



# TIMBER SALE PRESCRIPTION

## GENERAL

Date 8/31/2010	Forest, Mineral and Fire Management Unit Grayling FMU
Timber Sale Number (if applicable) 72-002-11-01	Sale Name (or prescription name) Comp 186 Thinning

## LOCAL CONTACT

Name Joan Charlebois	Telephone (989) 348 - 6371 x 7443
Email Address Charleboisj@michigan.gov	FAX (989) 348 - 8825

Map of Project Area Attached

## LEGAL DESCRIPTION

T26N R04W Section(s) 33 Description NE, N1/2SE  
 Year of Entry: 2011 Compartment(s): 186 Stand Number(s): 35, 37

## THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 95 Source:  OI  GPS  Other \_\_\_\_\_

Payment will be made on the basis of these estimated acres.

## TREATMENT & OBJECTIVE

STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
35	O9	41	170	Thinning	Oak
37	M9	54	120	Thinning	Mixed northern hardwoods

## PRESCRIPTION

- Stand 35 - Thinning - Mark to cut down to 70 square feet of residual BA. Aspen and red maple are designated cut species and therefore do not need to be marked. Remove the overstory from existing pockets of natural oak regeneration. Don't leave oak within pockets of dense aspen.
- Stand 37 - Thinning - Mark to cut down to 70 square feet of residual BA. Aspen is a designated cut species, therefore no marking is needed.
- See Appendix G

**Access** Military Road a quarter-mile north of Four Mile Road, west on dirt road.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
none	

## CONTRACT WORK CAN BEGIN

Immediately  Date: \_\_\_\_\_

**CONTRACT WORK MUST BE COMPLETED BY:** 05/1/2011 - Contract is within National Guard training area, there will be **no extensions** because this area will not be accessible after April 30<sup>th</sup>.

**PAINT LINE WORK**

This is included in the bid     This is not included in the bid

**Paint line work to be performed: See attached map for stand line locations & Appendix A for unit line 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	<input type="checkbox"/> Other:
Sale boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red	<input type="checkbox"/> Other:
Sale cutting unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow	<input type="checkbox"/> Other:
Stand type line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other:

**Exclusions to mark and why**

None

**Standards for marking lines against private land**

NA

**AREA CALCULATION**

This is included in the bid     This is not included in the bid

UNIT	METHOD	STANDARD
Sale	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Stand	<input type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	

**Special Instructions:**

See attached Appendix A

**TIMBER CRUISING SPECIFICATIONS**

This is included in the bid     This is not included in the bid

**Required Basal Area Factor:**     10     20     Other:

**Cruise Line Directions**

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
<b>TOTAL NUMBER OF CRUISE POINTS</b>		

**Cruise Special Instructions:**

Unless otherwise specified, the tally sheets used must be those supplied by the Forest, Mineral and Fire Management Unit.

**TIMBER MARKING SPECIFICATIONS**

This is included in the bid     This is not included in the bid

Precise specifications to be delineated at pre-work meeting with DNR staff

**Total Merchantable Residual BA (Basal Area):** 70 (Minimum 60 to Maximum 80)

TREATMENT	NUMBER	SIZE
Regeneration Gaps Per Acre	0	N/A
Girdled Trees Per Acre	0	N/A

PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Single slash on two opposite sides	9.1 inches	8.0 inches
Sawbolts	na		
Pulpwood	Single slash on two opposite sides	4.6 inches	4.0 inches

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave		<input checked="" type="checkbox"/>	Green <input type="checkbox"/> Other
Trees marked to cut	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Orange <input type="checkbox"/> Other

TALLY INTENSITIES	
SPECIES / PRODUCT	RATIO
	1 :
	1 :
	1 :

**SPECIAL MARKING INSTRUCTIONS**

For stand 35, see Appendix E (attached).  
 For stand 37, see Appendix D (attached) and the Compleat Marker (available upon request).  
 See attached Appendix G for both stands.

This is a National Guard training area. Access will be limited at times due to Military training. You must contact the Unit Manager or contract administrator at least three days in advance so that they can check with the Military and determine accessibility. Typically these areas are accessible from October 1 through April 30<sup>th</sup>, with the areas being closed most of the summer months. Special training may occur and close these areas at other times throughout the year.

**Unless otherwise specified, the tally sheets used must be those provided by the Forest, Mineral and Fire Management Unit.**

**RESTRICTIONS**

1. Forest, Mineral and Fire Management Division must to be able to identify who did what on the timber sale.
2. The contractor may not have more than two markers in one payment unit without prior approval.
3. Each marker should have an assigned area to mark (not strips).

