

**Timber Sale Preparation Prescription
General**

Date: **12/9/2002**

Forest Management Unit: Grayling

Timber Sale Number: Sale Name: **Compartment 260 Shelterwood**

Local Contact: Mark Montei Ext: 7442 TX (989) 348-6371 FAX: (989) 348-8825

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Map of Project Area Attached

Legal Description: T27N R2W Section(s) 23 Description SW1/4, W1/2SE, SWNE, SESW

Year of Entry: 2003 Compartment(s): 260 Stand Number(s): 28, 29

This timber sale preparation contract is based on the following acreage:

Estimated Acres: 141 source OI GPS Other The contractor will use a GPS unit to determine enclosed acreage to the nearest one-tenth acre, unless an alternative method is approved prior by the Unit Manager. Payment will be based on actual acres rounded to the nearest whole acre.

Treatment & Objectives: Final Harvest and Delayed Removal

Stand nbr	Cover Type	Acres	BA / Acre	Treatment	Management Objective
28	J5	5	40	Final harvest	Oak
29	O6	136	90	Shelterwood	Oak

Prescription:

1. Stand # 28 is a final harvest. Everything 4 inches and larger is to be harvested
2. Stand # 29 is a Shelterwood. Mark to leave 30 BA

Access: Wakeley Bridge Road and Artillery Trail.

DNR preparation work to be done prior to contract work: Estimated date:

None	

Contract work can begin:

Immediately

Date: 10/01/02

Contract work must be completed by: Date July 15, 2003

All paperwork must be submitted to the timber sale administrator at least 10 days prior to contract completion date to allow for inspections.

Paint Line Work

- This is bid item
 This is not a bid item

Paint line work to be performed. See attached map for locations.

Type of line	Work to be done	Not applicable	Paint color	
Private boundary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Blue	Other:
Sale boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red	Other:
Sale cutting unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow	Other:
Stand type line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other:
Trees marked to leave	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Green	Other:
Trees marked to cut	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Orange	Other:

Exclusions to mark and why: None

Special Instruction: Stand #28's boundary will be marked with yellow paint to be established as a unit line. Unit line for stand #29 will follow the two-track dividing the stand between east and west.

Standards for marking lines against private land: None

Area calculation:

Unit	Method	Standard	
Sale	GPS	Appendix A	
Payment unit	GPS	Appendix A	
Stand			

Special Instruction: See guidelines outlined in Appendix A. Written permission must be obtained from the Unit Manager prior to bid and must be submitted with bid if a method other than GPS is to be used for area calculation.

Timber Cruising Specifications

- This is a bid item
 This is not a bid item
 Required Basal Area Factor: 10 20 Other:

Cruise Line Direction: North/ South

Cruising Units	Number of plots per acre	Spacing (chains)
I, Stand 28	One per acre	3.5 X 3.5
II, III Stand 29	One per 1.8 acres	4.5 X 4
Total Number of Cruise Points	141	

Cruise Special Instructions:

See attachment **Appendix B**

Unless otherwise specified, the tally sheets use must be those supplied by the Management Unit.

Timber Marking Specifications

- This a bid item
- This is not a bid item
- Precise specifications to be delineated at pre-work meeting with DNR staff.

Total Residual BA (Basal Area): 30 BA

Treatment	Number	Size
Regeneration gaps per acre	N/A	
Girdled Trees per acre	N/A	

	Marking symbol	Minimum DBH	Top DIB
Sawlogs	Appendix C	9 inches	8 Inches
Sawbolts	Appendix C	9 inches	8 Inches
Pulpwood	Appendix C	4.5 inches	4 inches

Tally intensities
Species / product

Ratio:

	1 :
	1 :
	1 :
	1 :

Species to favor: White Oak
Species to reduce: Red Maple

Special Marking Instructions : See guidelines outlined in attached Appendix C.

None

Unless otherwise specified, the tally sheets used must be those provided by the Management Unit.

Restrictions: We wish to be able to identify who did what on our sales. You may not have more than two markers in one payment unit without approval. Each marker should have an assigned area to mark (not strips).

