement shall be prior to felling unless ground and timber conditions otherwise justify. Width of said skyline corridors shall be kept to a practicable minimum consistent with the related silvicultural prescription.

For all yarding methods, if rigging must be slung on undesignated live trees, these trees shall be protected from damage by special steel plates, nylon tail-hold slings or similar effective protective devices.

Swing Yarding. In areas designated with the following labels on the Sale Area Map, the following requirements are included, unless otherwise agreed in writing:

"Tractor Swing" - all Included Timber shall be tractor skidded from yarder landing to loading areas shown on Sale Area Map or other agreed locations.

"Skyline Swing" - all Included Timber shall be skyline yarded from tractor skidded area to a skyline yarding landing. Location of tractor and skyline landings shall be agreed upon prior to skidding and yarding operations.

INSTRUCTIONS: *Include in contracts requiring cable or skyline yarding. Note references to Sale Area Map.*

Map Symbols:

CS - *Use where no other restrictions are necessary.*

CR - *Applicable where landing excavation must be restricted to avoid unacceptable watershed damage.*

CW - *Same as CR except that landing size must be smaller than that needed for a fixed-boom yarder, because of extremely sensitive or unstable soils.*

SY - *Applicable in clearcutting units or other areas where protection of the residual stand is not necessary.*

SL - *Applicable where necessary to protect residual stand and landing excavation is not restricted.*

SR - *Applicable where necessary to protect residual stand and landing excavation must be restricted to avoid unacceptable watershed damage.*

SW - *Same as SR except that landing size must be smaller than that needed for a fixed-boom yarder, because of extremely sensitive or unstable soils.*

If a swing is necessary, note reference to Sale Area Map.

R5-CT6.428

CT6.428 - LANDINGS. (8/2006) Unless otherwise agreed in writing, on areas designated on Sale Area Map, landings shall be restricted to a size that will require use of a shovel or heel boom loader. Landing size shall be kept to a minimum consistent with safe yarding and loading operations.

INSTRUCTIONS: *(CT6.428) MAY BE INCLUDED IN CONTRACT WHEN CERTAIN LANDINGS, OR LANDINGS SERVING PORTIONS OF SALE AREA, MUST BE AREAS OF VERY STEEP TERRAIN AND UNSTABLE SOILS, SO THAT THE LANDING MUST BE KEPT AS SMALL AS POSSIBLE. THIS PROVISION MUST NOT BE INCLUDED MERELY FOR THE SAKE OF REDUCING LANDING SIZE WHERE TERRAIN IS NOT CRITICAL.*

R5-CT6.429

CT6.429 - HELICOPTER YARDING. (8/2007) Within subdivisions/payment units so designated on Sale Area Map, yarding shall be by a helicopter capable of lifting and transporting products to landings without unnecessary damage to residual trees.

Unless otherwise agreed in writing, the following conditions apply to this sale.

Purchaser is not required to cut trees if there is insufficient volume to make a turn of at least 100 cubic feet net scale (500 board feet net scale) within a 100 foot radius from the largest tree.

If trees that would have been exempt from cutting as described above are cut, pieces meeting minimum specifications in AT2 shall be removed, scaled and paid for.

Areas where flight pattern is restricted are shown on the Sale Area Map. Logs and other external loads shall not be flown over these areas.

INSTRUCTIONS: Include in contracts requiring helicopter yarding of all or part of included timber. Note references to Sale Area Map.

R5-CT6.43

CT6.43 - REMOVAL OF HARDWOOD. (8/2006) Notwithstanding BT2.2 and BT6.4, Purchaser may deck and leave hardwood products from Included Timber at areas designated by agreement on or near Sale Area. Title to any such products left on said areas at Termination Date shall remain in Forest Service pursuant to BT8.11.

INSTRUCTIONS: (CT6.43) May be included in contract when it is necessary to remove hardwoods from cutting units for fuel management or site preparation needs.

R5-CT6.5

CT6.5 - STREAMCOURSE PROTECTION. (8/2006) Unless otherwise agreed in writing, wheel or track laying equipment shall not operate within "Buffer Strips" except as necessary for fire suppression activities. "Buffer Strips" are areas marked on the ground or are within the distances identified on the Sale Area Map measured from the apparent high water mark of streamcourses. Boundaries of Buffer Strips may be modified by agreement in writing to meet unforeseen operating conditions.

Culverts, bridges, or other suitable structures shall be required on skid roads and trails only at points where it is necessary to protect Stream courses. The type of crossing structures, method of installation and removal shall be determined by agreement. Purchaser in accordance with CT6.6 - Erosion Prevention and Control, shall remove such structures and associated fills.

