

Unit	DxD Dist Spec (ft)	Lower Dia. Limit (stump diameter inches)	Upper Dia. Limit (stump diameter inches)	Cut Tree Species	Ghost Tree Species	Additional DxD Specifications
16,16B	17	9	24	DF, WH, PSF	RA, SS, WRC	Gaps: Remove all cut-tree species 9-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
16,16B HT		9	22	DF, WH, PSF	RA, SS, WRC	Diameter limit cut
16A		10	24	DF, WH, PSF	RA, SS, WRC	No gaps in subdivision
17, 17A, 17B	16	10	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
17, 17A HT		10	24	DF, WH	PSF, RA, SS, WRC	Diameter limit cut.
18,18A,18B, 18C,18E,18F	17	10	24	DF, WH	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
18,18A,18B,18C, 18E HT		10	24	DF, WH	PSF, RA, SS, WRC	Diameter limit cut.
18D	15	10	24	DF, WH, PSF	RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
18D HT		10	24	DF, WH, PSF	RA, SS, WRC	Diameter limit cut.
18G	18	10	24	DF, WH, PSF	RA, SS, WRC	No gaps in subdivision
19,19A,19B,19C 19D,19E	16	10	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also.
19,19C,19D HT		10	24	WH, DF	PSF, RA, SS, WRC	Diameter limit cut.

20,20A,20B,20C,20D	15	10	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
20E	16	10	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
20,20A,20B,20C 20E HT		10	24	WH, DF	PSF, RA, SS, WRC	Diameter limit cut.
21,21A,21B,21C	16	9	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
21,21C,21D HT		9	24	WH, DF	PSF, RA, SS, WRC	Diameter limit cut.
22	15	9	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 9-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless marked with orange paint.
22 HT		9	22	WH, DF	PSF, RA, SS, WRC	Diameter limit cut.
81,81A,81B,81C	13	10	24	WH, DF	PSF, RA, SS, WRC	Gaps: Remove all cut-tree species 10-24 inch stump diameter within 45 feet of trees painted with an orange band and the letter "G", unless they are marked with orange paint also.
81,81A,81B HT		10	22	WH, DF	PSF, RA, SS, WRC	Diameter limit cut.
BP-1						Clearcut

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

DESCRIPTION

All live trees, except as excluded below, in all Subdivisions except as stated below, if it is within see below of a live tree with a larger stump diameter. That live tree with the largest stump diameter will remain standing after logging is complete.

ALL SUBDIVISION

Cut tree species will be Western hemlock, Douglas-fir and Pacific Silver fir in subdivisions, gaps, and heavy thin areas, with all other species being treated as ghost trees (see special instruction table).

No western redcedar, Sitka spruce, hardwoods, or orange painted trees will be cut except within the designated clearing limits for temporary roads or as designated by the Forest Service.

Minimum stump diameter is given for each cut tree species by subdivision (see special instruction table).

Maximum stump diameter is given for each cut tree species by subdivision (see special instruction table).

Regardless of maximum stump diameter, all cut tree species will be used for the purpose of determining spacing distance (see special instruction table).

Boundary trees (Tags and Orange Paint) are ghost trees. Ghost trees are not to be used for spacing and are not to be cut or used to cut another tree.

Gaps: Center tree is marked with a "G" painted on the tree. Trees larger than the maximum stump diameter, smaller than the minimum stump diameter, ghost tree species stated for the subdivision, and orange painted trees will not be cut (see special instruction table).

Heavy thin: Boundary is marked with pink tags facing toward the heavy thin, blue boundary tags facing out, orange paint, and a combination of blue and pink ribbon. Trees larger than the maximum stump diameter, smaller than the minimum stump diameter, ghost tree species stated for the subdivision, and orange painted trees will not be cut (see special instruction table).

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

All skidtrails/roads and landing clearing limits shall be identified and approved per C6.42#, before this provision is implemented.

DEFINITIONS For ALL SUBDIVISIONS:

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

Minimum Stump height is 10 inches on the **high side** of the tree.

Stump diameter is measured at stump height **perpendicular to the bole** of the tree.

A tree that forks below 10 inches will be considered 2 trees. A tree that forks above 10 inches will be considered one tree. This will be used for the purpose of determining the largest tree.

A tree is determined to be forked below 10 inches, if a diameter tape can be placed between the two boles, below 10 inches and each measured individually.

No windthrown trees can be removed unless otherwise agreed to by the Forest Service.

Windthrown trees are those with the root wad either exposed or partially exposed.

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

Removal Schedule:

<u>Included Timber</u>	<u>Time Limits</u>
ALL	6 months after felling is started.
All timber decked during construction clearing	6 months after felling is started.
Timber decked during road construction	6 months after Forest Service authorizes Purchaser to use roads pursuant to B5.2.

