



## TIMBER SALE PRESCRIPTION

**GENERAL**

Date 2/18/2009	Forest, Mineral and Fire Management Unit Traverse City
Timber Sale Number (if applicable) 61-029-09-01	Sale Name (or prescription name) Connector Mix

**LOCAL CONTACT**

Name Patrick Ruppen	Telephone (231) 922 - 5280
Email Address ruppenp@michigan.gov	FAX (231) 922 - 1853

**Map of Project Area Attached**

**LEGAL DESCRIPTION**

T27N R10W Section(s) 24 Description Part of section 24 nw of Consumers Power Transmission line

Year of Entry: 2009 Compartment(s):42 Stand Number(s): 71, 74, 76

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

Estimated Acres: 153 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
74	O8	124	180-220	Shelterwood	Pine/mixed deciduous
71	A9	21	180-220	CC with reserv	Aspen/mixed pine
76	A7	8	180-220	Group selection	Aspen/pine/oak.

**PRESCRIPTION**

1. Stand 74 1.Cut all aspen, red maple. 2.Mark well formed/healthy oak to retain (40 ba. +/- 20) of retention dependent on quality and amount of residual pine. 3. Mark trees to drop for coarse woody debris in aspen pockets (1-2)/acre. 4. Leave all red and white pine-cut all jack pine.
2. Stand 71 1. Cut all aspen and red maple. 2.Leave all pine. 3. Mark well formed healthy oak to retain (2-4/acre) as found. Mark trees to drop for coarse woody debris (1-2)/acre.
3. Stand 76. 1. Cut all aspen and red maple. 2. Retain all pine. Mark oak for retention (40ba. +/- 20). Mark trees to drop for coarse woody debris in aspen pockets (1-2/acre)

**Access** access via county roads and two tracks. Four wheel drive vehicle may be necessary dependant on road conditions.

DNR PREPARATION WORK TO BE DONE PRIOR TO CONTRACT WORK	ESTIMATED DATE
lines painted and GPS work done.	02/28/2009

**CONTRACT WORK CAN BEGIN**

Immediately  Date:

**CONTRACT WORK MUST BE COMPLETED BY** Date 08/30/2009

**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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Blue	<input type="checkbox"/> Other:
Sale boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Red	<input type="checkbox"/> Other:
Sale cutting unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 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 type="checkbox"/> GPS <input type="checkbox"/> String Chain <input type="checkbox"/> Other	
Payment Unit	<input 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/a

CRUISING UNITS	NUMBER OF PLOTS PER ACRE	SPACING (CHAINS)
Stand 71    19 plots	1	3.1 X 3.1
stand 74 and 76 combined = 73 plot	.54	4.3 X 4.3
		X
		X
<b>TOTAL NUMBER OF CRUISE POINTS</b>	92	

**Cruise Special Instructions:**

Cruise plot centers must be staked with a plot-numbered ribbon and additional flagging must be hung at least 4' high around plot stake. Cruise all products after green-marking retention. Better quality red oak logs should be separated in tally. Pin oak/low quality red oak logs will be cruised as mixed oak logs. White oak should be tallied separately. All oak pulpwood cruised as mixed oak, aspen logs cruised by species and red maple tallied separate. Aspen pulp may be cruised as mixed aspen pulpwood. Contractors using TCruise should provide .tce and .tcd files for the cruise data. If solo is also used, a waypoint file for the cruise plot centers should also be provided rather than a paper map. For contractors not using TCruise, cruise data must be entered in to the contractor version of TSALE and data disk delivered.

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):** 40 (Minimum 20 to Maximum 60)

TREATMENT		NUMBER	SIZE
Regeneration Gaps Per Acre			
Girdled Trees Per Acre			
PRODUCT	MARKING SYMBOL	MINIMUM DBH	TOP DIB
Sawlogs			
Sawbolts			
Pulpwood			

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 drumming logs

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

**SPECIAL MARKING INSTRUCTIONS**

Most of this area is being harvested to regenerate oak and aspen and to release advanced pine regeneration. Red and White Pine will be retained and aspen, red maple, jack pine and unmarked oak cut per contract specification. Oak will be green marked for retention to produce mast and shelter pine regeneration as it grows in to stand. Oak quality is variable. Well formed/healthy oak should be retained averaging 40 ft of basal area. More oak retention will be expected where quality is good and less retention will be expected where oak is poor quality or there is a heavier pine component in canopy. Because of the variability in these stands an expanded acceptable basal area range of +/- 20 sq ft has been used. However, the above guidelines will be expected to be implemented on the ground. In larger aspen pockets 1-2 trees/acre are to be marked for coarse woody debris-drumming logs. Orange paint should be applied in X's around tree. Specific marking guidelines will be discussed with contract administrator at start of work.

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 Pat Ruppen at (231) 922 - 5280x6843, to make arrangements for paint.
2. Paint will be supplied from the Traverse City 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. Cruise data for each payment unit either as .tce/.tcd files from TCruise or data disk with data entered in TSALE-contractor version.