Damage to Stream course or Buffer Strips caused by unauthorized Purchaser's Operations shall be repaired by Purchaser in a timely and agreed manner to the extent practical as determined by Forest Service to restore and prevent further damage to Stream courses.

INSTRUCTIONS: (CT6.5) Required in all timber sales which have streamcourses. Do not make BT6.5 inapplicable. Note reference to Sale Area Map.

If a stream has more than one buffer width within a unit, it must have clearly identifiable sections on the ground.

This provision replaces CT6.5 dated 12/75 and eliminates the need to post numerous miles of stream courses within the sale area requiring varying buffer strips greater than 50 feet by identifying the width of the buffer strips on the Sale Area Map.

R5-CT6.6#

CT6.6# - EROSION PREVENTION AND CONTROL. (5/2008) Erosion prevention and control work, including Streamcourse protection, required by CT6.5 and BT6.6 shall be completed within 15 calendar days after skidding operations related to each landing are substantially completed or after Forest Service designation on the ground of work where such designation is required hereunder. Said time limit shall be exclusive of full days lost in Purchaser's Operations due to causes beyond Purchaser's control. Such on the ground designation shall be done as promptly as feasible unless it is agreed that the location of such work can be established without marking on the ground. After September 15 and as long thereafter as operations continue the work shall be done as promptly as practicable. Damage resulting from Purchaser's Operations due to failure to perform required work shall be repaired by Purchaser.

Notwithstanding other provisions in this contract and unless otherwise agreed in writing, any hay, straw, or mulch used in this contract shall be State of California certified weed free.

Additional erosion control requirements of this contract are listed in the following table.

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		

INSTRUCTIONS: Include in all new contracts. Regional Office approval is needed for any changes in wording or other specifications. Note within the table, all sections are optional requirements. If an optional requirement is not needed for the sale, leave the title of the requirement, then delete all of the text from the requirement, and then type in "NA".

VEGETATIVE SOIL STABILIZATION: To be used in contracts where it is expected that disturbed soils in parts of sale area or contract area will require vegetative cover for stabilization and problems will not be met by BT6.6. Should not be used where this is not expected or where vegetative establishment not feasible. Note reference to Sale Area Map legend.

SPECIAL EROSION PREVENTION MEASURES: This specification is to be used only for sales which contain special soil stabilization problems which are not expected to be taken care of by normal methods prescribed under BT6.6 and CT6.6. Note reference to Sale Area Map.

SOIL SCARIFICATION: Use in sales to counter the effects of soil compaction on certain temporary roads and landings used by the purchaser or contractor. Care must be taken when using both Tillage and Scarification in the same contract that you do not treat the same area with both applications.

BACKBLADING: For use on sales with recreation development sites and/or public use areas including water and travel influence zones, and special management units where backblading will adequately prevent erosion. Note reference to Sale Area Map.

TILLAGE: For optional use in timber sales that require tillage of temporary roads, landings, skid roads or tractor roads. Enter the maximum number of acres expected to be tilled and the Tillage depth in inches. Care must be taken when using both Tillage and Scarification in the same contract that you do not treat the same area with both applications.

R5-CT6.7#

CT6.7# - SLASH TREATMENT. (8/2006) Purchaser shall pile, scatter, yard, construct firelines or otherwise treat slash defined in specifications below, within designated areas. Work required of Purchaser shall be in accordance with the following slash plan and specifications, and the Sale Area Map.

All vegetative debris associated with construction of Specified Roads such as unutilized timber, brush and grubbed stumps is Construction Slash. Measures to be taken by Purchaser for treatment of Construction Slash are set forth in the attached road construction specifications and in the attached slash treatment specifications.

Vegetative debris larger than 1 inch in diameter outside bark and 3 feet long resulting from Purchaser's Operations, other than Construction Slash, is Logging Slash. Measures to be taken by Purchaser for treatment of Logging Slash are set forth below unless otherwise agreed in writing.

Forest Service and Purchaser shall jointly develop a schedule for completion of slash treatment on the various portions of Sale Area prior to Purchaser's Operations.

Removing may be substituted for treatment of any other specified method.

By agreement in writing, certain slash may be left for fuelwood. When the specified treatment is by a combination of methods, Logging Slash not treated by one of the methods shall be treated by the other(s).

See the slash treatment specification table below.

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" 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.

Unit	Large End 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 <> inches. Machine Piling is not required on areas where use of tractors would cause undue damage to residual timber or where slopes exceed <> 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 <> 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.