PLANS AND CRITERIA PURSUANT TO C5.1# (OPTION 1) - TEMPORARY ROAD AND LANDING CONSTRUCTION
(01/2013)

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

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

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

Material Sources. Designated sources for Temporary Road and Landing construction are shown on the Sale Area Map. Source areas shall be marked on the ground by Forest Service prior to development to prevent conflict with other users.

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

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

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

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

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

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

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

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

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

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

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

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

Stream Crossings.

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

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 1

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

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

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

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

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
2259		4.8	6.6	U, A	Unsuitable for haul prior to completion of reconstruction and Public Use Restricted
2259042		0.0	1.18	U, A, R	Unsuitable for haul prior to completion of reconstruction, Public Use Restricted and Hauling allowed between June 1 and October 31
2259048		0.0	0.83	U,A	Unsuitable for haul prior to completion of reconstruction and Public Use Restricted
2259049		0.0	0.16	U,A	Unsuitable for haul prior to completion of reconstruction and Public Use Restricted
2259043		0.0	0.13	A, R	Public Use Restricted and Hauling allowed between June 1 and October 31
2273	Boulder Creek Bridge			R	<u>1/</u>
2259040		0.0	2.0	A	Public Use Restricted
2273	Boulder Creek	0.0	1.24	A	Public Use Restricted during rock haul
2273050	Boulder Creek Pit	0.0	0.06	A	Public Use Restricted during pit development and rock haul
2273100		0.0	0.14	A	Public Use Restricted during pit development and rock haul

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

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

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications									
	From	To		T-811	T-813	T-831	T-832	T-834	T-838	T-842	T-851		
2258000	0.00	0.8	0.8	P	P	P	P	P	P	P	P		
2259	0.00	6.6	6.6	P	P	P	P	P	P	P	P		
2259040	0.00	1.95	1.95	P	P	P	P	P	P	P	P		
2259043	0.00	0.13	0.13	P	P	P	P	P	P	P	P		
2273000	0.00	1.2	1.2	P	P	P	P	P	P	P	P		
2273100	0.00	0.10	0.10	P	P	P	P	P	P	P	P		
2259042	0.0	0.7	0.7	P	P	P	P	P	P	P	P		

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

Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications									
	From	To		T-803	T-811	T-813	T-831	T-832	T-834	T-838	T-842	T-851	
2258000	0.00	0.8	0.8	P	P	P	D	D	D		D	P	
2259000	0.00	6.6	6.6	P	P	P	P	P	P		P	P	
2259040	0.00	1.95	1.95	P	P	P	P	P	P	P	P	P	
2259042	0.00	1.18	1.18	P	P	P	P	P	P	P	P	P	
2259043	0.00	0.13	0.13	P	P	P	P	P	P	P	P	P	
2273000	0.00	1.2	1.2	P	P	P	P	P	P	P	P	P	
2273100	0.00	0.10	0.10	P	P	P	P	P	P	P	P	P	
2259048	0.00	0.83	0.83	P	P	P	P	P	P	P	P	P	
2258049	0.00	0.16	0.16	P	P	P	P	P	P	P	P	P	

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

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications									
	From	To		T-811	T-813	T-831	T-834	T-835	T-838	T-839			
2258000	0.00	0.8	0.8	P	P								
2259000	0.00	6.6	6.6	P	P	P	P	P	P				
2259040	0.00	1.95	1.95	P	P	P	P	P	P				
2259042	0.00	1.18	1.18	P	P	P	P	P	P				
2259043	0.00	0.13	0.13	P	P	P	P	P	P	P			
2273000	0.00	1.2	1.2	P	P	P	P	P	P				
2273100	0.00	0.10	0.10	P	P	P	P	P	P				
2259048	0.00	0.83	0.83	P	P	P	P	P	P	P			
2258049	0.00	0.16	0.16	P	P	P	P	P	P				

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

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

1 Road No. and Termini	2 Special Project Specifi- cation	3 Travel Way			4 Brush And Log Out	5 Surfacing	7 Wet Weather Haul	6 Snow Removal	8 Post Haul	
		Width	X Slope	Comp					Block	Treat
2258000 MP 0.00 to 0.8		EX			Log Out ONLY	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2259000 MP 0 to 6.9		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2259040 MP 0.00 to 1.8		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2259042 MP 0.00 to 1.1		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2259043 MP 0.00 to 0.13		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU	P	P
2273000 MP 0.00 to 1.2		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2273100 MP 0.00 to 0.10		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P
2258048 MP 0.00 to 0.70		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU	P	P
2258049 MP 0.00 to 0.40		EX			Brush Left & Right Log Out	Aggregate Base Grading A	WW Aggregate Base, Grading A Additional Erosion Control Measures	JU		P

