



**DEPARTMENT OF NATURAL RESOURCES  
STATE OF MICHIGAN  
TIMBER SALE PROSPECTUS #7504**

SCHEDULED SALE DATE AND TIME: **9:00 a.m. (local time) on November 14, 2024.**

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:

Otter Hardwoods (11-011-24) / T51N, R36W, SEC. 24, S1/2SW,SWSE.  
T51N, R36W, SEC. 25, NW,W1/2NE.

Houghton County, Advertised Price \$89,476.20, 189.5 Acres, Hardwood, Sugar Maple.

SALE NOTE: Access is through private property.

Access may be through private land.

# TIMBER SALE INFORMATION

Otter Hardwoods (11-011-24)  
 T51N, R36W, SEC. 24; T51N, R36W, SEC. 25.  
 Houghton County (Advertised Price \$89,476.20)

SALE NOTE: Access is through private property.

Access may be through private land.

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 &amp; SPECIES</u>	<u>ESTIMATED UNITS*</u>	<u>ADVERTISED PRICE</u>
Sawtimber		
Black Cherry	1.9 MBF	\$ 37.00 / MBF
Red Maple	44.2 MBF	\$ 137.00 / MBF
Sugar Maple	249.8 MBF	\$ 256.00 / MBF
Yellow Birch	12.1 MBF	\$ 122.00 / MBF
Pulpwood		
Balsam Fir	2 Cords	\$ 5.20 / Cord
Mixed Hardwood	1,347 Cords	\$ 13.30 / Cord

\* The total volume is statistically estimated within plus (+) or minus (-) 15.40 percent. There are an estimated 2,079 cords on this timber sale, plus or minus 320 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 \$5,000.00 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	22.2%
02	14.8%
03	27.1%
04	23.8%
05	12.1%
4. If no cutting takes place, the 10% down payment will not be refunded.
5. Operations on the contract issued will terminate on 06/30/2028.

**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.

VOLUME		STATISTICAL RANGE IN CORDS		
TOTAL CUBIC FEET	TOTAL CORDS	PERCENT ERROR	MINIMUM	MAXIMUM
164,210	2,079	15.40%	1,759	2,399

**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.

VDU	VOLUME		PERCENT ERROR	RANGE IN CORDS	
	TOTAL CUBIC FEET	TOTAL CORDS		MINIMUM	MAXIMUM
9	164,210	2,079	15.40%	1,758	2,399
<b>TOTAL:</b>	<b>164,210</b>	<b>2,079</b>		<b>1,758</b>	<b>2,399</b>

**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
9	189.5	1	42.1
		2	28.1
		3	51.3
		4	45.0
		5	23.0
<b>TOTAL:</b>	<b>189.5</b>		<b>189.5</b>

**DESCRIPTION OF TIMBER BY PU (PU)**

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
1	Black Cherry	Sawtimber	0.4	MBF	42.1	\$19,884.80
	Red Maple		9.8	MBF		
	Sugar Maple		55.5	MBF		
	Yellow Birch		2.7	MBF		
	Mixed Hardwood		300	Cords		
	<i>Black Cherry</i>	Pulpwood	3	<i>Cords</i>		
	<i>Red Maple</i>		91	<i>Cords</i>		
	<i>Sugar Maple</i>		176	<i>Cords</i>		
	<i>Yellow Birch</i>		30	<i>Cords</i>		
2	Black Cherry	Sawtimber	0.3	MBF	28.1	\$13,266.90
	Red Maple		6.6	MBF		
	Sugar Maple		37.0	MBF		
	Yellow Birch		1.8	MBF		
	Mixed Hardwood		200	Cords		
	<i>Black Cherry</i>	Pulpwood	2	<i>Cords</i>		
	<i>Red Maple</i>		61	<i>Cords</i>		
	<i>Sugar Maple</i>		117	<i>Cords</i>		
	<i>Yellow Birch</i>		20	<i>Cords</i>		
3	Black Cherry	Sawtimber	0.5	MBF	51.3	\$24,195.40
	Red Maple		11.9	MBF		
	Sugar Maple		67.7	MBF		
	Yellow Birch		3.2	MBF		
	Balsam Fir		2	Cords		
	Mixed Hardwood	362	Cords			
	<i>Black Cherry</i>	Pulpwood	4	<i>Cords</i>		
	<i>Red Maple</i>		109	<i>Cords</i>		
	<i>Sugar Maple</i>		213	<i>Cords</i>		
<i>Yellow Birch</i>	36		<i>Cords</i>			
4	Black Cherry	Sawtimber	0.5	MBF	45.0	\$21,260.90
	Red Maple		10.5	MBF		
	Sugar Maple		59.3	MBF		
	Yellow Birch		2.9	MBF		
	Mixed Hardwood		321	Cords		
	<i>Black Cherry</i>	Pulpwood	4	<i>Cords</i>		
	<i>Red Maple</i>		97	<i>Cords</i>		
	<i>Sugar Maple</i>		188	<i>Cords</i>		
	<i>Yellow Birch</i>		32	<i>Cords</i>		
5	Black Cherry	Sawtimber	0.2	MBF	23.0	\$10,868.20
	Red Maple		5.4	MBF		
	Sugar Maple		30.3	MBF		
	Yellow Birch		1.5	MBF		
	Mixed Hardwood		164	Cords		
	<i>Black Cherry</i>	Pulpwood	2	<i>Cords</i>		
	<i>Red Maple</i>		50	<i>Cords</i>		
	<i>Sugar Maple</i>		96	<i>Cords</i>		
	<i>Yellow Birch</i>		16	<i>Cords</i>		
TOTAL:			308.0	MBF		
TOTAL:			1,349	Cords		