**PAINT**

1. Call Joan at (989) 348 - 6371 x 7443, to make arrangements for paint.
2. Paint will be supplied from Grayling Field Office.
3. Contractor's work schedule must coincide with the DNR work schedule for paint supply.
4. The DNR will not be available on weekends or evenings.

**DELIVERABLES**

1. Names of those who marked each payment unit.
2. A summary of paint used (in quarts).
3. GPS files for any GPS work.

## **Grayling Management Unit** **Boundary Marking and Area Calculation**

1. The attached type map delineates the contract marking area (stands 35 & 37).
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 from both 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 unit lines that will constitute payment unit boundaries. Split each stand into two payment units of approximately equal acreage. Stand 35 should have a north-south unit line. Stand 37 should have an east-west unit line.
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.
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. GPS units used must be compatible with Pathfinder Office (2.01 or later) or be capable of producing an ArcView-compatible shapefile. Supply electronic and paper copies of the corrected and edited (outlier/erroneous points cleaned up) GPS file.
9. Position Mode must be set so that the GPS receiver collects data from a minimum of four satellites. This must be recorded in the position properties window after downloading.
10. The GPS receiver must log PDOP or HDOP. This log must be recorded in the position properties window after downloading.
11. PDOP/HDOP mask must be less than or equal to 8.
12. SNR setting must be greater than or equal to 4.
13. Sale boundaries are to be recorded as an area feature, not a line. Isolated stands must each be recorded as separate area features.
14. Payment Unit lines must be recorded as line features bisecting the stand. Area calculation is not needed for the Payment Units.

**Grayling Management Unit**  
**Individual Tree Marking**  
**Northern Hardwoods Crop Tree Release**

Appendix D

1. Select crop trees. Crop trees are defined as trees that have the potential of making a grade one sawlog when they are mature. A grade one sawlog is any tree capable of producing 16 feet of clear lumber. A crop tree can be ANY species of tree. It is important to manage for the best tree in place at all times.
2. Locate at least 50 crop trees per acre spaced approximately 25 to 30 feet apart. For trees less than 8" DBH, mark enough crown competitors to provide seven feet of open space around the crop tree's crown. For trees greater than 8", mark the two most important crown competitors. See the Compleat Marker for further reference.
3. After the crop tree has been chosen and properly released, additional trees may have to be removed to reduce the basal area to the desired target. First remove high-risk (ie: Eutypella canker) and cull trees from the stand, followed by commercial subcanopy trees beneath the crop tree. (Commercial trees will be defined as any trees that contain at least one 100" sawlog or pulp stick.) Lastly, remove any other lesser quality intermediate and codominant trees from the stand to reduce basal area to the desired goal.
4. Across the sale area, at least two den trees per acre will be left. Trees that have a "platform" crotch structure for raptor nest support located beneath the foliage canopy shall be left.
5. The contractor will keep track of total quarts of paint used per-sale by color.
6. Marking must be done in dry weather and when tree surfaces are not wet.
7. Mark the trees on two opposite sides, approximately 6 feet above the ground.
8. Each marked tree must be stump-marked at the base of the stump (one side), between the roots and extending all the way to the ground.
9. Paint must be applied on moss-free areas.

**Grayling Management Unit**  
**Oak Thinning Sale Preparation**  
**Individual Tree Marking**

Appendix E

1. Target for retention vigorous, high quality Oak trees.
2. Trees in multiple-stemmed clumps (ie: trees that grew from the same stump) must be either all marked or all left. Do not partially mark within multiple-stemmed clumps of trees.
3. Remove high risk and suppressed Oak (trees showing signs of stress, such as epicormic branching, upper crown dieback, damaged or potential damaged, or may not live another 10 years).
4. Where possible, retain 1-2 wildlife den trees per acre.
5. The Grayling Management Unit Office will provide paint.
6. The contractor will keep track of total quarts of paint used per-sale by color.
7. Marking must be done in dry weather and when tree surfaces are not wet.
8. Place marks approximately six feet above the base of the tree.
9. 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.
10. Paint must be applied on moss free areas.

## **Grayling Management Unit** **Unexploded Military Ordinance Hazard**

This timber sale preparation contract is located in an area where military training has taken place. Within these areas, there is the potential to encounter unexploded bombs, artillery shells, mortar rounds, mines, grenades or other devices. In the event that you encounter any type of unexploded ordinance or device while conducting contract work in this area, **DO NOT TOUCH IT!** Flag the spot where you are standing, leave the area undisturbed, and report the location to the contract administrator as soon as possible. Do not re-enter the area until the contract administrator confirms that the area has been investigated and cleared by the military.