SLASH TREATMENT		
Subdivision or Unit No	Specified Method	Prohibited Method

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.

SLASH TREATMENT			
	Subdivision or Unit No.	Specified Method	Maximum Height of Decks
<u>Landings</u>			
<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.

SLASH TREATMENT			
	Subdivision		

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

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.

INSTRUCTIONS: Include in all new contracts. All slash treatment requirements, including treatment along permanent roads, shall be supported by a fuel management analysis and fuel treatment plan as required in FSM 5150.

For use with TIM, the table is inserted into the contract on the page following the

provision. For example, if the provision is on page "21", the table will be numbered page "22", 22a, 22b, 22c, etc., and titled "SPECIFICATIONS PURSUANT TO CT6.7# - SLASH TREATMENT (12/2004)". Enter Sale Name and Page number, and insert specifications. Font is Courier New, size 10.

Regional Office approval is needed for any changes in wording or other specifications.

ASSISTANCE IN SLASH BURNING. For optional use when it is anticipated that purchaser's equipment and equipment operators may be needed in slash preparation. Purchaser's assistance should not be requested if forest service can reasonably accomplish the job by either force account or contracting.

BUCKING LARGE LOGGING SLASH. May be included where treatment is needed and it is reasonable to expect the public to remove quantities of slash for fuelwood. Application of this provision must be limited to specific subdivisions or portions thereof by notation on sale area map.

COVERING PILES. Include when it is anticipated that burning will be done during the winter after heavy rains or snow.

DAMAGED SMALL TREES. May be included only in contracts where there is risk of excessive damage to saplings and poles which would increase fire hazard or be objectionable aesthetically because sale area or subdivision is subject to substantial public use. Where it is practicable for this work to be accomplished by forest service using brush disposal deposits, this provision will not be used. Applications may be limited to specific subdivisions or portions of subdivisions by notation on sale area map.

FUELBREAKS. For use on sales when fuelbreaks are planned and approved in advance of advertising. Treat only logging slash developed by purchaser's operations. Note that fuelbreak must be shown on sale area map and boundaries designated on the ground.

FIRELINES. For optional use. If the sale does not require both hand and tractor firelines fill in blanks with 0 for the one that is not needed. If sale does not need scatter, fill in blanks with 0. Note reference to sale area map.

VISIBLE SLASH TREATMENT. Note reference to sale area map. The area or zone must be marked on the ground and shown on sale area map if of uniform width, may be shown only by distance limitation on sale area map. Provision must be made for treatment or boneyard areas for residual slash. Disposal area must be shown on sale area map and staked on ground in advance of advertising.

YARDING UNUTILIZED MATERIAL. Include in contracts covering sales where movement of unutilized material will eliminate or greatly reduce the need for slash burning. Regional forester approval is required if yum material is to be removed outside the sale area. Yum specifications should be consistent with meeting minimum allowable slash loading to meet R5 slash policy requirements. In no case should the specifications be less than the small end diameter specified for minimum pieces in AT2 and not less than ten (10) feet in length. Note that areas other than subdivisions or clearcutting units, to which this provision applies, must be designated on sale area map. Yuml not to be used when ground conditions within 100 feet of landing are not suitable for decking. Yumd not to be used when landing size will not permit decking. Yumr not to be used in sales when logs can be left scattered around landings or decked on landings as provided by yuml or yumd.

CT6.8-1# – MEASURING – Option 1. (8/2006) Timber quantity estimates in AT2 were made as described in the Forest Service Handbook FSH 2409.12, Timber Cruising Handbook, available for inspection in the offices of the Forest Supervisor and District Ranger. When trees are marked after date of sale advertisement, or when volume is added pursuant to BT2.13, BT2.131, BT2.132, BT2.133, BT2.134, BT2.14, BT2.37, BT2.4, CT2.134, CT2.135, CT2.371, or other authorization hereunder, each tree shall be measured using procedures in FSH 2409.12.

Tables used for volume determinations are listed in the List of Volume Tables attached hereto.

INSTRUCTIONS: (CT6.8 OPT 1) This provision is to be used in 2400-13T contracts where a local volume table could not be constructed and thus R-5 volume tables are to be used to determine volume of additional timber. Values listed in the tables 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.

Note either Option 1 or Option 2 must be included in the contract.