## Sale Specific Conditions & Requirements

Sale Name: Otter Hardwoods

Sale Number: 11-011-24 Seq#: 1

### 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 marked with orange paint.

### 2 - Timber Specifications

#### 2.1 - Included Timber

##### 2.1.3 - Cut tree marked unit(s) (12/08)

Within Payment Unit(s) 1-5, all trees are designated for cutting when marked with orange paint above and below stump height, regardless of merchantability.

#### 2.2 - Utilization

##### 2.2.3 - Stump heights (4/07)

Stump heights within the Sale Area shall not exceed 12 inches for trees greater than 10 inches DBH and 4 inches for trees smaller than 10 inches DBH. A written waiver of this requirement may be obtained if wet summer weather makes winter logging necessary.

##### 2.2.4 - Skidding length (2/14)

Skidding of unlimbed tops is not permissible unless approved by the Unit Manager or his/her representative. Skidding of lengths over 17 feet is permissible as long as the Sale Administrator approves the method and machinery used. If at any point damage exceeds specification 3.4.1, all of the remaining wood must be skid in lengths less than 17 feet.

##### 2.2.7 - Uncut designated trees (2/04)

Liquidated damages of \$10.00 per tree will be assessed for every marked tree not cut.

##### 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.

##### 2.2.11 - Chipping restriction (9/14)

If chipping occurs on this sale, then no woody debris present on the ground at the start of the sale may be chipped. In addition, brush or chips may not be stored or stockpiled on-site.

### 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.

No damage is acceptable to undesignated live merchantable trees. Within the Sale Area, if more than 5% of trees (> 4.5" DBH) within a specified area of the sale are damaged, liquidated damages will be assessed for all trees damaged. Rates will be in accordance with General Condition and Requirement 3.4 Damaged Timber.

### 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 or be chipped, utilized or otherwise removed from the sale.

#### 4.1.4 - Timber removed for construction (3/23)

Trees cut or damaged in the process of pre-approved road, landing or skid trail construction will be decked in an area separate from other Designated Timber and not removed until measured by the sale administrator. Payment will be made at contract prices or average prices, if not on the contract.

#### 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. If culverts are removed, 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 (4/24)

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 or 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.

#### 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. In general, this will require constructing a four (4') foot high berm of stumps and logs covered with earth. These roads must be rendered impassable to cars and trucks. Temporary berms may be required if no sale activity occurs for 30 or more consecutive days. 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. A copy of the written permission from the private landowner must be given to the Unit Manager within 30 days of the bid opening and prior to the beginning of operations.

## 5 - Operations

### 5.1 - Notification

#### 5.1.1 - Pre-sale conference (10/16)

A pre-sale conference between the Purchaser and sale administrator is required prior to beginning any operations to determine

landing and road locations. The Unit Manager or his/her representative must be contacted at least 10 days in advance to schedule the conference.

#### 5.1.4 - Post-sale conference (10/16)

A post-sale conference on site between the Purchaser and sale administrator is required 5 days prior to the completion of active logging operations to determine clean-up and repair of landings, road edges, and the fulfillment of other contract specifications.