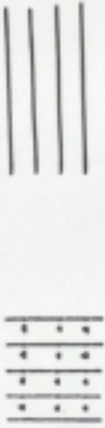
Paint: Call (989) 348-6371 Ex: 7441 or 7442 to make arrangements for all paint pick up. Paint will be supplied from Grayling Field Office. Contractors work schedule must coincide with the DNR work schedule for paint supply. The DNR will not be available on weekends or evenings.

Deliverables:

1. A list of who marked (cruised) each payment unit (names)
 2. A summary of paint used (in quarts)
 3. Tally summaries for each payment unit, (one summary regardless of the number of markers) and all of the original tally sheets.
 4. GPS files for any GPS work done.
 5. A hardcopy of the traverse must be supplied to the timber sale administrator prior to the administrator performing a check cruise.
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SHELTERWOOD REED FINAL HARVEST



◇ - Survey Markers
(if not indicated)

└ - Gates

COMPARTMENT 260

2003 Y.O.E.

Logging Forest Management Unit

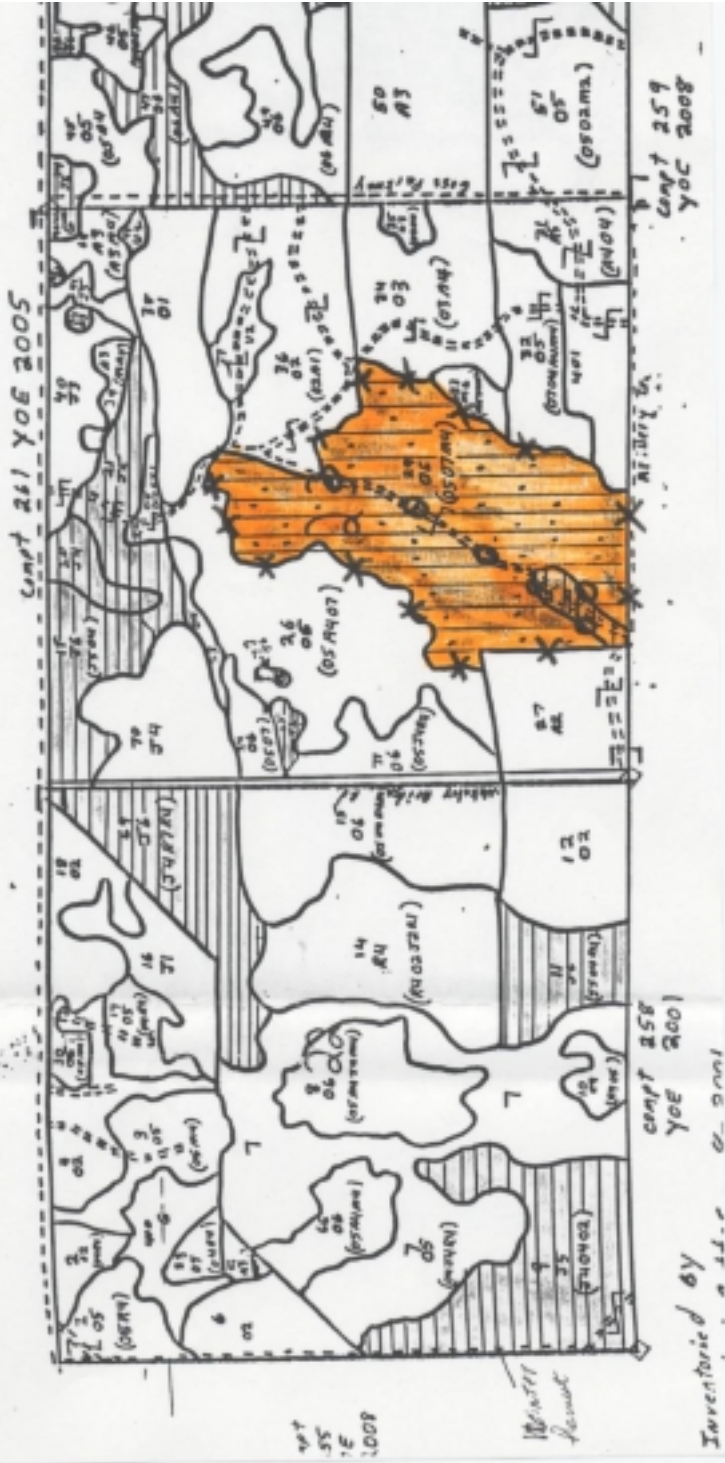
7N R02W Sections 22, 23, 24

Crawford County

1920 Acres

Scale: 4 inches=1 mile (1:15840)