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

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

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

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

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

Subdivisions	Operation Conditions	Purpose
20,20A,20B,20C, 20D,20E,21,21A, 21B,21C,21D,	Year around operations allowed, with 2 hour daily restrictions (work must begin 2 hours after sunrise and end 2 hours before sunset) between April 1 and September 30 (inclusive).	Marbled Murrelet breeding season
Ground based portions 16,17,18,18E, 18F,19,19D,21, 21C,,22,81C	All ground based operations shall occur between June 1 and October 31 (inclusive).	Prevention of soil compaction, rutting, and puddling.
16,16A,16B 17,17A,17B, 18,18A,18B,18C, 18D,18E,18F, 18G 19,19A,19B,19C, 19D,19E 22	All falling, yarding and hauling operations shall only occur between August 6 and February 28 (inclusive).	Prevention of disturbance to Marbled Murrelet and Spotted Owl.
16,16A,16B 17,17A,17B, 18,18A,18B,18C, 18D,18E,18F, 18G 19,19A,19B,19C, 19D,19E 22	All falling, yarding, and hauling operations shall only occur 2 hours after sunrise and 2 hours before sunset between August 6 and September 30 (inclusive).	Spotted Owl and Marbled Murrelet breeding season
81,81A,81B,81C	Year around falling and yarding operations allowed, except between 2 hours after sunrise and 2 hours before sunset between April 1 and September 30 (inclusive).	Marbled Murrelet breeding season
81,81A,81B,81C	Hauling operations shall only occur between June 1 and October 31 (inclusive).	Protection of road surface
BP 1 and Pit Development	All operations including pit development must be completed by June 1, 2015.	Pit Development

C6.315# Sale Operation Schedule

Subdivision	Operations Conditions	Purpose
All	Road construction, reconstruction, and obliteration (temporary and specified) are allowed only between 2 hours after sunrise and 2 hours before sunset June 1 and Sept. 30 (inclusive).	Prevention of disturbance to Marbled Murrelet.
All	Road construction, reconstruction, and obliteration (temporary and specified) are allowed only between Sept. 30 and October 31 (inclusive), without the 2 hour restrictions unless otherwise agreed to by Forest Service.	Reduction of sedimentation.
All	All instream culvert work is allowed between July 15 and August 31. Operations may be allowed outside this window after consultation with the Forest Service fisheries biologist and the WA State Dept. of Fish and Wildlife.	Reduction of potential impact to fish.
All	Haul operations that occur between November 1 and May 31 (inclusive) require a Wet Weather Haul agreement between the Purchaser and Forest Service. Some requirements may include additional silt fencing, straw wattles, straw mulch, spot rocking, and other forms of sedimentation reduction devices and purchaser self suspension of haul.	Reduction of sedimentation.

APPLICATION SCHEDULE PURSUANT TO CT6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER
(04/2014)

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

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

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

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

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

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

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

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

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

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

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

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

<u>FELLING METHODS</u>	<u>SUBDIVISIONS</u>
Directional felling away from adjacent ownerships, land survey monuments, residual and adjacent stands, when within 66 feet of timber edge along streamcourses, and FSR 2259, 2259040, 2259042 and 2259043. Timber designated to be cut shall be felled in a manner to maximize protection of residual trees and facilitate all yarding operations, unless otherwise agreed to in writing by the Forest Service.	All
<u>FELLING EQUIPMENT</u>	<u>SUBDIVISIONS</u>
Wedges, or jacks as needed	All

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

YARDING/SKIDDING REQUIREMENTS	SUBDIVISIONS
Ground based equipment, single span skyline and helicopter required, as indicated on the Sale Area and Slash Disposal Map.	All
Dedicated ground based skidtrails/roads shall be no closer than 110 feet apart center to center (except where converging), and will not exceed 12 feet in width.	Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21,21C,22,81C
Dedicated ground based skidtrails/roads shall utilize a sufficient layer of slash and unmerchantable material to minimize rutting.	Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21,21C,22,81C
Skyline corridors will be no closer than 120 feet apart center to center and will not exceed 12 feet in width for parallel roads. Skyline corridors will be parallel to each other where feasible.	All
Skyline corridors will be no closer than 150 feet apart center to center at the tailhold or tailtree and will not exceed 12 feet in width for wheel spoked roads.	All
Skidtrails/roads shall minimize disturbance to existing large down logs and felled hazard trees. If such logs are moved, they will be replaced as directed by the Forest Service.	Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21,21C,22,81C
Skidtrails/roads/landings shall impact less than 20% of the sale area.	Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21,21C,22,81C
Leading end of logs shall be suspended above ground during yarding and/or loader swing operations.	All
Log lengths shall not exceed 40 feet plus trim and may be reduced if damage occurs to the residual stand. Log lengths may be increased only when approved in writing by the Forest Service.	All
Felling leave trees to free hung up trees will not be allowed.	All
Severely damaged rub trees shall not be cut until skidding operations are completed. Rub trees shall be designated to be cut unless otherwise directed in writing by the Forest Service.	All
All yarding operations shall result in no more than 15% of the residual trees receiving damage per subdivision. No more than 10% of the residual trees may have damage exceeding 16 square inches. Damage is defined as exposure or breakage of the cambial layer of the bole or root collar.	All

