

# Attachment

**B**

Draft - Subject to change

PROJECT NUMBER 001 - Pre-commercial Thin and Reduce Fuel Loading to an end Result of 8 to 10 Tons per Acre.

Project Location

The locations of the worksites are shown on the Contract Area Map. This project work will be done within the boundaries of cutting units shown in the table below for the Mint Stewardship Contract.

Subdivision	Acres
18	4
22	93
28	9
30	14
35	118
38	22
39	107
52	14

Technical Specifications

In identified cutting units, cut and dispose of trees over 12.0 inches in height, and less than 5.0 inches DBH to an average spacing of 24 x 24 feet leaving the most vigorous, undamaged and healthy trees. Use the following priority when selecting leave trees:

- (1) Western Larch
- (2) Ponderosa Pine
- (3) Western White Pine
- (4) Western Red Cedar
- (5) Western Hemlock
- (6) Douglas-fir
- (7) Grand Fir

All cut trees shall be cut below the lowest live limb, except when prevented by natural obstacles; in which case any live limbs below the cutting point shall be removed. Trees shall be completely severed from the stump. Stump height shall not exceed 6 inches above ground level or 4 inches above natural obstacles.

Cut all brush over 12.0 inches in height to a height not to exceed 8 inches. Herbaceous plants may be ignored.

Dispose of slash to a fuel loading of 8 to 10 tons per acre. For the purposes of this project slash is defined as vegetative debris including, but not limited to, cull logs, blasted or pushed-out stumps, chunks, broken tops, limbs, branches, rotten wood, damaged or cut brush, damaged, cut or destroyed reproduction, saplings and poles, pre-existing or created by the activity. The process used shall in no way damage or kill existing leave trees. If piling and covering is the approved treatment, piling and covering specifications will be included at that time. No large down woody material 20" or greater in small end diameter and 20 feet in length or greater shall be piled in cutting units 18 and 30. This large down woody material will not count toward the 8 to 10 tons per acre fuel loading target. Burning by Contractor will not be approved.

Impact to soils from Contractor's Operations shall be less than 10 percent of the stewardship/cutting unit area. Impact is defined as soils being exposed by the removal of the duff layer or displaced from one place to another as the result of Contractor's Operations.

Not more than 5 percent of the residual stand may be damaged by Contractor's Operations. Scarring of boles that exceed 16 square inches of cambium exposure will be considered damage. Any tree "root sprung" or with a broken top will also be considered damage.

Contractor's Obligations

The Contractor shall furnish materials, labor, supervision, transportation, and all supplies for this project.

Acceptable Quality Level

The Forest Service will visually compare the slash remaining on site with the slash loading photo series on file at the Barlow Ranger Station. The reference photo is on page 42 of USDA GTR PNW 52 (1976). If the fuel loading appears to be within specification the work will be accepted on a completed subdivision.

If the Forest Service and the Contractor do not agree on a visual inspection result, a fixed plot inventory of the down woody material will be completed by the Forest Service using the PLANAR INTERCEPT FUEL INVENTORY GUIDE (on file at the Barlow Ranger District). Data collected will be entered into the computer model DDWoodyPC to calculate the average tons per acre of down woody material remaining on site. When calculated fuel loadings exceed the high end of the loading objectives, Contractor shall rework to meet specification standards. Contractor's work shall also not go below the low end of the objective range. If this occurs, Contractor may be required redistribute slash to meet the standards.

For pre-commercial thinning, the tree spacing should average a 24 foot spacing. Individual spacing between trees should be no less than or greater than 50 percent the identified spacing where stocking allows. Initial inspection will consist of a review of the trees cut and left to determine if the technical specifications have been met. When work appears satisfactory it will be accepted. When work is unsatisfactory the Contractor will cut additional trees to meet the above technical specifications.

If the Contractor disagrees with the results of the random walk thru by the Forest Service, the Contractor may request a formal systematic sample across the unit. Plots (1/50th acre) will be distributed throughout the area to generate a one percent sample. Each plot examined will record the following findings.

1. Number of leave trees that should have been left.
2. Number of trees that were left.
3. Number of satisfactory leave trees
4. Number of deficient trees
5. Number of excess trees.

Plot centers will be designated on the ground and each plot will be documented if it is satisfactory or unsatisfactory and the reason why. Number of trees deficient + Number of excess trees / trees to be left = x%. 100% - x% = quality. A 90 percent quality rating is acceptable.

If work quality is more than 90 percent, work items will be accepted. Where quality is 90 percent or below, contractor will pay for the costs of the Forest Service formal sampling, and rework the area to meet the required technical specifications.

