



TIMBER SALE PRESCRIPTION

GENERAL

Date 10/18/2009	Forest, Mineral and Fire Management Unit Gladwin Management Unit
Timber Sale Number (if applicable) 73-008-10-01	Sale Name (or prescription name) Highlands Oak

LOCAL CONTACT

Name Mike Hanley	Telephone (517) 243-2028
Email Address hanleym@michigan.gov	FAX (989) 426-1454

Map of Project Area Attached

LEGAL DESCRIPTION

E1/2 of the SW1/4 and the SE ¼ of **Sec 22** and also the SW ¼ of the NW1/4 of **Sec 27** and also the W 1/2 of **Sec 34 of T18N R02E**

Year of Entry: 2010 Compartment(s): 75 Stand Number(s): 14, 25, 33, 60 and 79

THIS TIMBER SALE CONTRACT IS BASED ON THE FOLLOWING ACREAGE

Estimated Acres: 120 Source: OI GPS Other IFMAP
 Payment will be made on the basis of these estimated acres.

TREATMENT & OBJECTIVE

STAND #	COVER TYPE	ACRES	BA	TREATMENT	MANAGEMENT OBJECTIVE
14	O8	60	100	Shelterwood	Mixed Oak
25	O8	16	40	Seed Tree w/ reserves	Aspen/Oak
33	R6	12	160	Thinning	Red Piine
60	O7	10	30	Seed Tree w/ reserves	Mixed Oak
79	O9	22	90	Shelterwood w/reserves	Mixed Oak

PRESCRIPTION

- **Stand 14:** Mark to leave with green paint one Jack Pine per acre and all Red Pine, White Pine and White Oak. Mark additional Oak to achieve a total for all species of 20 BA/AC. Mark to leave with green paint additional trees in the vicinity of campsites. Campsite locations and specifics will be identified during pre work meeting.
- **Stand 25:** Mark to leave with green paint all White Oak and White Pine. Mark additional large Oak to reach total residual of 10 BA/AC. Mark to leave with green paint any trees in vicinity of campsites.
- **Stand 33:** Mark to cut with Orange paint, regardless of species, to create 20 foot wide rows with 40 feet between rows. Target 110 BA/AC. All trees within rows must be marked.
- **Stand 60:** Mark to leave with green paint 10 BA/AC of best super canopy Oak.
- **Stand 79:** Mark to leave with green paint a total of 40 BA/AC of best, mature trees. Favor the retention of Red Oak, then White Oak. All Red Pine are to be left but not marked.
- **Access:** Via Grim Road, Center Fireline Trail and various state two tracks.

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 Date **07/31/2010**

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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yellow	<input type="checkbox"/> Other:
Stand type line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other:

Special Instructions for paint line work: See attached map for locations and colors of lines to be marked.

Standards for marking lines against private land: N/A

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 ≤ 3
Payment Unit	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	PDOP ≤ 3
Stand	<input type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	

Special Instructions:

Contractor must GPS all stands, payment units, and/or retention islands separately. Contractor must also provide a GPS file and hard copy of each stand printed at a scale of 1:15840. 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 North-South or East-West

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
Stands 14, 25, 33, 60 and 79	1	Evenly Spaced
TOTAL NUMBER OF CRUISE POINTS	120 (approximately)	

Cruise Special Instructions:

- Total number of cruise points is estimate, based on estimated acres. Actual number should be based on 1 plot per acre, for acreage determined by GPS.
- **ALL CRUISE POINTS MUST SHOW RESIDUAL BA.**
- Contractor **MUST** show plot locations for each stand on their GPS stand boundary map. Plot locations do **NOT** need to be GPS'd.
- Plot center locations must be marked on the ground and at eye level with brightly colored ribbon.
- Imagery and shapefile information for Solo as well as TCruise cruising template must be made available upon request.

It is preferred that contractor use DNR tally sheets. Contractor may use their own tally sheets, with approval by Gladwin Forest Management Unit.

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):

Stand 14: 20 (Minimum 10 to Maximum 30)

Stand 25: 10 (Minimum 0 to Maximum 20)

Stand 33: 110 (Minimum 100 to Maximum 120)

Stand 60: 10 (Minimum 0 to Maximum 20)

Stand 79: 40 (Minimum 30 to Maximum 50)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre		N/A	N/A
Girdled Trees Per Acre		N/A	N/A
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs	Slash visible from all sides	9.1" Diameter Class	8" Diameter Class
Sawbolts			
Pulpwood	Slash visible from all sides	4.6" 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

See individual stand prescriptions for retention details. Contractor must GPS leave islands when applicable. Implementation of the retention guidelines will be discussed on a stand by stand basis at the pre work meeting.

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.