



**DEPARTMENT OF NATURAL RESOURCES
STATE OF MICHIGAN
TIMBER SALE PROSPECTUS #7165**

SCHEDULED SALE DATE AND TIME: 11:00 a.m. (local time) on January 4, 2023.

LOCATION: SW REGION-WILD, 621 NORTH 10TH STREET, PLAINWELL, MI 49080.

CONTACT NAME: Cynthia McQueer

PHONE NUMBER: (269) 762-1762

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 Game Area Manager , CRANE POND SGA, for certain timber on the following described lands:

Carson (21-001-22) / T06S, R13W, SEC. 17, NENW.

T06S, R13W, SEC. 18, NWSW.

T06S, R13W, SEC. 19, SWNE,NESW,N1/2SE,SWSE.

T06S, R13W, SEC. 20, W1/2SW.

T06S, R13W, SEC. 29, NENW,S1/2NW.

T06S, R13W, SEC. 8 , SWNE,S1/2SW.

T06S, R14W, SEC. 13, E1/2SE.

Cass County, Advertised Price \$65,391.30, 68.3 Acres, Aspen, Hardwood.

SALE NOTE: All black locust must be harvested.

Access may be through other public land.

TIMBER SALE INFORMATION

Carson (21-001-22)

T06S, R13W, SEC. 17; T06S, R13W, SEC. 18; T06S, R13W, SEC. 19; T06S, R13W, SEC. 20; T06S, R13W, SEC. 29; T06S, R13W, SEC. 8; T06S, R14W, SEC. 13.

SALE NOTE: All black locust must be harvested.

Access may be through other public 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 & SPECIES</u>	<u>ESTIMATED UNITS*</u>	<u>ADVERTISED PRICE</u>
Sawtimber		
B. T. Aspen	112.4 MBF	\$ 81.00 / MBF
Black Cherry	130.4 MBF	\$ 171.00 / MBF
Black Locust	28.6 MBF	\$ 36.00 / MBF
Black Walnut	2.9 MBF	\$ 1,650.00 / MBF
Red Maple	58.9 MBF	\$ 103.00 / MBF
Red Oak	27.1 MBF	\$ 142.00 / MBF
Red Pine	12.3 MBF	\$ 88.00 / MBF
Sugar Maple	11.9 MBF	\$ 227.00 / MBF
Yellow Poplar (Tulip Tree)	25.6 MBF	\$ 142.00 / MBF
Pulpwood		
B. T. Aspen	124 Cords	\$ 1.00 / Cord
Mixed Hardwood	580 Cords	\$ 18.10 / Cord
Red Pine	6 Cords	\$ 36.35 / Cord

* The total volume is statistically estimated within plus (+) or minus (-) 21.95 percent. There are an estimated 1,655 cords on this timber sale, plus or minus 363 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 \$3,269.57 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:

<u>PAYMENT UNIT NUMBER</u>	<u>PERCENT OF TOTAL SALE VALUE</u>
01	38.0%
02	55.7%
03	0.8%
04	4.6%
05	0.9%

4. If no cutting takes place, the 10% down payment will not be refunded.
5. Operations on the contract issued will terminate on 03/01/2025.

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
130,713	1,655	21.95%	1,291	2,018

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
1	1,837	23	225.03%	29	76
2	1,799	23	106.08%	1	47
3	2,284	29	106.08%	2	60
4	7,364	93	194.88%	88	275
5	24,671	312	92.48%	23	601
6	8,998	114	187.45%	100	327
7	21,900	277	86.75%	37	518
8	14,975	190	120.78%	39	418
9	9,989	126	129.92%	38	291
10	5,841	74	45.46%	40	108
11	1,969	25	88.99%	3	47
12	2,656	34	170.02%	24	91
13	8,230	104	87.05%	13	195
14	2,990	38	63.65%	14	62
15	485	6	225.03%	8	20
16	14,724	186	133.87%	63	436
TOTAL:	130,713	1,655		261	3,571

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
1	1.4	1	1.4
2	1.0	1	1.0
3	3.5	3	3.5
4	3.2	4	3.2
5	9.9	2	9.9
6	5.9	2	5.9
7	7.5	1	7.5
8	6.6	2	6.6
9	7.6	1	7.6
10	1.4	2	1.4
11	0.7	2	0.7
12	8.2	5	8.2
13	2.8	2	2.8
14	2.4	1	2.4
15	0.7	2	0.7
16	5.5	2	5.5
TOTAL:	68.3		68.3

DESCRIPTION OF TIMBER BY PU (PU)

