



**DEPARTMENT OF NATURAL RESOURCES
STATE OF MICHIGAN
TIMBER SALE PROSPECTUS #7093**

SCHEDULED SALE DATE AND TIME: **9:00 a.m. (local time) on August 25, 2022.**

LOCATION: **BARAGA MGMT UNIT, 427 US 41 NORTH, BARAGA, MI 49908.**

CONTACT NAME: Brad Carlson

PHONE NUMBER: (906) 353-6651

PROSPECTUS NOTE: The bidder is advised to inspect the sale area and review the location, estimated volumes, operating costs and contract terms of proposed sales. Please be aware that some landowners may request 60 days or more notice for access across their land.

Notice is hereby given that bids will be received by the Unit Manager, BARAGA MANAGEMENT UNIT, for certain timber on the following described lands:

Forties Flopped Farm (11-014-22) / T53N, R32W, SEC. 4 , NWNW.

T54N, R32W, SEC. 33, SENW,SW,W1/2SE.

Houghton County, Advertised Price \$8,360.45, 120.1 Acres, Aspen, Spruce/Fir/ Tamarack.

SALE NOTE: All units of volume listed for this sale were estimated using the Inventory Manager computer program and the new Michigan taper model.

TIMBER SALE INFORMATION

Forties Flopped Farm (11-014-22)
T53N, R32W, SEC. 4; T54N, R32W, SEC. 33.
Houghton County (Advertised Price \$8,360.45)

SALE NOTE: All units of volume listed for this sale were estimated using the Inventory Manager computer program and the new Michigan taper model.

A timber sale contract for this lump sum, sealed bid timber sale will be awarded to the responsible bidder offering the highest sealed bid price. All units of volume listed below were estimated using the Inventory Manager computer program and the new Michigan taper model. Bids must be at or above the following advertised price for each product and species:

<u>PRODUCTS & SPECIES</u>	<u>ESTIMATED UNITS*</u>	<u>ADVERTISED PRICE</u>
Pulpwood		
Balsam Fir	585 Cords	\$ 1.50 / Cord
Mixed Aspen	734 Cords	\$ 5.80 / Cord
Mixed Hardwood	295 Cords	\$ 2.05 / Cord
Mixed Spruce	819 Cords	\$ 2.20 / Cord
Paper Birch	293 Cords	\$ 1.20 / Cord
Tamarack	334 Cords	\$ 1.40 / Cord

* The total volume is statistically estimated within plus (+) or minus (-) 6.83 percent. There are an estimated 3,055 cords on this timber sale, plus or minus 209 cords at the 95% confidence level. The estimated units are final and not subject to adjustment. Prospective bidders are urged to examine this timber and to make their own estimates of quantity and quality.

BOND AND PAYMENT SCHEDULE:

1. A bond in the amount of \$400.00 to insure faithful performance of the conditions of the contract will be deposited by the successful bidder within 21 days of the sale award.
2. Cutting in any sale or unit without the required advance payment would be considered a trespass.
3. Total payment must be paid in advance or according to the following schedule:
 - (a) Ten percent (10%) of the sale value must be paid within 21 days of the sale award.
 - (b) The 10% down payment will be credited towards the first unit cut.
 - (c) Payment for each of the following units must be made before cutting begins in that unit:

PAYMENT UNIT NUMBER	PERCENT OF TOTAL SALE VALUE
01	13.8%
02	45.2%
03	41.0%
4. If no cutting takes place, the 10% down payment will not be refunded.
5. Operations on the contract issued will terminate on 06/30/2026.

SALE STATISTICS

Volumes were calculated in cubic feet using the Michigan taper model. Cubic foot volume includes all wood inside bark for the product indicated. For display purposes, cubic feet were converted to cords and MBF using a simple conversion factor, e.g. 79 cubic feet per cord and 185 cubic feet per MBF. The cubic foot volumes are precise; the cords and MBF volumes are not. Cubic foot volume cannot be directly converted to cords or boards with precision.

SALE VOLUMES

The total estimated sale volume may not equal the sum of the species/products due to the nature of statistical calculations associated with double sampling methodology.

