



MICHIGAN DEPARTMENT OF NATURAL RESOURCES
FOREST, MINERAL AND FIRE MANAGEMENT

TIMBER SALE PRESCRIPTION

GENERAL					
Date May 5, 2008			Forest Management Unit Roscommon		
Timber Sale Number (if applicable) 71-034-08-01			Sale Name (or prescription name) Moorestown Rd Red Pine		
LOCAL CONTACT					
Telephone Number (989) 275 - 4622 EXT 2740			FAX Number (989) 275 - 6203		
Name Steve Anderson			Email Address Anderssl@michigan.gov		
<input checked="" type="checkbox"/> Map of Project Area Attached					
LEGAL DESCRIPTION					
T24N R4w Section(s) 24 Description sesw of 6; nsw of 5					
Year of Entry: 2008 Compartment(s):21 Stand Number(s): 21 and 26					
THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE					
Estimated Acres: 19 Source: <input checked="" type="checkbox"/> OI <input type="checkbox"/> GPS <input type="checkbox"/> Other _____					
Payment will be made on the basis of these estimated acres.					
TREATMENT & OBJECTIVE					
STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
21	R6	12	140	Thinning	Red Pine
26	R6	7	160	Thinning	Red Pine
PRESCRIPTION					
1. Boundary, mark, GPS, and cruise. Thin from below, removing poor form and suppressed trees. Mark access routes through areas of low quality and along old roads, prior to marking majority of stand. Residual BA will vary from 90-120 Sq ft, dependant on original stocking and quality. If removal of hardwoods will excessively damage the residual stand, they should be marked with green paint to leave. Cruise jack pine, any hardwoods and marked trees.					
Access: M-33					
DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK					ESTIMATED DATE
CONTRACT WORK CAN BEGIN:					
<input checked="" type="checkbox"/> Immediately <input type="checkbox"/> Date:					
CONTRACT WORK MUST BE COMPLETED BY: Date 12/15/2008					

PAINT LINE WORK

X 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	
Private boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Blue	<input type="checkbox"/> Other:
Sale boundary	x	<input type="checkbox"/>	X Red	<input type="checkbox"/> Other:
Sale cutting unit	x	<input type="checkbox"/>	X Yellow	<input type="checkbox"/> Other:
Stand type line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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 <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:

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: N/S

CRUISING UNITS	1 point per acre	SPACING (CHAINS)
Stand 21	1	3 X 3
Stand 26	1	3 X 3
TOTAL NUMBER OF CRUISE POINTS	19	

Cruise Special Instructions:

Cruise all species separately, unless otherwise noted at on site meeting with Roscommon Field Office Staff
 Residual BA by species should also be recorded at each point
 Cruise data should be separated per Payment Unit with in a particular stand, however-cruise point density shown is based on stand acreage, not PU acreage. (prevents over-sampling)

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 Residual BA (Basal Area): 100

TREATMENT	NUMBER	SIZE
Regeneration Gaps Per Acre	none	none
Girdled Trees Per Acre	none	

PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Orange slash, visible all the way around the tree, and one orange dot at the stump/ground line	10.0"	9.0"
Pulpwood	Orange slash, visible all the way around the tree, and one orange dot at the stump/ground line	4.6"	4.0"

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

TALLY INTENSITIES

SPECIES / PRODUCT	

SPECIES TO FAVOR: Red Pine
SPECIES TO REDUCE: Hardwoods, jack pine
SPECIAL MARKING INSTRUCTIONS:
 Mark using "Crop Tree Release" method (see *The Compleat Marker* for more info).
 Retain 1-2 wildlife den trees per acre, when present.
 Retain 1-2 trees of declining vigor for future snag production.
 Regeneration gaps should be placed in areas containing poor quality trees (if possible).

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

RESTRICTIONS:

PAINT:

1. Call Jason Hartman at (989) 275-4622 ext 2742, to make arrangements for paint.
2. Paint will be supplied from Roscommon 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. A list of names that marked or cruised each payment unit, including a Map of this info.
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.

ROSCOMMON 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).
4. The Roscommon Management Unit does not contract the marking of private lines on any of our timber sales. Management Unit personnel will mark private lines with blue paint and the contractor will mark remaining stand(s) with red paint so as to obtain complete closure of all stands designated for cutting.
5. If sale is to be divided into cutting units, line location will be as shown on attached map of sale. Cutting lines will be marked with yellow paint on four sides of trees.
6. Place Marks approximately six feet above the base of the tree.
7. The contractor will keep track of total quarts of paint used per-sale by color.
8. Contractor must use GPS to determine acreage.
9. Position Mode must be set so that GPS receiver collects data from a minimum of four satellites and 3D.
10. GPS receiver must log PDOP, SNR, number of satellites, and mode of collection (Manual/GPS).
11. PDOP mask must not exceed 7. This can be modified if approved by the Unit Manager.
12. GPS data must be differentially correct and provided in either ESRI .SHP or Trimble .COR format. Files will contain PDOP(HDOP at the discretion of the Unit Manager), SNR, number of satellites, and mode of collection (Manual/GPS) for each point collected. In addition, supply a disk of traverse file along with hard copy of the corrected traverse file.

ROSCOMMON MANAGEMENT UNIT
TIMBER CRUISING SPECIFICATIONS

1. Cruise at a rate specified in the Timber Sale Preparation Prescription.
2. Use a 10-factor prism for all plots. Plots shall be evenly distributed throughout sale area.
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. 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 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.
6. All cruise sheets must have compartment number, stand number, unit number, prism factor, date, individual tree species, and the cruiser's name.
7. A copy of the POSALE program will be provided to the successful bidder for cruise data entry. Original cruise sheets and a disk containing the cruise data exported from POSALE must be delivered upon the completion of the sale. **Note: At the cruise data entry screen in POSALE, when prompted to enter the stand acres, enter your actual GPS acres for that stand—NOT the contract's estimated inventory-based acreage.**

ROSCOMMON MANAGEMENT UNIT
LEAVE TREE MARKING SPECIFICATIONS

1. Leave Trees must be marked at breast height and also stump marked with green paint.
2. Paint on leave trees must be able to be seen from all sides of the tree.
3. Den trees and good mast trees, if found, must be marked to leave for wildlife.