

TIMBER MARKETING & MANAGEMENT INC.
 Professional Forestry Consultants
 P.O. Box 396
 Chesterfield, VA 23832
 Ph (804) 796-9622
 Fax (804) 796-9693
 www.tmmva.com

| | |
|------------------|---------------------|
| Sale Date: | May 16, 2018 |
| Time: | 11:00 a. m. |
| Day: | Wednesday |
| Total Vol./Acre: | 17,542 B. F. |
| Pine Vol/Tree: | 304 B. F. |
| Hdwd. Vol/Tree: | 193 B. F. |

CLEAR- CUT SALE

Having been employed by **Tom Willingham, Ben Willingham and John Biedenharn** we solicit bids on all merchantable timber on 49 +/- acres in Powhatan County, Virginia and as shown on the attached map.

We have cruised the pulpwood trees (8% plot cruise) to be harvested. Our estimate of their volume is:

| <u>Pulpwood</u> | <u>Cords</u> | <u>Tons</u> |
|-----------------|--------------|-------------|
| Pine | 29 | 75 |
| Soft Hardwood | 259 | 673 |
| Hard Hardwood | 88 | 229 |
| TOTAL | 376 | 978 |

We have made a 100% count of the sawtimber-size trees. Our estimate of their volume is:

| <u>Sawtimber</u> | | | |
|------------------|---------|---------------|--|
| Loblolly Pine | 692,800 | Virginia Pine | 700 |
| Poplar | 102,100 | Black Cherry | 400 |
| Red Oak | 38,400 | Ash | 200 |
| Gum | 13,700 | Beech | 200 |
| Hickory | 6,300 | Hackberry | 200 |
| Elm | 2,500 | White Oak | 200 |
| Black Walnut | 1,200 | Total | 859,700 Total B.F. Int 1/4" Scale |
| Maple | 800 | | |

The above volumes are not guaranteed; however, care was taken in the field to assemble the above tables. You should note how your utilization practices may vary from the above and make any necessary adjustments.

Conditions

1. The landowner assumes responsibility for compliance with the Virginia State Seed Tree Law.
2. A period of time of 2 years will be allowed to cut and remove the timber.
3. Roads **must** be maintained and restored to their original condition upon completion of the logging. Any newly constructed roads and decks must be left in a graded condition and must be seeded upon completion of logging. Any newly constructed haul roads, skid roads and log decks and all logging operations must be in accordance with the guidelines set out in the **Best Management Practices Manual** of the Virginia Department of Forestry.
4. No tops or laps will be allowed to remain in the streams, fields, buffers or over cutting boundaries. They must be pulled back immediately.
5. Only the blue marked trees are to be cut from Streamside Management Zones.
6. No logging will be permitted during excessively wet weather conditions as determined by Timber Marketing & Management, Inc. If logging is halted due to weather conditions, then an extension of time equal to the time lost will be granted.
7. A \$2,000.00 performance bond will be paid at closing and held by Timber Marketing & Management, Inc. to insure compliance with all BMP requirements, road maintenance and conditions of the Timber Purchase Contract.

Only sealed bids will be accepted and owners reserve the right to reject any or all bids. BIDS SHOULD BE SUBMITTED PRIOR TO THE TIME OF BID OPENING AND CAN BE SUBMITTED VIA: Mail to: Timber Marketing & Management, Inc. P. O. Box 396, Chesterfield, Virginia 23832 **OR** hand delivered to 9520 Ironbridge Road, Chesterfield, Virginia **OR** telephoned in to 804-796-9622 **OR** faxed to 804-796-9693 **OR** emailed to tmm4u@aol.com Bids must be made on a lump-sum basis and must be received at this address no later than posted bid date and time as shown on the cover.

There will not be any scheduled show trip of the tract; however, you may call and set an appointment or you may inspect the property at your own leisure.

Sincerely,
Timber Marketing & Management, Inc.



Andrew J. Lindberg, Area Manager
804-338-8436 mobile
804-796-9622 office

Biedenharn - Willingham Tract Block C

Timber Marketing & Management, Inc.