List of Volume Tables (CT6.8 Opt 1)

<i>Species</i>	<i>Name of Volume Table</i>	<i>Date</i>
<i>DOUGLAS-FIR</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>PONDEROSA PINE</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>JEFFREY PINE</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>SUGAR PINE</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>WESTERN WHITE PINE</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>LOGSPOLE PINE</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>WHITE FIR</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>RED FIR</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>GRAND FIR</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>
<i>INCENSE CEDAR</i>	<i>R-5 Cubic Foot Volume Tables to a Utilization Top</i>	<i>9/97</i>

R5 CT6.8 – 2#

CT 6.8-2# - Measuring Option 2. (8/2006) Timber quantity estimates in AT2 were made as described in the Forest Service Handbook FSH 2409.12, Timber Cruising Handbook, available for inspection in the offices of the Forest Supervisor and District Ranger. When Trees are marked after date of sale advertisement, or when volume is added pursuant to BT2.13, BT2.131, BT2.132, BT2.133, BT2.134, BT2.14, BT2.37, BT2.4, CT2.134,

CT2.135, CT2.371, or other authorization hereunder, each tree that is less than 25 inches in diameter breast height (DBH) and has less than 25% visible defect shall have its volume determined from the following table.

Trees greater than or equal to 25 inches DBH; trees with more than 25% defect; or trees from species or diameter groups shown as "N/A" in the table below shall be measured using procedures in FSH 2409.12 and shall use the "R5 Cubic Foot Volume Tables to a Utilization Top", 9/97.

Timber Sale
Tree Volume (based on original cruise tree data)
(Volume in 100 Cubic Feet - CCF)

PP, SP DBH	Volume	WF, RF DBH	Volume	DF DBH	Volume	IC DBH	Volume	LP DBH	Volume
10 in.		10 in.		10 in.		10 in.		10 in.	
11 in.		11 in.		11 in.		11 in.		11 in.	
12 in.		12 in.		12 in.		12 in.		12 in.	
13 in.		13 in.		13 in.		13 in.		13 in.	
14 in.		14 in.		14 in.		14 in.		14 in.	
15 in.		15 in.		15 in.		15 in.		15 in.	
16 in.		16 in.		16 in.		16 in.		16 in.	
17 in.		17 in.		17 in.		17 in.		17 in.	
18 in.		18 in.		18 in.		18 in.		18 in.	
19 in.		19 in.		19 in.		19 in.		19 in.	
20 in.		20 in.		20 in.		20 in.		20 in.	
21 in.		21 in.		21 in.		21 in.		21 in.	
22 in.		22 in.		22 in.		22 in.		22 in.	
23 in.		23 in.		23 in.		23 in.		23 in.	
24 in.		24 in.		24 in.		24 in.		24 in.	

INSTRUCTIONS: (CT6.8 OPT 2) This provision may be used for larger thinning sales where it is expected that there will be a need to "add-on" or designate skid trail and skyline corridor trees, and/or landing trees in significant numbers.

Fill in volume figures on the basis of cruise trees measured in the original cruise for the sale. Develop a local volume table from regression analysis of the sale's cruise to fill out the table. Consult RO Measurements for assistance if necessary.

R5-CT6.83

CT6.83 - ACCOUNTABILITY. (8/2006) Forest Service and Purchaser shall agree upon the haul route(s) prior to use. All products removed from Sale Area shall be transported over the designated route of haul.

Purchaser shall:

(a) Require truck drivers to sign form R5-2400-242, product removal permit, assure permit is attached to the load prior to removal from the Sale Area and while in transit to load destination.

(b) Assign a competent individual at the landing to record the following information for each load on the product removal permit provided by Forest Service:

1. Date and time load is punched out with a paper punch or equivalent
2. Truck ID or license number
3. Load destination

Used books of product removal permits (stub portion) shall be returned to the Forest Service at least weekly, unless otherwise agreed.

(c) Require truck drivers to stop for transportation inspections, if requested by Forest Service, when products are in transit from Sale Area to Purchaser's processing facility(s).

(d) Inform truck drivers of the designated route(s) of haul, the agreed upon location(s) for transportation inspections, the method of alerting drivers of an impending stop, and the fact that loads may be inspected at other locations where it is safe and possible to do so.

(e) Require truck drivers to assure the product removal permit is secured to each load of product (including chip vans, dump trucks or other container used for removing material) on the front lower corner of the drivers side of the load. Staple product removal permits to a log or attached piece of wood or other suitable material. Product removal permit shall remain attached to log until manufactured into products or if chips, until load has been unloaded. After logs are processed or load of chips unloaded the product removal permit shall be either destroyed or otherwise rendered unusable, unless otherwise agreed.

INSTRUCTIONS: (CT6.83) Include In All New Tree Measurement Contracts. May Be Included In Existing Contracts Upon Written Request Of Purchaser And At Time Of Extension.