<p>No trees over the maximum stump diameter, as stated in C2.35#, will be allowed to be cut during skid road construction (ground based), unless designated by the Forest Service.</p>	<p>All</p>
<p>Groundbased landings adjacent to any haul roads will be a minimum of 50 feet off the road surface, if feasible, unless otherwise agreed to in writing by the Forest Service.</p>	<p>Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21, 21C,22,81C</p>
<p>Protect all snags. However, if logging safety is jeopardized, snags may be felled and then left in the stand as coarse woody debris</p>	<p>All</p>
<p>Dedicated ground based skidtrails/roads shall be no closer than 60 feet from subdivision boundary unless otherwise agreed to by the Forest Service.</p>	<p>Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21, 21C,22,81C</p>
<p>Ground based yarding operations with tractors will not operate on slopes exceeding 30%, or 50% with feller/bunchers, unless otherwise agreed to by the Forest Service.</p>	<p>Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21, 21C,22,81C</p>
<p>Logging plan maps designed by the Forest Service are for establishing average yarding distances for appraisal purposes only and are not part of this contract.</p>	<p>All</p>
<p>The locations of all skidtrails and skyline corridors will be approved prior to felling operations.</p>	<p>All</p>
<p>Ground based yarding operations will not operate on slopes exceeding 30%, unless otherwise agreed to by the Forest Service.</p>	<p>Groundbased portions in subdivisions 16,17,18,18E,18F,19,19D,21, 21C,22,81C</p>
<p>Feller/buncher operations will not operate on slopes exceeding 50% and will be approved prior to operations.</p>	<p>16A, 18G</p>

SPECIFICATIONS PURSUANT TO C6.74# - SLASH TREATMENTS REQUIREMENTS
(02/2002)

Slash Plan

Definitions

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

I. Definitions:

Slash: Material with a diameter of ¼ inch to 5 inches and 3 feet in length or greater remaining in treatment strips. Material greater than 5 inches in diameter does not have to be treated if all limbs have been removed.

Landing Piles:

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

II. Slash outside subdivision boundaries

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

III. System road slash

Purchaser shall clear all slash created by harvest operations from the surfacing of the 2259, 2259040, 2259042, 2259043, 2259048 and 2259049 roads. Ditches shall be cleared of all harvest operation slash.

IV. Landing slash

All skyline landing slash at landings located on the 2259, 2259040 (before gate), and 2259042 roads shall be piled and covered as described above.

All skyline landing slash at landings located on temporary roads and the 2259040 (after gate), 2259043, 2259048, and 2259049 roads shall be removed from landing areas and distributed evenly over skyline corridors concurrent with yarding operations.

All ground-based landing slash shall be removed from landing areas and distributed evenly over skid roads concurrent with skidding operations.

All helicopter landings shall be piled and covered as described above. Landings located on temporary roads shall be piled in the middle of the landing or as directed in writing by the Forest Service.

V. Temporary roads

Slash created by opening existing or constructing temporary roads within 66 feet (slope distance) of the timbered edge along the 2259, 2259040, and 2259042 roads shall be pulled back 66 feet from road junctions and evenly distributed to a depth of 2 feet.

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

VI. Leave tops in subdivisions

Top unmerchantable portion of all included timber shall be bucked and left within subdivisions except in areas designated for pull back as shown on Sale Area and Slash Disposal Map. Ground based equipment may use this material within skid trails/roads and processor paths to reduce ground impacts but within areas designated for pull back, the slash used on skid trails/roads shall not result in a continuous fuel bed.

VII. Directional felling and pull back Slash

Within 66 feet (slope distance) of the treated edge along the 2259, 2259040, 2259042, 2259043, 2259048 and 2259049 roads, timber shall be directionally felled and slash shall be pulled back and scattered. Material larger than 5 inches does not need to be pulled back provided all limbs are removed and pulled back 66 feet (slope distance).

VIII. Limb logs in subdivisions

Logs must be limbed on 3 faces prior to yarding.