### 5.2 - Conduct of Operations

#### 5.2.1 - Slash

##### 5.2.1.11 - Slash for reforestation (3/21)

To facilitate reforestation, the Sale Area or Payment Unit(s) 1-5 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) 3, unless changed by written agreement, cutting, skidding, and hauling are not permitted during the period of April 1 to July 30. This restriction is to protect Goshawk nesting.

##### 5.2.3.2 - Operating restrictions (9/11)

Within Payment Unit(s) 1-5, unless changed by written agreement, all areas that were harvested during the previous harvest season must be completed by June 15. This restriction is to allow the clean up areas to revegetate before the dry season.

##### 5.2.3.3 - Bark slippage restriction (3/09)

Within Payment Unit(s) 1-2 and 4-5, unless changed by written agreement, cutting and skidding are not permitted during the period of April 15 to July 15. This restriction is because of bark slippage.

#### 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.

#### 5.2.32 - Decking/landing restoration (9/13)

All decking and landing areas must have the surface area restored to a condition equal to or better than before. This is to ensure the proper regeneration of the stand. Wood debris, chips and "cookies" from trimmings must be removed or scattered away from landing and loading areas and may not be windrowed on the edge.

#### 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.

#### 5.4.2 - Skid trails (2/04)

Skid trails up and down slopes should be avoided. If however this is unavoidable, these trails will be left in a non-erodible condition using water bars, logs, and slash. Placing of slash on these skid trails while logging is ongoing may alleviate need for

any further action. At the direction of the sale administrator, seed, fertilizer, and mulch may also be required.

## 5.8 - Protection of Endangered Species

### 5.8.3 - Red shoulder hawk or goshawk (1) (2/16)

In the event that an active red shoulder hawk or goshawk nest is found, the contract may be amended to protect the nest site until the nest is determined to be inactive. The value of the trees in this excluded area will be refunded or credited to the Purchaser. The nest will be buffered with a five-chain radius (eight acre) protection area, centered on the nest tree, in which there will be no cutting or new roads constructed. Avoid human disturbance, including loading and skidding, in the protection area.

An additional zone of five chains (ten chains centered on the active nest tree) will be established in which there is no management activity from April 1 to July 30. Limit biomass harvesting and chipping operations within this ten-chain zone, retain the maximum one-third of residues per the Woody Biomass Harvesting Guidelines (Michigan DNR 2010). Nests determined to be inactive will be protected with a one-chain no-harvest buffer.

### 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.



**TIMBER SALE MAP**

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

Sale Number <b>11-011-24</b>	Date <b>08/13/2024</b>	
Scale <b>1:15,840</b>	Page <b>1</b>	Of <b>1</b>