R5-CT7.2#

CT7.2# - SPECIFIED FIRE PRECAUTIONS. (06/2012)

Purchaser or a designated Purchaser's Representative shall certify compliance with specific Timber Sale Contract and California Public Resources Code (CPRC) fire precautionary measures in BT7.1 Plans, CT7.2# and CT7.22#. Certification shall be provided prior to starting operations during Fire Precautionary Period and shall be updated as needed.

Listing of specific fire precautionary measures in the following subsections is not intended to relieve Purchaser in any way from compliance with State fire laws covering fire prevention and suppression equipment applicable to Purchaser's Operations.

Upon request of Forest Service, Purchaser shall permit and assist in periodic testing and inspection of required fire equipment.

The following definitions shall apply to CT7.2# and CT7.22#:

Active Landing: A location Purchaser is skidding logs into, or performing other operations such as delimiting, log manufacturing, and chipping logs.

Except for EV and E days, loading logs or stockpiled chips only on a cleared landing does not constitute an Active Landing.

Hot Saw: A harvesting system that employs a high-speed (>1100 rpm) rotating felling head (i.e., full rotation lateral tilt head).

Mechanical Operations: The process of felling, skidding, chipping, shredding, piling, log processing and/or yarding which requires the use of motorized power which includes, chainsaws, chippers, motorized carriages, masticators, stroke delimiters, skidders etc.

Specific equipment requirements and fire precautionary measures are shown in the following table and in CT7.22#:

A. Fire Tools and Equipment Purchaser shall meet applicable parts of Section 4428 of the CPRC.

Unless agreed otherwise, Fire tools kept at each Active Landing shall be sufficient to equip all employees in the felling, yarding, loading, chipping, and material processing operations associated with each landing. Fire equipment shall include two tractor headlights for each tractor dozer used in Purchaser's Operations. Tractor headlights shall be attachable to each tractor and served by an adequate power source. Fire tools shall be kept in a sealed fire tool box adjacent to the Active Landing and readily accessible in event of fire.

Where cable yarding is used, Purchaser shall provide a size 0 or larger shovel with an overall length of not less than 46 inches and a serviceable 5 gallon backpack pump filled with water or a fire extinguisher bearing a label showing at least a 4-A rating must be within 25 feet of each tail and corner block.

Trucks, tractors/skidders, pickups and other similar mobile equipment shall be equipped with and carry at all times a size 0 or larger shovel with an overall length of not less than 46 inches and a 2-1/2 pound axe or larger with an overall length of not less than 28 inches.

All required fire tools shall be maintained in suitable and serviceable condition for fire fighting purposes.

B. Fire Extinguishers

Purchaser shall equip each internal combustion yarder, fuel truck, and loader with a (4-A:60-B:C) fire extinguisher for oil and grease fires.

Skidders and tractors shall be equipped with a minimum 5-BC fire extinguisher.

Fire extinguishers shall be mounted, readily accessible, properly maintained and fully charged.

Purchaser shall equip all mechanized harvesting machines and log processors with hydraulic systems, powered by an internal combustion engine (e.g. masticator, chipper, feller/buncher, harvester, forwarder, Hot Saw, stroke delimeter, etc), with at least two 4-A:60-B:C fire extinguishers or an acceptable CAFS substitute identified in Section K.

C. Spark Arresters and Mufflers

Except for tractors and other equipment with exhaust-operated turbochargers, Purchaser shall equip each operating tractor and any other internal combustion engine with an approved spark arrester. There shall be no exhaust bypass on any system.

Spark Arresters shall be a model tested and approved under Forest Service Standard 5100-1a as shown in the National Wildfire Coordinating Group Spark Arrester Guide, Volumes 1 and 2, and shall be properly mounted and maintained according to manufacturer's specifications.

Every motor vehicle subject to registration shall at all times be equipped with an adequate exhaust system meeting the requirements of the California Vehicle Code.

D. Power Saws

Each power saw shall be equipped with a spark arrester approved and maintained in effective working order as identified in the Spark Arrester Guide in Section C. above and according to applicable parts of CPRC Section 4442 or 4443. An Underwriters Laboratories (UL) approved fire extinguisher containing a minimum 14 ounces of fire retardant shall be kept with each operating saw.

A size 0 or larger shovel with an overall length of not less than 38 inches shall be kept with each gas can, but not more than 300 feet from each power saw when used off cleared landing areas.

E. Fire Supervisor & Fire Patrolperson

Purchaser shall designate in the fire plan required by BT7.1 and furnish on Sale Area during operating hours a fire supervisor, named in writing and authorized to act on behalf of Purchaser in fire prevention and suppression matters.