<u>VOLUME</u>			<u>STATISTICAL RANGE IN CORDS</u>	
<u>TOTAL CUBIC FEET</u>	<u>TOTAL CORDS</u>	<u>PERCENT ERROR</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
241,319	3,055	6.83%	2,846	3,264

VDU VOLUMES

A VDU is a Volume Determination Unit. Volumes and their associated statistics are calculated at the VDU level and summarized to the sale level. There is often a one to one relationship between a VDU and a Payment Unit, but not always, depending on the cruise design. Refer to the VDU TO PAYMENT UNIT table.

	VOLUME			RANGE IN CORDS	
VDU	TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
5	44,147	559	15.84%	470	647
6	109,542	1,387	10.55%	1,240	1,533
10	87,630	1,109	10.82%	989	1,229
TOTAL:	241,319	3,055		2,700	3,409

VDU TO PAYMENT UNIT

When a VDU is associated with more than one Payment Unit (PU), the VDU volumes are assigned to the PU based on acres of the VDU within the PU.

VDU	VDU ACRES	PU	PU ACRES
5	19.2	1	19.2
6	54.1	3	54.1
10	46.8	2	46.8
TOTAL:	120.1		120.1

DESCRIPTION OF TIMBER BY PU (PU)

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE				
1	Balsam Fir	Pulpwood	102	Cords	19.2	\$1,149.70				
	Mixed Aspen		35	Cords						
	<i>Quaking Aspen</i>		35	<i>Cords</i>						
	Mixed Hardwood		38	Cords						
	<i>Red Maple</i>		3.7	<i>MBF</i>						
	<i>Red Maple</i>		31	<i>Cords</i>						
	Mixed Spruce		221	Cords						
	<i>Black Spruce</i>		197	<i>Cords</i>						
	<i>White Spruce</i>		24	<i>Cords</i>						
	Paper Birch		56	Cords						
	<i>Paper Birch</i>		2.5	<i>MBF</i>						
	<i>Paper Birch</i>		51	<i>Cords</i>						
	Tamarack		116	Cords						
2	Balsam Fir	Pulpwood	244	Cords	46.8	\$3,786.35				
	Mixed Aspen		480	Cords						
	<i>Quaking Aspen</i>		480	<i>Cords</i>						
	Mixed Hardwood		127	Cords						
	<i>Red Maple</i>		3.7	<i>MBF</i>						
	<i>Red Maple</i>		120	<i>Cords</i>						
	Mixed Spruce		88	Cords						
	<i>Black Spruce</i>		88	<i>Cords</i>						
	Paper Birch		152	Cords						
	<i>Paper Birch</i>		152	<i>Cords</i>						
	3		Balsam Fir	Pulpwood			239	Cords	54.1	\$3,424.40
			Mixed Aspen				219	Cords		
			<i>B. T. Aspen</i>				82	<i>Cords</i>		
<i>Quaking Aspen</i>		137	<i>Cords</i>							
Mixed Hardwood		130	Cords							
<i>Red Maple</i>		3.3	<i>MBF</i>							
<i>Red Maple</i>		123	<i>Cords</i>							
Mixed Spruce		510	Cords							
<i>Black Spruce</i>		502	<i>Cords</i>							
<i>White Spruce</i>		8	<i>Cords</i>							
Paper Birch		85	Cords							
<i>Paper Birch</i>		7.3	<i>MBF</i>							
<i>Paper Birch</i>		70	<i>Cords</i>							
Tamarack		218	Cords							
TOTAL:			3,060	Cords						

Sale Specific Conditions & Requirements

Sale Name: Forties Flopped Farm

Sale Number: 11-014-22 Seq#: 2

1 - Sale Area

1.2 - Boundaries

1.2.1 - Painted boundaries (9/19)

The sale boundary and Payment Unit boundaries are marked and identified by blue and red paint. Exterior sale boundary lines against private property are marked with blue paint. Exterior sale boundary lines against state are marked with red paint. Interior Payment Unit boundaries are marked with red paint. The painted boundary line trees are not Included Timber and are to be protected unless otherwise directed by the sale administrator. Red painted trees designating an interior Payment Unit boundary are only to be cut when all surrounding Payment Units have been paid.

