



# TIMBER SALE PRESCRIPTION

**GENERAL**

Date 10/04/12	Forest, Mineral and Fire Management Unit Grayling
Timber Sale Number (if applicable) 72-608-13-01	Sale Name (or prescription name) West Comp 260 Seed Tree

**LOCAL CONTACT**

Name Tom Barnes	Telephone (989) 348-6371 ext: 7449
Email Address Barnest2@michigan.gov	FAX (989) 348-8825

Map of Project Area Attached

**LEGAL DESCRIPTION**

T27N R02W Section(s) 22 Description: SWNE, W1/2SE, E1/2SW, SWSW  
 Compartment: 260 (2013 YOE) stands 13, 18, 22

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

Estimated Acres: 76 Source:  Other GIS (IFMAP) Payment will be made on the basis of these estimated acres.

**TREATMENT & OBJECTIVE**

STAND NUMBER	TREATMENT NAME (IFMAP)	COVER TYPE	ACRES	BA Range	TREATMENT	MANAGEMENT OBJECTIVE
13	72260013-Cut	R9	17	81-110	Seed Tree w/ Reserves	Nat. RP, Mixed Deciduous
18	72260018-Cut	O7	49	1-50	Seed Tree w/ Reserves	Pine, Oak
22	72260022-Cut	R8	10	81-110	Seed Tree w/ Reserves	Nat. RP, Mixed Deciduous

**PRESCRIPTION**

Stand 13:

- Mark to leave RP down to 30 square feet of residual basal area.
- Aspen is a designated leave species and does not need to be marked

Stand 18:

- RP is a designated leave species and does not need to be marked. Inventory estimates 5% of the canopy cover is RP.
- Mark to leave oak in order to achieve a total residual basal area (RP included) of 30 square feet.

Stand 22:

- Mark to leave RP down to 30 square feet of residual basal area.
- Mark to leave ten white oak trees, preferably stems that have high value to wildlife (open-grown form, good mast producers, den & nest potential).

**Access:** From North Down River Road, ~1.4 miles north on Wakeley Bridge Road, then west on a two-track road to near the prescription area. Or ~0.5 miles north on Wakeley Bridge Road, then ~1.2 miles northwest on Ketchum Truck Trail to near the prescription area.

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

**CONTRACT WORK CAN BEGIN**  Immediately **CONTRACT WORK MUST BE COMPLETED BY:** April 30, 2014

**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 locations)

TYPE OF LINE	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR	
Payment Unit Boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yellow	<input type="checkbox"/> Other:
Sale Boundary - State	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red	<input type="checkbox"/> Other:
Sale Boundary - Private	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Blue	<input type="checkbox"/> Other:
Leave Islands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Green	<input type="checkbox"/> Other:

Exclusions to mark and why:

Standards for marking lines against private land

**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	
Cruising Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain	
Stand	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain	
Retention Island	<input type="checkbox"/> GPS <input type="checkbox"/> String Chain	

Special Instructions:

See 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: North-south or east-west grid, by the spacing specified below if compass and pacing, or by a uniform square, GPS-calculated grid.

CRUISING UNIT	ESTIMATED ACRES	NUMBER OF PLOTS PER ACRE	APPROXIMATE SPACING (CHAINS)
13	17	1	3 x 3.3
18, 118, 218	49 total	1	3 x 3.3
22	10	1	3 x 3.3
<b>TOTAL NUMBER OF CRUISE POINTS</b>		76 (estimate)	

Cruise Special Instructions:

Red Pine will be cruised by using the V-Bar Method, all other species will be cruised by traditional point sampling. See Appendix B and Appendix 8 (Product Standards And Cruising Manual, revised 6-24-2011, will be provided upon request. Note on page 29 the addition of the Walkthrough Method for cruising edge points).

The type of tally sheet used must meet with the approval of the contract administrator.

**TIMBER MARKING SPECIFICATIONS**

This is included in the bid

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

**Total Merchantable Residual BA (Basal Area):** Refer to page 1 PRESCRIPTION for acceptable residual

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre		NA	
Girdled Trees Per Acre		NA	
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Single slash on two opposite sides	9.1"	8.0"
Sawbolts	N/A		
Pulpwood	Single slash on two opposite sides	4.6"	4.0
TYPE OF WORK	WORK TO BE DONE	STANDS	PAINT COLOR
Trees marked to leave	<input checked="" type="checkbox"/>	13, 18, 22	<input checked="" type="checkbox"/> Green <input type="checkbox"/> Other
Trees marked to cut	<input type="checkbox"/>		<input type="checkbox"/> Orange <input type="checkbox"/> Other
TALLY INTENSITIES			
SPECIES / PRODUCT		RATIO	
		1 :	

**SPECIAL MARKING INSTRUCTIONS:**

See page 1 PRESCRIPTION details by stand & Appendix H.