Unless agreed otherwise, Purchaser shall furnish and designate in writing, a Fire Patrolperson each operating day when Project Activity Level C or higher is in effect. When on duty, the Fire Patrolperson is required to patrol the operation for the prevention and detection of fires, to take suppression action where necessary and to notify Forest Service as required under Sections I. Reporting Fires and L. Communications. This Fire Patrol is required on foot, unless otherwise agreed.

By written agreement, one Fire Patrolperson may provide patrol on this and adjacent projects or sales. No Fire Patrolperson shall be required on Specified Road construction jobs except during clearing operations unless otherwise specified.

F. Seasonal Permits

Purchaser shall obtain written permits from Forest Service before allowing welding, warming fires or burning, subject to CT7.22# - Emergency Precautions.

G. Clearing of Fuels

Purchaser shall clear away, and keep clear, fuels and logging debris as follows:

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	10 feet slope radius
Tail or corner haulback blocks:	All running blocks on a cable yarding operation shall be located in the center of an area that is cleared to mineral soil at least 15 feet in diameter.
Lines near, between or above blocks:	Sufficient clearing to prevent line from rubbing on snags, down logs and other dead woody material.

H. Smoking

All smoking shall be confined within a car, truck, crew rig or other enclosed cab after 1:00 PM on Ev days and all hours on E days (CT7.22#). At other times, any smoking shall be done while sitting in an area at least 3 feet in diameter, cleared of flammable materials. Burning tobacco and matches shall be extinguished before they are properly disposed.

I. Reporting Fires

As soon as feasible, but no later than **15 minutes** after discovery, Purchaser shall notify Forest Service of any fires on Sale Area or along roads used by Purchaser.

J. Tank Truck

Purchaser shall provide a water tank truck or trailer on or in proximity to Sale Area during Purchaser's Operations hereunder during Fire Precautionary Period unless otherwise agreed.

Tank truck or trailer shall contain at least 300 gallons of water and comply with the following requirements:

(1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Sale Area by Forest Service using a 5/16 inch orifice with a one inch in line test kit and shall meet or exceed the pressure values identified in the following table for nearest temperature and elevation:

T e m p	Sea Leve l	1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet		
55	179	23	174	23	169	23	165	22	161	22	157	22	153	22	150	21	146	21	142	21	139	21
70	175	23	171	23	166	22	162	22	158	22	154	22	150	21	147	21	143	21	139	21	136	20
85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20

outfitted for immediate attachment to carriage and transported without damage to the unit.

Fire extinguishers required for Hot Saws, Masticators and similar equipment identified in Section B. above may be substituted with a 3 gallon CAFS.

Tank truck, trailer or equivalent may be substituted with a 30 Gallon CAFS with at least 550 feet of one inch hose and an adjustable nozzle with enough water, air and foam concentrate for at least one recharge.

This equipment and accessories shall also be deliverable to a fire in the area of operations and subject to the requirements for each specific activity level identified in CT7.22#.

L. Communications Purchaser shall furnish a serviceable communications system such as a telephone, radio-telephone, radio system or satellite phone connecting each operating side within the Sale Area with Purchaser's headquarters, and capable of notifying Forest Service within **15 minutes** of discovery of any fires on the Sale Area or along Purchaser's haul route. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service may agree to a reasonable alternative notification method.

A Citizen's Band (CB)radio is not acceptable communications.

M. Cable Yarding Tank Unit When all or part of Included Timber will be harvested by a long span (over 1,500 feet)cable yarding operation, Purchaser shall provide at each active cable yarding landing a tank truck, trailer or acceptable CAFS substitute which can be lifted and transported by the carriage.

The unit shall meet the same requirements as specified for the tank truck, trailer or approved CAFS substitute.

N. Helicopter Yarding Fire Precautions Purchaser shall provide and maintain fire equipment as follows:

1. The fire tool box required under this provision shall be equipped for attachment to the helicopter long line so that it may be hauled to needed locations. Such attachment device shall not interfere with access to fire tools. Unless agreed otherwise, the fire tool box shall be located at the Active Landing ready for immediate dispatch.
2. An external helibucket readily attachable to the helicopter, with a capacity of at least 500 gallons, and having a remote control door mechanism adequate for rapid dropping of water. The helibucket shall be located at the helicopter service landing and shall be filled with water ready for immediate dispatch unless otherwise agreed.
3. All aircraft used in conjunction with Purchaser's Operations shall be equipped with an operable radio system capable of meeting Region Five avionics requirements.
4. For protection of fuel servicing operations, fire extinguishers which have the following ratings based on the open hose discharge capacity, i.e., "broken hose," of the aircraft fueling system shall be readily available:
 - a. Where said capacity does not exceed 200 gallons per