COMPARTMENT 260
--- Boundary Line
--- Unit Line



Grayling Management Unit **Marking Boundaries and Area**

1. The attached type map delineates the contract marking area.
 2. Marking must be done in dry weather and when tree surfaces are not wet.
 3. Paint the boundary line in such a way that it can be seen both from the inside of the sale area and when walking along the line from either direction (*two sides*). Each boundary line tree must be stump-marked, at the base of the stump (*one side*) between the roots extending all the way to the ground.
 4. Paint in a unit line which will constitute the payment unit boundary, dividing the sale into payment units, as shown on the attached map.
 5. Place marks approximately six feet above the base of the tree.
 6. The contractor will keep track of total quarts of paint used per-sale by color.
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7. The contractor will use a GPS unit to determine enclosed acreage to the nearest one-tenth acre, unless an alternative method is approved prior by Unit Management.
 8. Position Mode must be set so that GPS receiver collects data from a minimum of four satellites, and positions deliver ODS (over determine system) data. 2D position will not be acceptable.
 9. Must log PDOP.
 10. PDOP mask less than or equal to 8.
 11. GPS units used must be compatible with Pathfinder Office 2.01 and/or capable of producing a Trimble .COR file format. In addition supply a disk of traverse file along with hard copy of the corrected traverse file.

Grayling Management Unit **Timber Cruising Specifications**

1. Cruise at a rate specified in the Timber Sale Preparation Prescription.
2. Use a 10-factor prism.
3. Use the product standards to determine products and heights of products. See appendix D of product summary in the “The Compleat Marker: A Guide to Managing Northern Hardwoods on Michigan State Forests.”
4. Mark location of plots on the map, using the plot number.
5. Determine residual BA of trees by species where applicable.
6. Unless otherwise agreed to by the contract administrator and the contractor, plot center will be marked by a stake or stick firmly inserted in the ground (not snow) with a ribbon attached to it at a height of not less than two feet above the ground, and labeled with the plot number. In addition ribbon at least 12 inches long must be attached to a tree closest to plot center.
7. All cruise sheets must have compartment #, stand #, unit #, prism factor, date, individual tree species, and the cruiser's name.
8. The Grayling Management Unit Office will provide cruise sheets.
9. Estimate the volume in MBF and cords by individual tree species to be harvested using the point sampling cruising method.

Grayling Management Unit Crown Closure.

1. The attached type map delineates the contract marking area.
2. Harvest all red maple, and aspen.
3. Retain all high quality oak trees.
4. Manage for the best tree in place.
5. Mark only the trees to be left using green paint. Mark only the trees to be cut using orange paint.
6. Leave a residual BA as specified in the **Timber Sale Preparation Prescription**.
7. The Grayling Management Unit Office will provide paint.
8. Multiple stemmed trees must be either completely marked or completely left unmarked. Do not partially mark any multiple stemmed trees.
9. The contractor will keep track of total quarts of paint used per-sale by color.
10. Remove high risk and suppressed oak trees (codominants showing signs of high stress, such as heavy epicormic branching, majority of crown loss, damaged or potential damaged, or may not live another 10 years).
11. Do not discriminate regarding marking red, white, or northern pin oak species.
12. Where possible, leave a minimum of two den trees per acre. (Don't remove all poor quality trees; some may be left if suitable as den trees). All trees designated as den trees must be marked with green paint.
13. Marking must be done in dry weather and when tree surfaces are not wet.
14. Place marks approximately six feet above the base of the tree.
15. Mark the trees on two opposite sides. Each marked tree must be stump-marked, at the base of the stump (one side) between the roots extending all the way to the ground.
16. Paint must be applied on moss free areas.
17. The contractor must contact the timber sale administrator at least two days before stopping to gather paint.