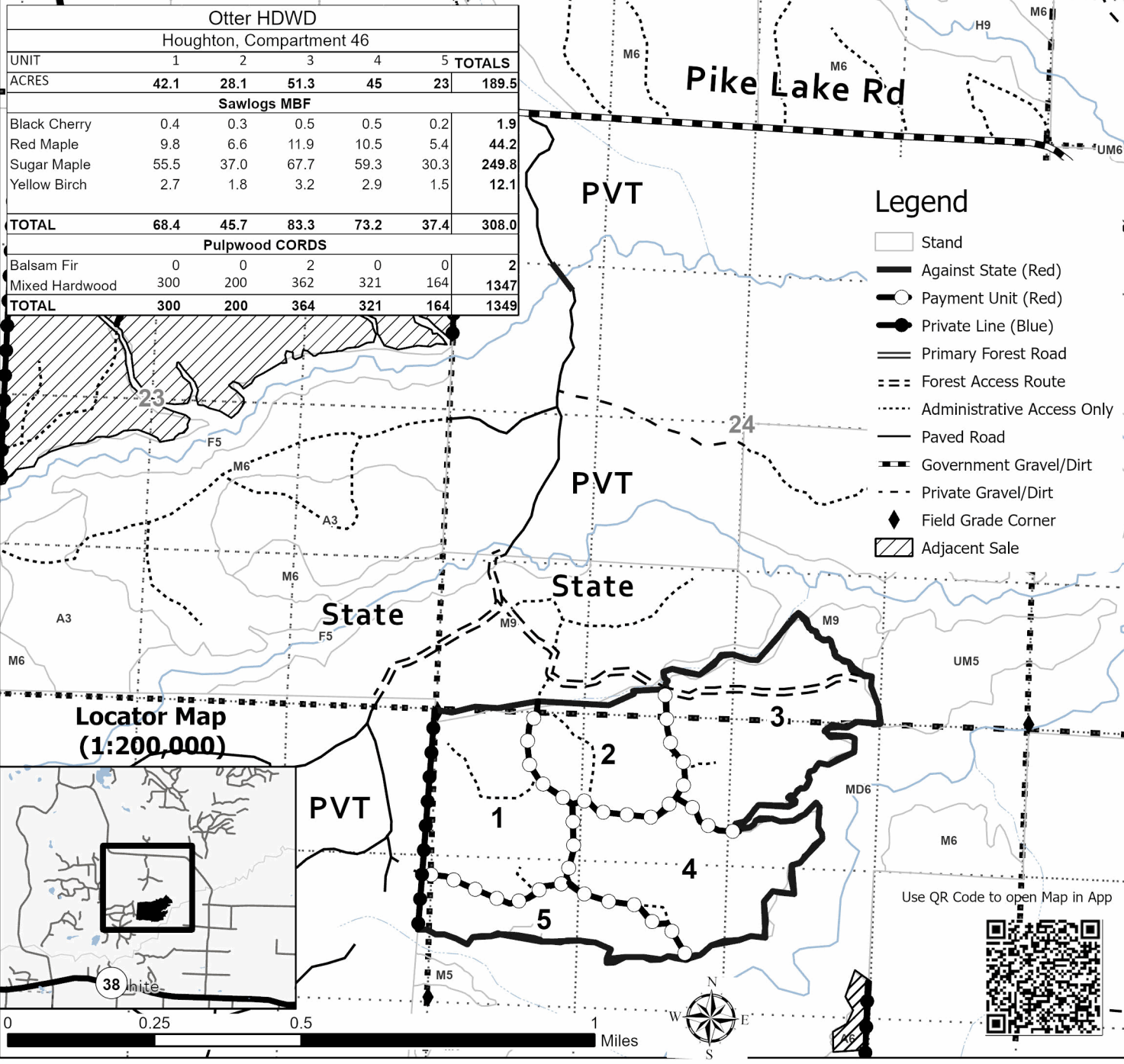
Forest Management Unit <b>Baraga</b>	County <b>Houghton</b>	Mapped By: Houle Cruised By: Houle & Mittlestat
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Township <b>51N</b>	Range <b>36W</b>	Section(s) and Subdivision(s) <b>Sec 24 S1/2SW, SWSE; Sec 25 NW, W1/2NE</b>
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Cover Type			
A = Aspen	J = Jack Pine	O = Oak	U = Upland Brush
B = Paper Birch	K = Rock	P = Lowland Poplar	UM = Upland Mix Forest
C = Cedar	L = Lowland Brush	Q = Mixed Swamp Conifer	V = Bog or Marsh
D = Treed Bog	LM = Lowland Mix Forest	R = Red Pine	W = White Pine
E = Swamp Hardwoods	M = Maple, Beech, Birch	S = Black Spruce	X = Non Stocked
F = Spruce/Fir	MC = Mixed Conifer	T = Tamarack	Y = Sand
G = Grass	MD = Mixed Deciduous	Z = Water	
H = Hemlock	N = Marsh		

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

Otter HDWD						
Houghton, Compartment 46						
UNIT	1	2	3	4	5	TOTALS
ACRES	42.1	28.1	51.3	45	23	189.5
<b>Sawlogs MBF</b>						
Black Cherry	0.4	0.3	0.5	0.5	0.2	1.9
Red Maple	9.8	6.6	11.9	10.5	5.4	44.2
Sugar Maple	55.5	37.0	67.7	59.3	30.3	249.8
Yellow Birch	2.7	1.8	3.2	2.9	1.5	12.1
<b>TOTAL</b>	<b>68.4</b>	<b>45.7</b>	<b>83.3</b>	<b>73.2</b>	<b>37.4</b>	<b>308.0</b>
<b>Pulpwood CORDS</b>						
Balsam Fir	0	0	2	0	0	2
Mixed Hardwood	300	200	362	321	164	1347
<b>TOTAL</b>	<b>300</b>	<b>200</b>	<b>364</b>	<b>321</b>	<b>164</b>	<b>1349</b>



Legend	
	Stand
	Against State (Red)
	Payment Unit (Red)
	Private Line (Blue)
	Primary Forest Road
	Forest Access Route
	Administrative Access Only
	Paved Road
	Government Gravel/Dirt
	Private Gravel/Dirt
	Field Grade Corner
	Adjacent Sale