- minute, at least one approved extinguisher having a minimum rating of 20-B;
- b. Where said capacity is in excess of 200 gallons per minute, but not over 350 gallons per minute, one approved extinguisher having a minimum rating of 80-B;
 - c. Where said capacity is in excess of 350 gallons per minute, two approved extinguishers, each having a minimum rating of 80-B.
- 5. By agreement, a suitable CAFS may also be used in lieu of the above extinguishers.
 - 6. Extinguishers of over 50 pounds gross weight shall be of wheeled type or be mounted on carts to provide mobility and ease of handling.

Required in all new contracts and contracts to be extended. Contract may also be modified and this provision along with companion provision CT7.22# included at Purchaser's request.

R5-CT7.22#

CT7.22# - EMERGENCY PRECAUTIONS. (06/2012) Purchaser's Operations shall conform to the limitations or requirements in the Project Activity Level (PAL) table below. Unless otherwise agreed in writing, Project Activity Levels applicable to this project shall be the predicted levels for the Fire Danger Rating Area(s), or fire weather station(s) stated in the Sale Area Map legend.

Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant an adjustment. If practicable, Forest Service will determine the following day's activity level by 6:00 PM. Purchaser shall obtain the predicted Project Activity Level from the appropriate Ranger District Office before starting work each day.

Forest Service may change the Project Activity Level Table to other values upon revision of the National Fire Danger Rating System. When Purchaser is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

PROJECT ACTIVITY LEVEL (PAL) - CT7.22# - EMERGENCY PRECAUTIONS

PROJECT ACTIVITY LEVEL TABLE

Level	<i>Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.</i>
A	Minimum required by CT7.2#.
B	1. Tank truck, trailer, or approved CAFS substitute shall be on or adjacent to the Active Landing.
C	1. When Hot Saws or Masticators are operating, a tank truck, trailer or approved CAFS substitute shall be within ¼ mile of these operations. Effective communications shall exist between the operator and the Active Landing. 2. Immediately after Mechanical Operations cease, Fire Patrol is required for two hours.

<p>D</p>	<ol style="list-style-type: none"> 1. Immediately after Hot Saw or Masticator operations cease, Fire patrol is required for three hours. 2. No Dead Tree felling after 1:00 PM, except recently dead. 3. No Welding or cutting of metal after 1:00 PM, except by special permit.
<p>Ev</p>	<ol style="list-style-type: none"> 1. The following activities may operate all day: <ol style="list-style-type: none"> a) Loading and hauling logs decked at approved landings. b) Loading and hauling chips stockpiled at approved landings. c) Servicing equipment at approved sites. d) Dust abatement, road maintenance (Chainsaw use prohibited), culvert installation within cleared area, chip sealing, paving, earth moving or rock aggregate stock pile loading and installation (does not include pit or quarry development). e) Chainsaw and log processing operations associated with loading logs or other forest products at approved landings. 2. Hot Saws or Masticators may operate until 1:00 PM; provided that: <ol style="list-style-type: none"> a) A tractor or other equipment with a blade capable of constructing fireline is on or adjacent to the active landing or within ¼ mile of the operating equipment. This piece of equipment shall have effective communication with the Hot Saw or Masticator. b) Any additional restrictions specified by the Forest. 3. All other conventional Mechanical Operations are permitted until 1:00 PM. 4. Some operations may be permitted after 1:00 PM, on a case-by-case basis, under the terms of a PAL Ev Variance Agreement. Activities for which a Variance may be issued are: <ul style="list-style-type: none"> • Rubber Tire Skidding • Chipping on Landings • Helicopter Yarding • Fire Salvage <p>When approved by a Line Officer, a Variance Agreement can be implemented when the criteria specified in the agreement are met and mitigation measures are in place. This approval is good for ten (10) days unless cancelled sooner or extended by the Contracting Officer for an additional ten (10) days. Variance approval can be withdrawn at the sole discretion of Forest Service. Variance approval is contingent on the 7-day fire weather forecast, fuel conditions, site characteristics, current fire situation, state of Purchaser's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).</p>
<p>E</p>	<p>The following activities may operate all day:</p> <ol style="list-style-type: none"> 1. Loading and hauling logs decked at approved landings. 2. Loading and hauling chips stockpiled at approved landings. 3. Servicing Equipment at approved sites. 4. Dust abatement, road maintenance (chainsaw use prohibited) or loading stock piles and rock aggregate installation (does not include pit or quarry development).