PU	MARKET GROUP	PRODUCT	QUANTITY	UNIT	ACRES	ADVERTISE PRICE
1	Black Cherry	Sawtimber	61.1	MBF	19.9	\$24,852.40
	Black Locust		20.8	MBF		
	Black Walnut		2.9	MBF		
	Red Maple		17.1	MBF		
	Red Pine		12.3	MBF		
	Sugar Maple		10.2	MBF		
	Mixed Hardwood		193	Cords		
	Black Cherry		103	Cords		
	Black Locust		11	Cords		
	Black Walnut		2	Cords		
	Red Maple		41	Cords		
	Sugar Maple		36	Cords		
	Red Pine		6	Cords		
2	B. T. Aspen	Sawtimber	106.7	MBF	33.5	\$36,404.70
	Black Cherry		61.3	MBF		
	Black Locust		7.8	MBF		
	Red Maple		38.6	MBF		
	Red Oak		27.1	MBF		
	Sugar Maple		1.7	MBF		
	Yellow Poplar (Tul		25.6	MBF		
	B. T. Aspen		122	Cords		
	Mixed Hardwood		278	Cords		
	Bitternut Hickory		4	Cords		
	Black Cherry		107	Cords		
	Black Locust		4	Cords		
	Black Walnut		11	Cords		
	Ironwood		7	Cords		
	Red Maple		87	Cords		
	Red Oak		15	Cords		
	Sassafras		31	Cords		
	Sugar Maple		3	Cords		
	Poplar (Tulip Tree)		9	Cords		
	3		Mixed Hardwood	Pulpwood		
Black Locust		29	Cords			
4	B. T. Aspen	Sawtimber	5.7	MBF	3.2	\$3,012.00
	Black Cherry		8.0	MBF		
	Red Maple		3.2	MBF		
	B. T. Aspen		2	Cords		
	Mixed Hardwood		47	Cords		
	Black Cherry		19	Cords		
	Red Maple		28	Cords		
5	Mixed Hardwood	Pulpwood	33	Cords	8.2	\$597.30
	Black Cherry		22	Cords		
	Red Maple		11	Cords		
TOTAL:			410.1	MBF		
TOTAL:			710	Cords		

Sale Specific Conditions & Requirements

Sale Name: Carson

Sale Number: 21-001-22 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, red and yellow 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 yellow 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

2.1.1 - Clearcut unit(s) with unmerchantable trees (6/14)

Within Payment Unit(s) 2 and 4, cut all trees that are two (2) inches or more at DBH, except do not cut any trees marked with green paint. In addition, within Payment Unit 4, do not cut any oak, hickory, or elm.

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

Within Payment Unit(s) 1 and 5, all trees are designated for cutting when marked with orange paint above and below stump height, regardless of merchantability. In addition, cut all black locust regardless of merchantability. Also, within Payment Unit 5, cut all aspen and tree of heaven (ailanthus).

2.1.4 - Designated timber unit(s) (6/17)

Within Payment Unit(s) 3, all aspen and black locust trees are designated for cutting, regardless of merchantability.

2.3 - Log Rule

2.3.1 - Log rule (12/08)

All board foot volumes of sawlog size products in this contract have been determined by the Scribner Decimal C Log Rule.

4 - Transportation

4.1 - Construction

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.

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. 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. 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.

4.1.10 - Oversight (12/08)

The Unit Manager, or his/her representative, must be present when the road improvement project is initiated.

4.4 - Access

4.4.3 - Access gate (12/08)

The access gate must be locked at the completion of each day unless otherwise approved by the Unit Manager or his/her representative.

5 - Operations

5.1 - Notification

5.1.1 - Pre-sale conference (10/16)

A pre-sale conference on site between the Purchaser and sale administrator is required prior to beginning a Payment Unit to determine landing and road locations.

5.1.6 - Utility R.O.W. (4/19)

It is the responsibility of the Purchaser to obtain permission from the utility company to utilize the natural gas pipeline R.O.W. for operations. Contact Vector Pipeline at (734) 462-0230.

5.2 - Conduct of Operations

5.2.1 - Slash

5.2.1.10 - No slash in openings (5/10)

No brush or logging debris is to be left in the maintained wildlife opening which is indicated by G0 on the Timber Sale Map. Any damage to the opening shall be repaired according to specifications of the Unit Manager or his/her representative.

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) 2, unless changed by written agreement, cutting, skidding, and hauling are limited to the period of October 1 to March 1. This restriction is to facilitate aspen regeneration.