2 - Timber Specifications

2.1 - Included Timber

2.1.2 - Clearcut unit(s) w/o unmerchantable trees (8/11)

Within Payment Unit(s) 1-3, cut all trees which meet minimum piece specifications in 2.2 Utilization, except white pine, oak, hemlock, and cedar. Also, retain all yellow birch over 18" DBH if present.

2.2 - Utilization

2.2.8 - Utilization and removal (5/14)

All products meeting standards set forth in General Condition and Requirement 2.2 - Utilization must be removed from the Sale Area. This is because excessive woody debris inhibits regeneration.

3 - Payments

3.4 - Damaged Timber

3.4.1 - Damaged timber (7/16)

General Condition and Requirement 3.4 Damaged Timber, defines liquidated damages for undesignated live merchantable trees which are cut or injured. In addition, extreme care should be taken to avoid damage to tree seedlings and saplings.

4 - Transportation

4.1 - Construction

4.1.1 - Stream crossings, general (3/11)

All stream crossing structures will be temporary and therefore, shall be provided by the Purchaser, and must be removed upon completion of the sale. All permits for stream crossings will be provided by the DNR for crossings located on state land.

4.1.3 - Slash and earthen piles (8/04)

Piles or windrows of earth along roads and landings that have been widened or constructed shall be leveled. Slash from road maintenance or construction, including stumps, shall be dispersed throughout the sale, chipped, utilized, or otherwise removed from the sale.

4.1.5 - Culverts (5/14)

Roads may require the installation of culverts for cross drainage or at natural drainage-ways. If culverts are needed in these locations, their placement will be specified by the sale administrator, and they shall be installed prior to hauling. The culverts shall be new, corrugated metal or plastic gauge. Culverts will be a minimum of 12 inches in diameter and 24 feet in length. Culverts will need to be removed unless otherwise directed by the sale administrator, fill shall be removed from wetland soils as specified. Soils shall be maintained and left in a non-erodible condition, with water bars, seed, fertilizer, mulch, and slash installed as directed by the sale administrator and as specified in the BMP manual. Stream crossing permits, if needed, will be obtained by the DNR for crossings located on state land.

4.1.6 - Road construction (1/09)

Construction of new roads or improvements of existing roads shall be done in such a way as to minimize the environmental and visual impacts. Merchantable trees shall be cut and utilized unless otherwise directed. Non-merchantable trees shall be severed and laid flat on the ground. Slash shall be scattered, and not left in windrows and kept a minimum of 10 feet back from the road edge, be chipped, utilized, or otherwise removed from the sale. Stumps shall be set upright, not left on edge, and be moved at least 10 feet away from the road edge. Disturbed soil shall be feathered into the woods and not left in berms or windrows.

4.1.7 - Road closure (10/11)

All new roads built into the sale must be blocked to vehicle traffic upon completion of the sale. Overgrown roads that are reopened shall be considered new roads. In general, this will require constructing a four (4') foot high berm of stumps and logs covered with earth. Contact the sale administrator for specific details of design and placement.

4.2 - Maintenance

4.2.4 - Grading (10/16)

For completion of the sale, state forest roads must be graded. In general, this will require a road grader or bulldozer to shape up the roads after forest products have been hauled off site. This includes cleaning of drainage areas, grading, crowning, and filling with gravel, if necessary. The grading equipment to be used must be approved by the Unit Manager or his/her representative.

4.2.5 - Two wheel drive condition (2/04)

All existing trail roads on and adjacent to the sale area must be passable by two-wheel drive traffic for the duration of the sale.

4.4 - Access

4.4.1 - Private property access (3/11)

Permission for access across private land is the responsibility of the Purchaser. Should the Purchaser desire to cross private land, a copy of the written permission from the private landowner may be required by the DNR.

5 - Operations

5.2 - Conduct of Operations

5.2.1 - Slash

5.2.1.11 - Slash for reforestation (3/21)

To facilitate reforestation, the Sale Area shall be left with slash evenly distributed. Bunched tops within the cutting area shall be broken up and scattered. Stumps shall be cut low to the ground. Processing sites shall not be left with a compacted layer of slash; tops from these sites shall be hauled back into the cut area and scattered.

5.2.2 - Hazard Trees/Snags

5.2.2.1 - Den trees (10/16)

Obvious hollow and/or den trees shall be protected and left standing unless they are a safety hazard.