Region 5 Project Activity Level (PAL) Ev Variance Application/Agreement

Project Name: _____
 Contract Number: _____
 Purchaser/Contractor Name: _____
 Request #__, for period: _____
 Units/Subdivisions Affected: _____

Location of operation:	
Slope	
Aspect	
Elevation	
Fuels on site	
Fuels in surrounding area	
7 Day PAL Outlook	
Short range predictions (Red Flags)	
<i>Fuel Moistures</i>	
Response time of suppression resources	
Potential for ignition	
RAWS location	
Current Fire Situation:	
Draw down information	
National Readiness Level	
Contractual considerations:	
Normal Operating Season	
Frequency of recent contract fires in area	
Type of operation	
Purchaser/Contractors past/current performance & equipment readiness	
Other site specific mitigation or precaution (i.e. Purchaser/Contractors proposals)	
Social & Community Considerations:	
Proximity of high value resources	
Sensitivity of location	
Remarks:	

Ev Proposed Actions

Rubber Tired Skidding

Chipping on Landings

Helicopter Yarding

Fire Salvage

Description of Mitigation Measures

Fire Management Officer Concurrence

Date

Line Officer Approval

Date

I have considered the above request and determined the specified mitigation measures or actions must be implemented to continue operations in Project Activity Level Ev. Unless extended, the approval remains in effect for ten (10) calendar days unless cancelled sooner or extended by the Forest Service for an additional ten (10) days. At the sole discretion of the Forest Service, this variance can be modified and/or cancelled at no cost to the government.

Contracting Officer

Date

Purchaser/Contractor Rep.

Date

R5-CT8.8#

CT 8.8# - BIG VALLEY FEDERAL SUSTAINED-YIELD UNIT. (8/2006). Logging and manufacture of Included Timber shall be governed by the Policy Statement for the Big Valley Federal Sustained-Yield Unit. In order to comply with the Policy Statement, the following restrictions apply:

- a. Not more than [enter 20% of sawlog volume shown in AT2] [enter unit of measure for the timber sale], of sawtimber, may be transported outside the Big Valley Area for manufacturing.
- b. Purchaser shall have available in the Big Valley Area sufficient yard facilities to dry all lumber and sufficient planing mill capacity to surface approximately 50 percent of lumber produced from Included Timber.

Notwithstanding AT2, sawtimber is defined as material suitable for the manufacture of lumber and meets the minimum of: length 10 feet; diameter inside bark at the small end 6.0 inches; merchantability factor of 12.

Prior to hauling Purchaser shall furnish to Forest Service in writing the names and addresses of the processing plants or other locations to which the timber is expected to be delivered.

Purchaser shall: (a) submit annually a certified report, by March 1, for the period January 1 through December 31 of the previous calendar year, on the disposition of all Included Timber, including a description of any timber which is sold, exchanged, or otherwise disposed of to another party, and a description of the relationship between Purchaser and the buyer.

Prior to delivering to another party any Included Timber, either before or after transfer of title, Purchaser shall notify the Contracting Officer of such action. Prior to delivery of Included Timber to another party, within the Big Valley Federal Sustained-Yield Unit, Purchaser shall require each buyer, exchange, or recipient to execute an agreement, acceptable to the Contracting Officer, which shall: (1) specify processing within the Big Valley Federal Sustained-Yield Unit for the timber involved; (2) require the execution of such agreements between the parties to any subsequent transactions involving said timber; and (3) require that all hammer brands and yellow paint must remain on logs until they are processed. No later than 10 days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to Forest Service a copy of such agreement.

Purchaser shall retain for 3 years from the sale Termination Date the records of all sales, exchanges, or dispositions of all Included Timber.

Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Forest Service.

For breach of this provision, Forest Service may terminate this contract and may take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this provision Forest Service will not be liable for any claims submitted by Purchaser relating to the termination.

INSTRUCTIONS: (CT8.8#) FOR USE OF THE MODOC NATIONAL FOREST ONLY. REQUIRED IN ALL CONTRACTS IN THE BIG VALLEY FEDERAL SUSTAINED-YIELD UNIT. THIS PROVISION SUPERCEDES PRVIOUS 4/1/1966 VERSION.

THIS PROVISION IS NEEDED TO PROPERLY ADMINISTER TIMBER SALE CONTRACTS TO MEET THE INTENT OF THE BIG VALLEY FEDERAL SUSTAINED-YIELD UNIT POLICY STATEMENT. THE NEW WORDING IS NEEDED TO DEFINE SAWTIMBER WHEN WOOD FIBER IS THE ONLY PRODUCT MEASURED.