5.2.3.2 - Operating restrictions (9/11)

Within Payment Unit(s) 1, 4, and 5, unless changed by written agreement, cutting, skidding, and hauling are not permitted during the period of March 1 to July 15. This restriction is required to protect endangered species and reduce oak wilt transmission and bark slippage

5.2.3.12 - Hunting operating restriction (1/18)

No Payment Unit may be started during the period of September 22 to October 2 without permission of the Unit Manager or his/her representative.

In addition, no Payment Unit may be started during the period of November 1 to November 30 without permission of the Unit Manager or his/her representative.

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.

5.4 - Soil Protection

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.

5.4.3 - Erosion control (12/08)

Skid trails or haul roads may require erosion control structures or berms per direction of the Unit Manager or his/her representative.

5.4.4 - Slope protection (9/19)

Skid trails and roads on slopes shall be water barred with slash, stumps, and/or clean straw bales native to the area as soon as use is complete to prevent erosion.

5.6 - Debris and Waste Material

5.6.3 - Equipment cleaning (12/17)

For purposes of this provision, "Off-Road Equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles. Off-Road Equipment brought on site must be clean and free from plant material and soil prior to arrival on any Payment Unit. Off-Road Equipment shall be cleaned of plant material and dirt prior to being moved to a new stand within the sale. Plant material includes leaves, stems, roots and seeds. Equipment shall be considered clean when a visual inspection does not disclose seeds, soil, vegetative matter, and other debris that could contain or hold seeds. This is to prevent the spread of invasive plant species.

7 - Other Conditions

7.10 - Certified Timber

7.10.1 - Non-certified timber (2/16)

The area encompassed by this timber sale is not certified to the standards of the Forest Stewardship Council (FSC) or the Sustainable Forestry Initiative (SFI). Forest products from this sale may not be delivered to the mill as "FSC and / or SFI certified". The lands within this sale are managed as a State Game Area.

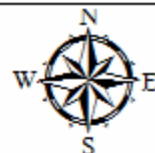
**TIMBER SALE MAP***This information provided by authority of Part 525, 1994 PA 451, as amended.*

Sale Number	Year
21 - 001	22

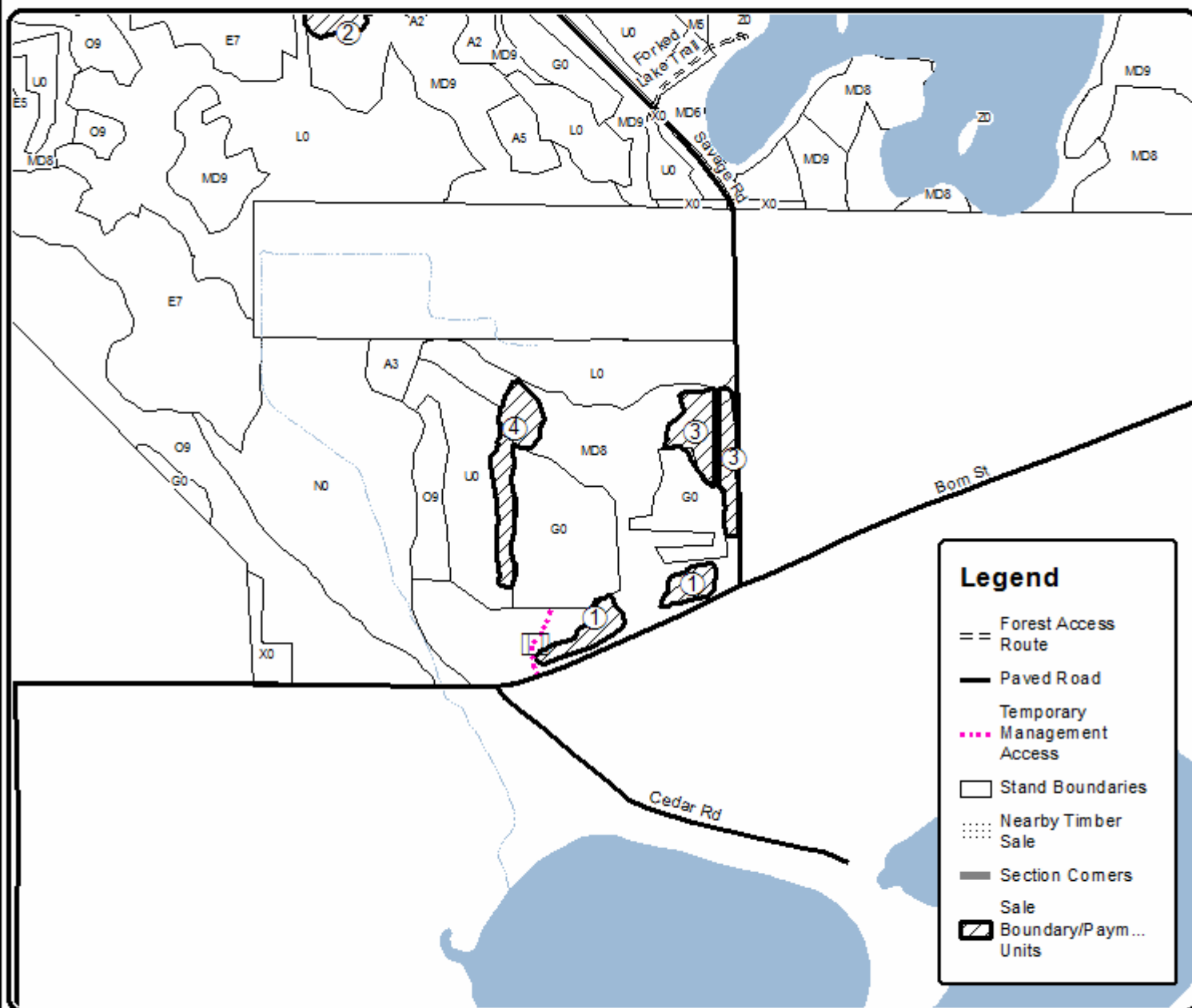
Forest Management Unit Crane Pond Field Office	County Cass County	Mapped By Nate DeVries	Date 09/13/2022	Page 1	of 5
Township 6S		Range 13 W	Section(s) and Subdivision(s) Section 29	Scale 1:10,000	