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

**RESTRICTIONS**

1. Forest Management Division staff 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. Paint will be supplied from the Grayling Field Office.
2. Call (989) 348-6371 ext 7449 (Tom Barnes) or ext 7443 (Joan Charlebois) to make arrangements for paint.
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. A list of names that marked or cruised each payment unit.
2. A summary of paint used (in quarts) by color.
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 and acreages for line running and area calculation work.
5. Cruise data entered into TSalePO and exported onto a disk or other electronic format. Use the sale name/number from page 1.

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

1. Establish the red sale boundary line as shown on the attached map. Paint the line so that it can be seen from both inside the sale area and when walking along the line from either direction.
2. Establish payment unit lines as shown on the attached map. Paint each payment unit line so that it can be seen from both adjoining payment units and when walking along the line from either direction.
3. Marking must be done in dry weather and when tree surfaces are not wet.
4. Place bole marks approximately five feet above the ground.
5. Each line tree must be stump-marked at its base and extending onto the ground.
6. The contractor will use a GPS unit to determine acreage by stand and payment unit to the nearest acre.
7. GPS units must be compatible with Pathfinder Office (2.01 or later) or produce an ArcMap-compatible shapefile. Correct and edit (clean up outlier/erroneous points) the GPS files before submitting the data.
8. Required GPS receiver signal quality settings for data collection: a minimum of four satellites, with a maximum DOP (dilution of precision) of 5.
9. The GPS receiver must log and save DOP and SNR (signal-to-noise-ratio) data.
10. Sale boundaries must be recorded as area features, not lines. Isolated stands must be recorded as separate area features.
11. Payment Unit lines must be recorded as line features.

## Grayling Management Unit Timber Cruising Specifications

1. Cruise designated timber using Appendix 8 Product Standards And Cruising Manual (revised 6-24-2011) to determine products and heights of products. Record cruise data by species/product as indicated in Appendix 8. Do not combine any species or products unless told to do so by the marking contract administrator.
2. Record BA of residual trees by species unless told otherwise by the marking contract administrator.
3. Cruise sheets will be provided upon request. If the contractor prefers to use their own cruise sheets, the sheet format must meet with the approval of the marking contract administrator.
4. Cruise at the sampling intensity specified in the Timber Sale Prescription and apply that rate to your GPS-determined stand acreage.
5. Separate cruise data by the cruising units indicated on the map.
6. Use a 10-factor prism.
7. Mark plot locations on a map, using the plot number.
8. 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 PU/stand number and plot number. In addition, ribbon at least 12 inches long must be attached to the tree closest to plot center.
9. All cruise sheets must be labeled with the compartment #, stand #, cruising unit #, prism factor, date and the cruiser's name. If a portable data recorder is used for cruising, submit a summary sheet that details the rest of the required information.
10. **A copy of the "TSalePO" program will be provided to the successful bidder for cruise data entry. Original cruise sheets and an electronic copy of the cruise data exported from TSalePO must be delivered upon completion of the contract field work.** Note: At the cruise data entry screen in TSalePO, when prompted to enter the stand or cruising unit acres, enter your actual GPS'd acres (rounded to the nearest whole acre) – NOT the contract's estimated inventory-based acreage. Enter each cruising unit's data separately, substituting the cruising unit number from the map when prompted for a stand number in TSalePO.

**Grayling Management Unit**  
**Seed Tree Sale Preparation**  
**Individual Tree Marking**

1. Leave a residual BA as specified in the **Timber Sale Prescription**.
2. Mark to leave stems with good form in terms of quality, seed-producing potential and windfirmness.
3. Target for removal high-risk, damaged, declining, poor-form and suppressed trees, but reserve stems that have high wildlife value (cavities, den & nest potential, future snags).
4. Do not selectively mark stems within multiple-stemmed clumps. Within a multiple-stem clump, either mark all of the stems or leave them all.
5. Marking must be done in dry weather and when tree surfaces are not wet.
6. Paint must be applied on moss free areas.
7. Mark the trees on two opposite sides, approximately five feet above the ground, with enough bole-wrap so that the marks can be seen from all sides of the tree.
8. Each marked tree must be stump-marked at the base of the stump between the roots and extending onto the ground.