For ground disturbance, a visual inspection will be made and if there is a concern that disturbance exceeds 10 percent, a soil survey will be conducted by the Forest Service. If found not in compliance with the 10 percent standard, Contractor will pay for the cost of the Forest Service survey and the Contractor will be required to mitigate the damages with methods approved by the Forest Service.

#### Measurement and Stewardship Credit

##### A. Measurement

All acreages are based on the horizontal plane within the established boundaries.

##### B. Re-measurement

1. The Contractor may at any time after award request remeasurement of any treatment type or area. This request must be made in writing to the Forest Service.
2. If remeasurement indicates a variance of 5 percent or less, the Contractor shall pay for the actual cost of remeasurement and no adjustment will be made in the Quantity stated in A.4.3.
3. If remeasurement indicates a variance greater than 5 percent, the Quantity stated in A.4.3 will be modified based on the remeasured amount and the Forest Service will pay for the remeasurement.

##### C. Determining Stewardship Credits

1. Calculation of Stewardship Credits for Accepted Work - Plot Inspection
  - a. After inspection of completed acreage, the Forest Service will calculate the Stewardship Credits.

PROJECT NUMBER 002 - Pre-commercial Thinning, brush cutting, and disposing of slash.

Project Location

The locations of the worksites are shown on the Contract Area Map. This project work will be done within the boundaries of stewardship units shown in the table below for the Mint Stewardship Contract.

Stewardship Unit	Tree Spacing (Feet)	Acres
124	25	64
131	24	21
136	24	6
141	20	11
142	20	15
146	20	20

Technical Specifications

In identified stewardship units, cut and dispose of trees over 12.0 inches in height, and less than 9.0 inches DBH to an average spacing identified in the table above leaving the largest, most vigorous, undamaged and healthy trees. Use the following priority when selecting leave trees:

- (1) Western Larch
- (2) Ponderosa Pine
- (3) Western White Pine
- (4) Western Red Cedar
- (5) Western Hemlock
- (6) Douglas-fir
- (7) Grand Fir

All cut trees shall be cut below the lowest live limb, except when prevented by natural obstacles; in which case any live limbs below the cutting point shall be removed. Trees shall be completely severed from the stump. Stump height shall not exceed 6 inches above ground level or 4 inches above natural obstacles.

Cut all brush over 12.0 inches in height to a height not to exceed 8 inches. Herbaceous plants may be ignored.

Dispose of all activity slash between 1 to 6 inches in diameter at the small end and more than 2 feet in length. For the purposes of this project activity slash is defined as vegetative debris including, but not limited to, broken tops, limbs, branches, damaged or cut brush, damaged, cut or destroyed reproduction, saplings and poles, created by the activity. The disposal process used shall in no way damage or kill existing leave trees. If piling and covering is the approved treatment, piling and covering specifications will be included at that time. Burning by Contractor will not be approved.

Impact to soils from Contractor's Operations shall be less than 10 percent of the stewardship/cutting unit area. Impact is defined as soils being exposed by the removal of the duff layer or displaced from one place to another as the result of Contractor's Operations.

Not more than 5 percent of the residual stand may be damaged by Contractor's Operations. Scarring of boles that exceed 16 square inches of cambium exposure will be considered damage. Any tree "root sprung" or with a broken top will also be considered damage.

Contractor's Obligations

The Contractor shall furnish materials, labor, supervision, transportation, and all supplies for this project.

Acceptable Quality Level

For pre-commercial thinning the tree spacing should average the spacing identified within the table above. Individual spacing between trees should be no less than or greater than 50% the spacing identified in the table where stocking allows. Initial inspection will consist of a review of the trees cut and left to determine if the technical specifications have been met. When work appears satisfactory it will be accepted. When work is unsatisfactory the Contractor will cut additional trees.

## Mint Stewardship

If the Contractor disagrees with the results of the random walk thru by the Forest Service, the Contractor may request a formal systematic sample across the unit. Plots (1/50th acre) will be distributed throughout the area to generate a 1 percent sample. Each plot examined will record the following findings.

1. Number of leave trees that should have been left.
2. Number of trees that were left.
3. Number of satisfactory leave trees
4. Number of deficient trees
5. Number of excess trees.

Plot centers will be designated on the ground and each plot will be documented if it is satisfactory or unsatisfactory and the reason why. Number of trees deficient + Number of excess trees / trees to be left = x%. 100% - x% = quality. A 90 percent quality rating is acceptable.

For cutting brush inspection, a review of the area will be conducted to ensure that Contractor's operations have cut brush as required in the Technical Specifications.

For slash disposal inspection, a review of the area will be conducted to ensure that Contractor's operations have disposed of the pieces required in the Technical Specifications.