Cover Type				Density	
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush	0 = Non Stocked	5 = Pole Timber Medium
B = Paper Birch	J = Jack Pine	O = Oak	UM = Upland Mixed	1 = Seedling Sapling Poor	6 = Pole Timber Well
C = Cedar	L = Lowland Brush	P = Lowland Poplar	V = Bog or Marsh	2 = Seedling Sapling Medium	7 = Saw Timber Poor
D = Treed Bog	LM = Lowland Mixed	Q = Mixed Swamp Conifer	W = White Pine	3 = Seedling Sapling Well	8 = Saw Timber Medium
E = Swamp Hdwoods	M = Mpl, Bch, Bach	R = Red Pine	X = Non Stocked	4 = Pole Timber Poor	9 = Saw Timber Well
F = Spruce Fir	MC = Mixed Conifer	S = Black Spruce	Z = Water		
G = Grass	MD = Mixed Deciduous	T = Tamarack			

Carson
Compartment 8140201
68.3 Acres



PU	Acres	PU	Acres
1	19.9	4	3.2
2	33.5	5	8.2
3	3.5		



TIMBER SALE MAP

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

Sale Number	Product	Price	Quantity	Total
1	Product A	10.00	5	50.00
2	Product B	20.00	3	60.00
3	Product C	30.00	2	60.00
4	Product D	40.00	1	40.00
5	Product E	50.00	1	50.00
6	Product F	60.00	1	60.00
7	Product G	70.00	1	70.00
8	Product H	80.00	1	80.00
9	Product I	90.00	1	90.00
10	Product J	100.00	1	100.00

21 - 001

Year

22

Forest Management Unit
Crane Pond Field Office

County
Cass County

Mapped By	Nate DeVries
Cruised By	Nate DeVries

Date	09/13/2022
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Township	Range	Section(s) and Subdivision(s)
6S	13 W	Section 19 and 20

Scale	1:10,000
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Cover Type

A = Aspen
B = Paper Birch
C = Cedar
D = Treed Bog
E = Swamp Hdwoods
F = Spruce Fir
G = Grass

H = Hemlock
J = Jack Pine
L = Lowland Brush
LM = Lowland Mixed
M = Mpl, Bch, Bach
MC = Mixed Conifer
MD = Mixed Deciduous

N = Marsh
O = Oak
P = Lowland Poplar
Q = Mixed Swamp Conifer
R = Red Pine
S = Black Spruce
T = Tamarack

U = Upland Brush
UM = Upland Mixed
V = Bog or Marsh
W = White Pine
X = Non Stocked
Z = Water