5.2.3 - Operating Restrictions

5.2.3.1 - Operating restrictions (9/11)

Within Payment Unit(s) 1-3, unless changed by written agreement, cutting, skidding, and hauling are limited to the period of December 1 to March 31. This restriction is because the sale is located within a deer wintering area.

5.2.30 - Landing/road top soil protection (2/15)

Top soil on landings and new roads must be removed, stockpiled and saved. Upon completion of the timber sale, soil must be evenly distributed back over the area for revegetation. In addition, the area must be seeded and mulched per instructions of the sale administrator.

5.2.38 - No decking against live trees (2/04)

Cut products may not be decked against unmarked or designated leave trees.

5.4 - Soil Protection

5.4.1 - Rutting restriction, general (7/16)

Operations are to cease immediately if equipment and weather conditions result in rutting of roads and/or skid trails which is 12 inches or greater in depth and 50 feet in length. The Unit Manager or his/her representative may restrict hauling and/or skidding if ruts exceed the specified depth. With the Unit Manager or his/her representative's approval, the Purchaser may return to the area when the risk of rutting has decreased.

5.8 - Protection of Endangered Species

5.8.5 - Protection of raptor nests (3/13)

All trees with raptor nests will be protected if found during harvesting operations. Notification will be made to the Unit Manager or his/her representative who will notify the Wildlife Biologist so an on-site evaluation and recommendation can be made, if necessary.

6 - Safety and Fire Prevention

6.2 - Signing

6.2.1 - Road posting (10/20)

The Purchaser is responsible for posting and maintaining caution signs on Sunshine Road and Red Rock Road prior to beginning operations. The road must be posted at appropriate distances from the Sale Area to warn of logging activity and truck traffic. Signs must be removed when harvest operations are suspended or completed. The Purchaser will provide these signs.

7 - Other Conditions

7.5 - Loss

7.5.1 - Deteriorating timber (7/09)

The sale area has received damage from windthrow in the past and is susceptible to additional damage. The Purchaser should harvest the wood as soon as possible. The Department of Natural Resources is held free of responsibility of any further damage or deterioration due to delay in harvesting.

**TIMBER SALE MAP**

This information provided by authority of Part 525, 1994 PA 451, as amended.

