



TIMBER SALE PRESCRIPTION

GENERAL					
Date 2/3/2009			Forest, Mineral and Fire Management Unit Gladwin Management Unit		
Timber Sale Number (if applicable) 73-001-09-01			Sale Name (or prescription name) Otter Pines		
LOCAL CONTACT					
Name Mike Hanley			Telephone (517) 243-2028		
Email Address hanleym@michigan.gov			FAX (989) 426-1454		
<input checked="" type="checkbox"/> Map of Project Area Attached					
LEGAL DESCRIPTION					
NW¼,NW¼ & W½,SW¼ & SE¼,SW ¼ & S½,SE¼ Sec 15 & S½,SE¼ & NE¼,SE¼ Sec 16 & W½, SE¼ Sec 17 of T20N R05W					
Year of Entry: 2009 Compartment(s): 11 Stand Number(s): 1, 2, 8,9,10,17,24,39 & 48					
THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE					
Estimated Acres: 216 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
1	R6	5	110	Final Harvest	Red Pine
2	R9	41	160	Thinning	Red Pine
8	J6	42	110	Final Harvest	Red Pine
9	R6	15	220	Thinning	Red Pine
10	O6	27	80	Final Harvest	Oak
17	R9	22	110	Final Harvest	Red Pine
24	O5	21	60	Final Harvest	Oak
39	O9	12	90	Final Harvest	Oak
48	R9	31	160	Thinning	Red Pine
PRESCRIPTION					
<ul style="list-style-type: none"> Stand 1: Red Pine removal: Do not mark R. Pine. Mark to leave Oak with green paint to meet retention guidelines. Leave SE corner uncut to meet retention guidelines. Stand 2: Mark to cut with orange paint retain 120 BA/AC. Favor the removal of damaged trees, dominant and codominant. Retaining all scattered Oaks. Focus retention along snowmobile trail. Stand 8: Jack Pine removal: Do not mark J. Pine. Mark to leave with green paint a mix of Red Pine and Oak to meet retention guidelines. Focus retention along snowmobile trail. Stand 9: Mark to cut with orange paint. Individual tree mark to reduce residual to 110 BA/AC. Stands 10, 17, 24 & 39: Final Harvest: Do not mark Red & White Pine. Mark to leave scattered Oaks with green paint to meet retention guidelines. Focus retention along snowmobile trail. Stand 48: Jack Pine removal. Mark to cut Oak with orange paint retaining 10 BA/AC of Oak. Mark to cut Red Pine with orange paint retaining 90 BA/AC of Red Pine. In stands 2 and 48: Target the removal of Red Pine trees for; <ol style="list-style-type: none"> 1) Creating good operational access for logging operations (rows are indistinguishable in many areas). 2) Suppressed, forked and poor health trees. 3) Favor the removal of the largest diameter trees to reach desired tree spacing. Access: Via Haskell Lake Road, Otter Road and various state two tracks. 					
DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK					ESTIMATED DATE
DNR will run and paint East property line of Stand 48					1/31/09
CONTRACT WORK CAN BEGIN <input checked="" type="checkbox"/> Immediately <input type="checkbox"/> Date:					
CONTRACT WORK MUST BE COMPLETED BY Date 07/31/2009					

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
Private boundary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Red <input type="checkbox"/> Other:

Contractor to paint red and blue lines (private boundary) in Stands: 1, 2, 8, 10, 17 & 39. DNR to paint blue line in Stand 48.

Standards for marking lines against private land: The sale area has survey corners. Copies of survey information may be obtained at the Gladwin Field Office to facilitate the location of private lines. The blue line is to be accurately located leaving no buffers along private boundaries.

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	PDOP ≤ 7
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP ≤ 7
Stand	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP ≤ 7

Special Instructions:

Contractor must GPS all stands and/or payment units separately. Contractor must also provide a GPS file and hard copy of each stand. See map for location and color of lines to be GPS'd.

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/A

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
TOTAL NUMBER OF CRUISE POINTS		

Cruise Special Instructions: DNR to cruise all stands.

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): Varies by stand. See prescription section.

- **Stand 2:** 120 (Minimum 110 to Maximum 130)
- **Stand 9:** 110 (Minimum 100 to Maximum 120)
- **Stand 48:** 100 [10 BA oak + 90 BA red pine] (Minimum 90 to Maximum 110)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre			
Girdled Trees Per Acre			
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Slash visible from all sides	10" Diameter Class	8" Diameter Class
Sawbolts			
Pulpwood	Slash visible from all sides	5" Diameter Class	4" Diameter Class

TYPE OF WORK	WORK TO BE DONE	NOT APPLICABLE	PAINT COLOR
Trees marked to leave	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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
N/A	1 :
	1 :
	1 :
	1 :

SPECIAL MARKING INSTRUCTIONS

For all stands Michigan DNR retention guidelines must be followed. See individual stand prescriptions for retention details. Contractor must GPS leave islands. Implementation of the retention guidelines will be discussed on a stand by stand basis at the pre work meeting.

Where possible focus retention along snowmobile trail in Stands 2, 8, 10, 17 and 39.

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 Mike Hanley at (517) 243 - 2028, to make arrangements for paint.
2. Paint will be supplied from Gladwin 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.
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.