Density

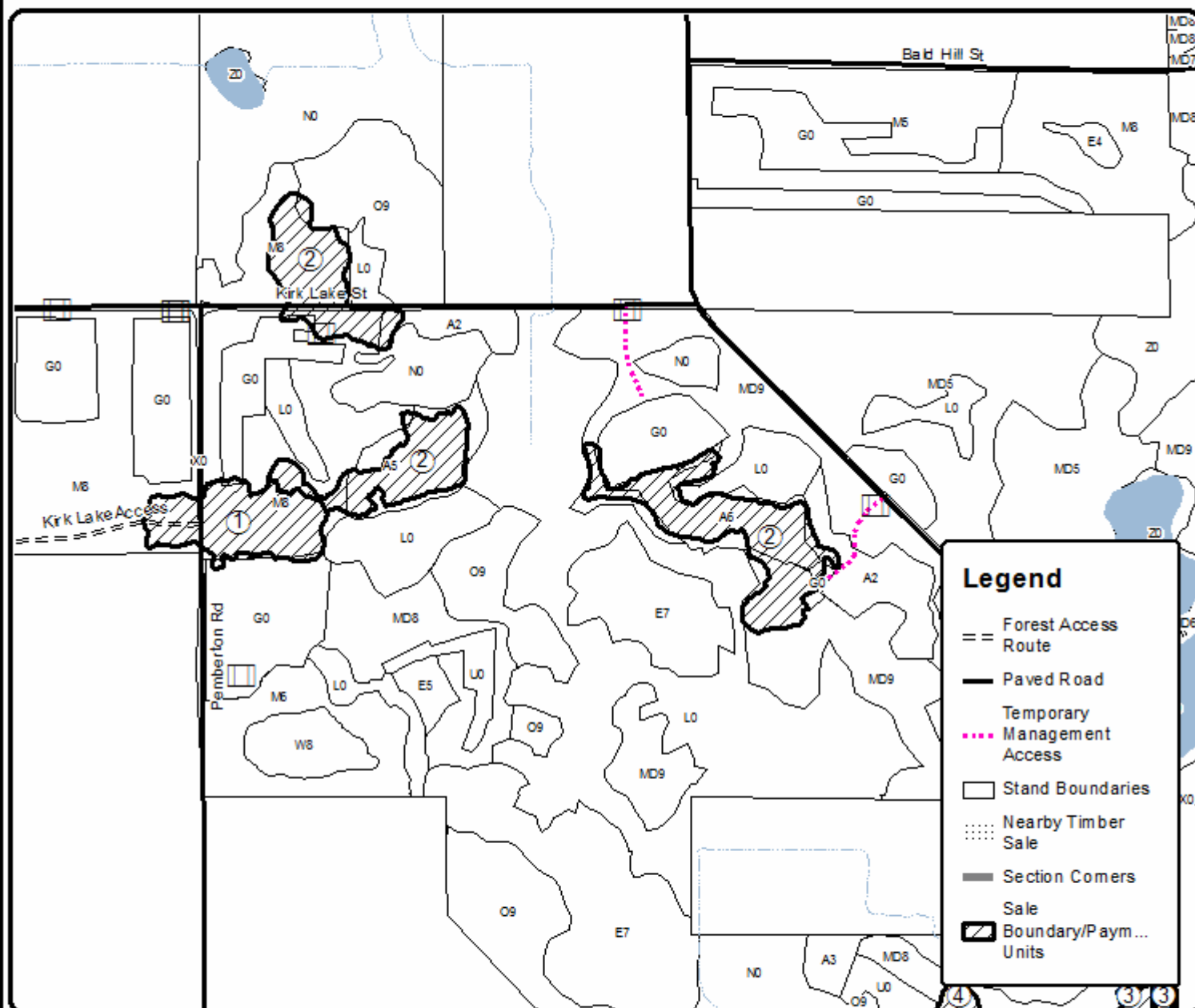
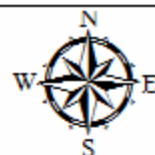
0 = Non Stocked
1 = Seedling Sapling Poor
2 = Seedling Sapling Medium
3 = Seedling Sapling Well
4 = Pole Timber Poor

5 = Pole Timber Medium
6 = Pole Timber Well
7 = Saw Timber Poor
8 = Saw Timber Medium
9 = Saw Timber Well

PU	Acres	PU	Acres
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1	19.9	4	3.2
2	33.5	5	8.2
3	3.5		

Carson
Compartment 8140201
68.3 Acres



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Sale Number	Year
21 - 001	22

Forest Management Unit Crane Pond Field Office	County Cass County	Mapped By Nate DeVries	Date 09/13/2022	Page 3	of 5
Cruised By Nate DeVries					