Sale Number	Year
11-014	22

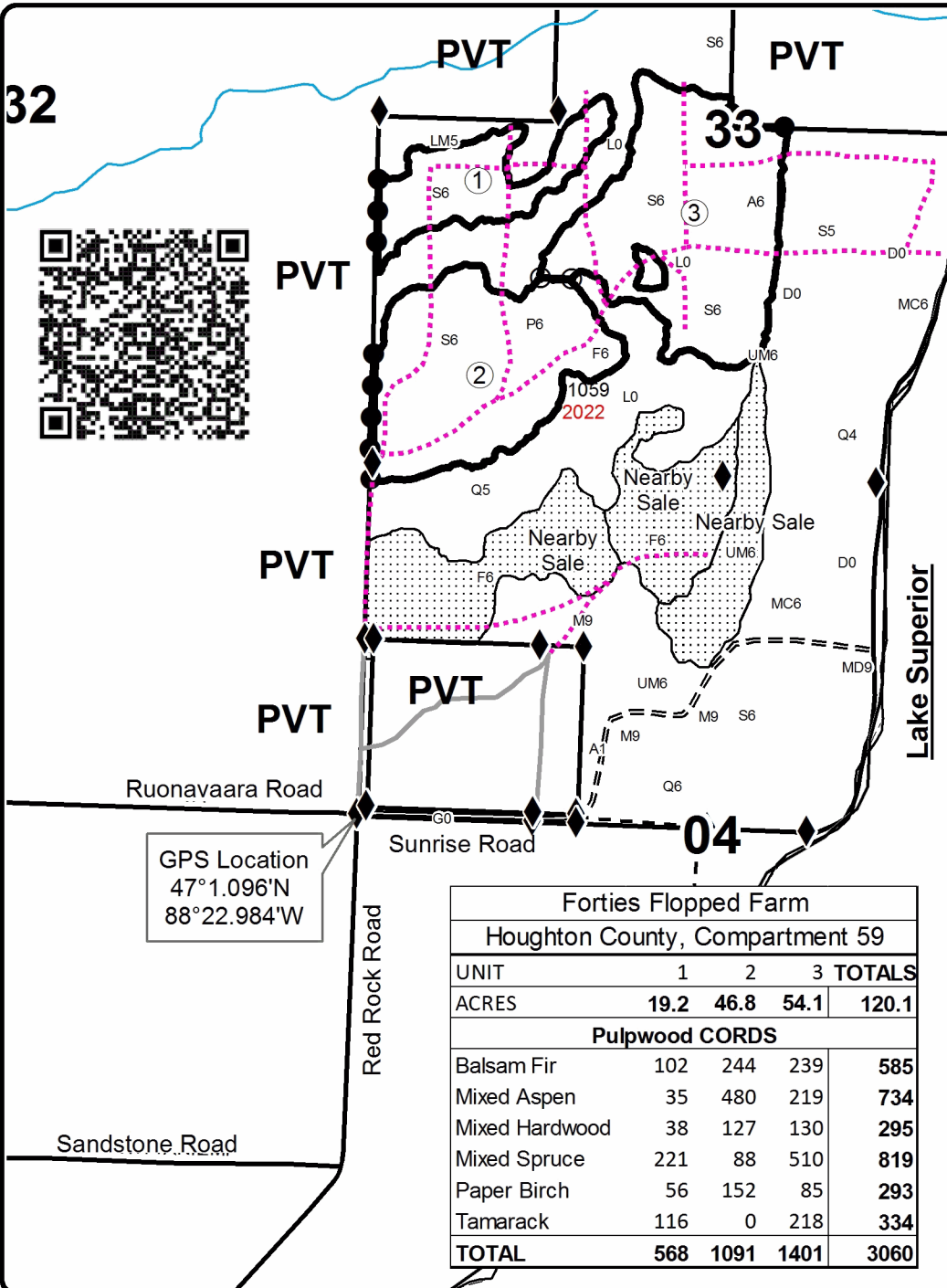
Forest Management Unit Baraga	County Houghton	Mapped By Carlson	Date 1/27/2022	Page 1	of 1
Township 53N & 54N	Range 32W	Section(s) and Subdivision(s) Sec 4 - NWNW; Sec 33 - SENW, SW1/4, W1/2SE	Scale 1:15,840		

Cover Type

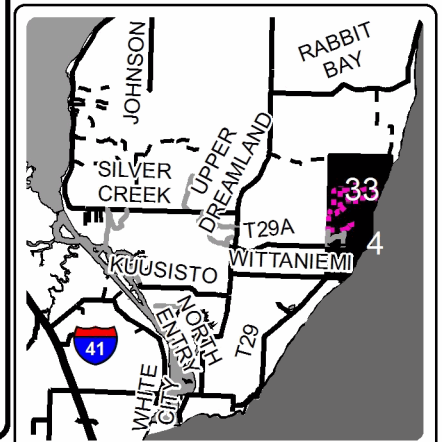
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush
B = Paper Birch	J = Jack Pine	O = Oak	UM = Upland Mixed
C = Cedar	L = Lowland Brush	P = Lowland Poplar	V = Bog or Marsh
D = Treed Bog	LM = Lowland Mixed	Q = Mixed Swamp Conifer	W = White Pine
E = Swamp Hdwoods	M = Mpl, Bch, Brch	R = Red Pine	X = Non Stocked
F = Spruce Fir	MC = Mixed Conifer	S = Black Spruce	Z = Water
G = Grass	MD = Mixed Deciduous	T = Tamarack	

Density

0 = Non Stocked	5 = Pole Timber Medium
1 = Seedling Sapling Poor	6 = Pole Timber Well
2 = Seedling Sapling Medium	7 = Saw Timber Poor
3 = Seedling Sapling Well	8 = Saw Timber Medium
4 = Pole Timber Poor	9 = Saw Timber Well

**Legend**

- ◆ Survey Corners
- == Secondary Forest Road
- == Forest Access Route
- Paved Road
- - Gravel Road
- Private
- Temporary Management Access
- Against State (Red)
- ⊙ Payment Unit (Red)
- Private Line (Blue)
- ▨ Nearby Timber Sales

Locator Map
1:200,000

0 0.125 0.25 0.5 0.75 1 Miles