If work quality is more than 90 percent, work items will be accepted. Where quality is 90 percent or below, contractor will pay for the costs of the Forest Service formal sampling, and rework the area to meet the required specifications.

For ground disturbance, a visual inspection will be made and if there is a concern that disturbance exceeds 10 percent, a soil survey will be conducted by the Forest Service. If found not in compliance with the 10 percent standard, Contractor will pay for the cost of the Forest Service survey and the Contractor will be required to mitigate the damages with methods approved by the Forest Service.

### Measurement and Stewardship Credit

#### A. Measurement

All acreages are based on the horizontal plane within the established boundaries.

#### B. Re-measurement

1. The Contractor may at any time after award request remeasurement of any treatment type or area. This request must be made in writing to the Forest Service.
2. If remeasurement indicates a variance of 5 percent or less, the Contractor shall pay for the actual cost of remeasurement and no adjustment will be made in the Quantity stated in A.4.3.
3. If remeasurement indicates a variance greater than 5 percent, the Quantity stated in A.4.3 will be modified based on the remeasured amount and the Forest Service will pay for the remeasurement.

#### C. Determining Stewardship Credits

1. Calculation of Stewardship Credits for Accepted Work - Plot Inspection
  - a. After inspection of completed acreage, the Forest Service will calculate the Stewardship Credits.

**PROJECT NUMBER 003 - Leave Tree Marking**

Project Location

The location of the worksite is shown on the Contract Area Map "DxPre". This project work will be done within the boundaries of all cutting units shown in the table below for the Mint Stewardship Contract.

Subdivision	Acres
18	4
22	93
28	9
30	14
35	118
38	22
39	107
52	14
151	8
152	6
153	11
155	9
156	7
157	15
158	3

Technical Specifications

Leave trees shall be designated as specified in K-C.3.5.7# (Option 1).

Contractor's Obligations

The Contractor shall furnish materials, labor, supervision, transportation, and all supplies not provided by the Forest Service, which are required to complete the project.

Commencement, Prosecution, and Completion of Work

A. The Contractor shall be required to (a) commence work under this contract after a pre-work meeting agreed upon by the Contractor and Forest Service, and (b) prosecute the work diligently. The time stated for completion shall include final cleanup.

B. Work on this stewardship project must occur prior to harvest activities in cutting units designated as "DxP" on the Contract Area Map and in K-C.3.5.7# (Option 1). It is estimated that adverse weather and/or road conditions may prevent access to the work sites or performance to specifications during certain periods of the year.

Acceptable Quality Level

A. The Contractor or Contractor's Representative shall make periodic inspections of the designations and marking that has been completed and shall provide the results to the Forest Service. The Contractor shall take corrective action, if deemed necessary. Inspection reports shall be made available to the Forest Service upon request. Inspection plot intensity and methods will be approved in advance by the Forest Service.

B. The Forest Service will make periodic inspections to verify that the Contractor is meeting contract specifications. The Contractor or his representative is encouraged to observe the inspection and will receive inspection summaries upon request. Inspections shall be performed in a manner that will not unduly delay work. The minimum standards for acceptable inspection results will be:

1. That 90 percent of the inspected marked trees within a cutting unit meet the prioritized standards described above. This includes successful spacing and distribution and selection of the marked trees throughout the cutting unit.

C. Unsatisfactory Marking

When inspection results are below 90 percent of required tree numbers, acceptance will not be made until all marking meets at least 90 percent of the prescription. Reinspections after rework will be made in the same manner as the first inspection but on different plots.

D. Reinspection Upon Contractor's Request

If the original Forest Service inspection results are unacceptable to the Contractor and a second inspection is requested without rework, the same inspection procedures will be used. However, the inspection pattern will be shifted. If the second inspection shows less than 5 percent variance from the first inspection, the Contractor shall pay the cost of the second inspection, and the result of the second inspection will be used in determining acceptance. Requests for reinspection must be made in writing to the Forest Service. Only one reinspection will be made by the Forest Service.

Measurement and Stewardship Credit

A. Measurement

All distances and acreages are based on the horizontal plane within the established boundaries.

B. Re-measurement

1. The Contractor may at any time after award request remeasurement of any treatment type or area. This request must be made in writing to the Forest Service.
2. If remeasurement indicates a variance of 5 percent or less, the Contractor shall pay for the actual cost of remeasurement and no adjustment will be made in the Quantity stated in A.4.3.
3. If remeasurement indicates a variance greater than 5 percent, the Quantity stated in A.4.3 will be modified based on the remeasured amount and the Forest Service will pay for the remeasurement.

C. Determining Stewardship Credits

1. Calculation of Stewardship Credits for Accepted Work - Plot Inspection
  - a. After inspection of completed acreage, the Forest Service will calculate the Stewardship Credits.