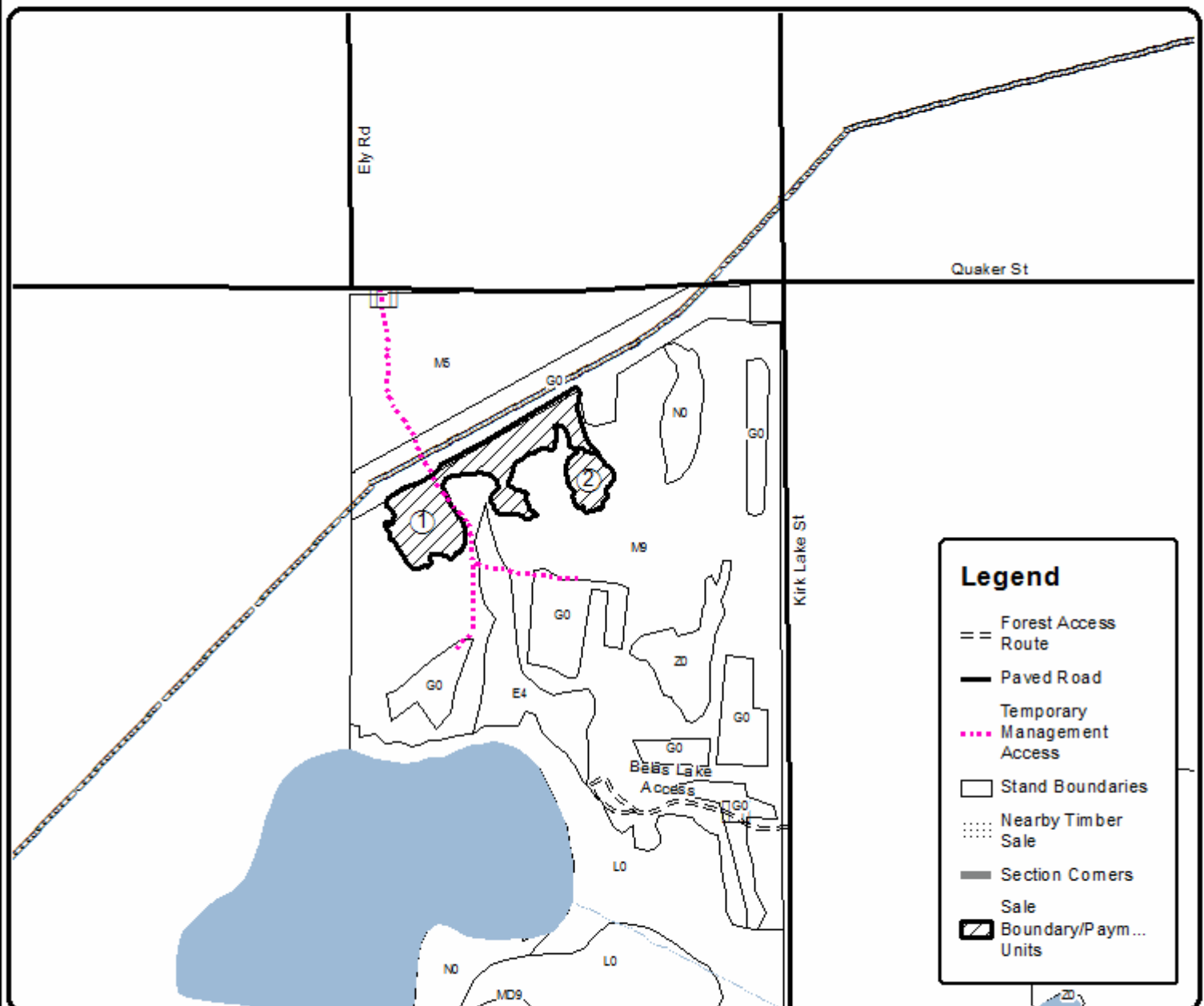
Township 6S	Range 14/13 W	Section(s) and Subdivision(s) Section 13/18	Scale 1:10,000
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Cover Type				Density	
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush	0 = Non Stocked	5 = Pole Timber Medium
B = Paper Birch	J = Jack Pine	O = Oak	UM = Upland Mixed	1 = Seedling Sapling Poor	6 = Pole Timber Well
C = Cedar	L = Lowland Brush	P = Lowland Poplar	V = Bog or Marsh	2 = Seedling Sapling Medium	7 = Saw Timber Poor
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Carson
Compartment 8140201
68.3 Acres



PU	Acres	PU	Acres
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3	3.5		



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Sale Number	Year
21 - 001	22

Forest Management Unit Crane Pond Field Office	County Cass County	Mapped By Nate DeVries	Date 09/13/2022	Page 4	of 5
Cruised By Nate DeVries					

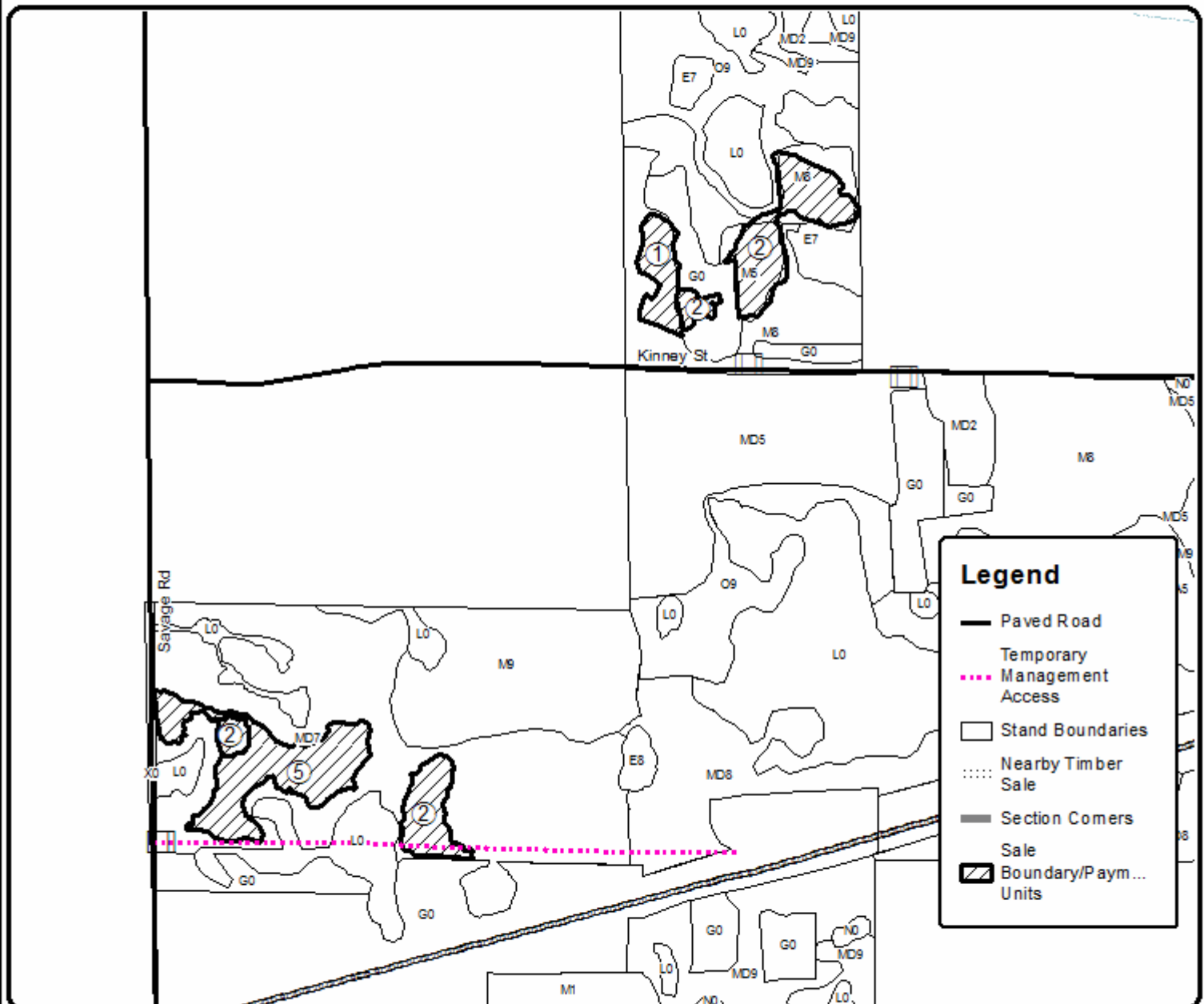
Township 6S	Range 13 W	Section(s) and Subdivision(s) Section 8	Scale 1:10,000
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Cover Type				Density	
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush	0 = Non Stocked	5 = Pole Timber Medium
B = Paper Birch	J = Jack Pine	O = Oak	UM = Upland Mixed	1 = Seedling Sapling Poor	6 = Pole Timber Well
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Carson
Compartment 8140201
68.3 Acres



PU	Acres	PU	Acres
1	19.9	4	3.2
2	33.5	5	8.2
3	3.5		



0 0.125 0.25 0.5 0.75 1 Miles

**TIMBER SALE MAP**

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Sale Number	Year
21 - 001	22

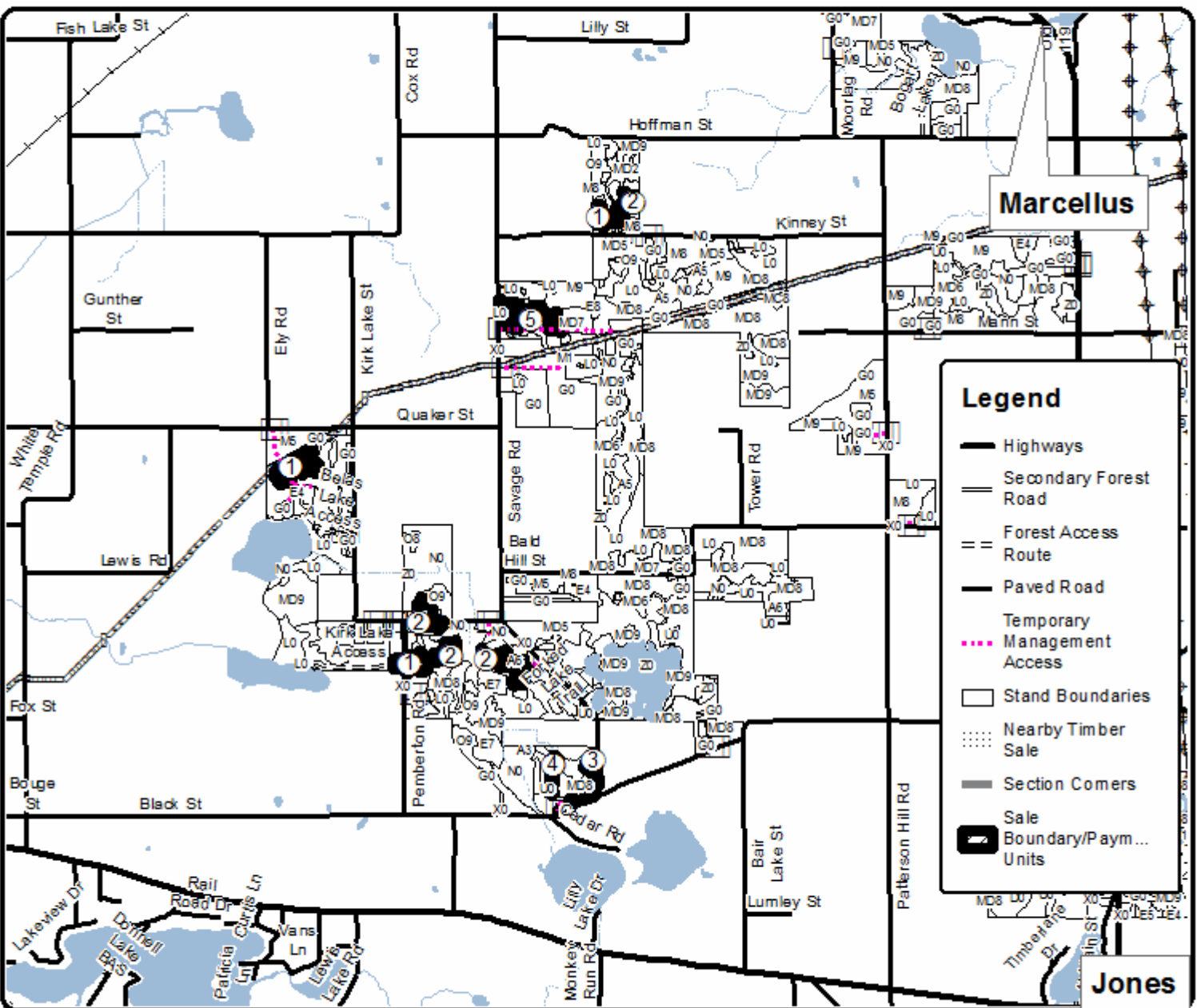
Forest Management Unit Crane Pond Field Office	County Cass County	Mapped By Nate DeVries	Date 09/13/2022	Page 5	of 5
Cruised By Nate DeVries					

Township 6S	Range 13/14 W	Section(s) and Subdivision(s) Sections 8, 18, 19, 20, 29/13	Scale 1:50,000
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Cover Type				Density	
A = Aspen	H = Hemlock	N = Marsh	U = Upland Brush	0 = Non Stocked	5 = Pole Timber Medium
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PU	Acres	PU	Acres
1	19.9	4	3.2
2	33.5	5	8.2
3	3.5		

Carson
Compartment 8140201
68.3 Acres



0.125 0.5 0.75 1
Miles