Professional Forestry Consultants

P.O. Box 396

Chesterfield, VA 23832-0000

Phone: (804) 796-9622 • Fax: (804) 796-9693

Pulpwood Cruise: 8.0%
Sawtimber Cruise: 100.0%

Cruise Date: Thursday, January 25, 2018
Owner's Name: Biedenharn-Willingham
County/State: Powhatan County, VA
Acreage: 49+/-
Cruise Type: Plot Cruise
Harvest Type: Clear Cut
Total BF/Acre: 17,542
Pine Vol/Tree: 304.1
Hardwood Vol/Tree: 192.7

Volume Legend:

- 1) Diameters shown in inches (DBH)
- 2) Logs measured in 16' increments
- 3) Sawtimber volumes are shown in thousands of board feet (MBF)
- 4) Volume scale used for each species of sawtimber is noted
- 5) Pulpwood volumes are shown in standard cords (128 cubic feet)

Comments:

Pulpwood Standard Cord

| Wood Classification | | | | | | | | |
|---------------------|------------|-----------|---------------|------------|---------------|-----------|---------|--------|
| Pine | | | Soft Hardwood | | Hard Hardwood | | Cedar | |
| DBH | # Trees | Volume | # Trees | Volume | # Trees | Volume | # Trees | Volume |
| 6 | 88 | | 4 | 1,350 | 53 | 325 | 13 | |
| 8 | 50 | | 5 | 975 | 77 | 400 | 32 | |
| 10 | 63 | | 10 | 563 | 75 | 238 | 32 | |
| 12 | 38 | | 10 | 225 | 45 | 63 | 12 | |
| 14 | | | 38 | 10 | | | | |
| Total | 238 | 29 | 3,150 | 259 | 1,025 | 88 | | |

Ash - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|-------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 14 | 2 | | | | | 2 | 0.2 | 100.0% |
| Total | 2 | | | | | 2 | 0.2 | |

Beech - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|-------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 1 | | | | | 1 | 0.1 | 23.6% |
| 20 | 1 | | | | | 1 | 0.2 | 76.4% |
| Total | 2 | | | | | 2 | 0.2 | |

Black Cherry - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|-------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 14 | 3 | | | | | 3 | 0.2 | 63.4% |
| 18 | 1 | | | | | 1 | 0.1 | 36.6% |
| Total | 4 | | | | | 4 | 0.4 | |

Black Walnut - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|----------|-------|-------|-------|-----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 5 | | | | | 5 | 0.3 | 23.9% |
| 14 | 3 | 1 | | | | 4 | 0.4 | 33.2% |
| 16 | | 1 | | | | 1 | 0.2 | 16.2% |
| 20 | | 1 | | | | 1 | 0.3 | 26.7% |
| Total | 8 | 3 | | | | 11 | 1.2 | |

Elm - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|----------|-------|-------|-------|-----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 7 | | | | | 7 | 0.4 | 15.7% |
| 14 | 7 | 1 | | | | 8 | 0.7 | 28.8% |
| 16 | 4 | 4 | | | | 8 | 1.2 | 48.3% |
| 20 | 1 | | | | | 1 | 0.2 | 7.2% |
| Total | 19 | 5 | | | | 24 | 2.5 | |

Gum - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|-----------|-----------|----------|-------|------------|-------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 37 | | | | | 37 | 2.1 | 15.1% |
| 14 | 14 | 20 | | | | 34 | 4.0 | 29.1% |
| 16 | 2 | 9 | 8 | | | 19 | 4.0 | 29.1% |
| 18 | 1 | 4 | | | | 5 | 1.1 | 8.3% |
| 20 | | 2 | 2 | 1 | | 5 | 2.0 | 14.6% |
| 22 | | | 1 | | | 1 | 0.5 | 3.9% |
| Total | 54 | 35 | 11 | 1 | | 101 | 13.7 | |

Hackberry - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|-------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 3 | | | | | 3 | 0.2 | 100.0% |
| Total | 3 | | | | | 3 | 0.2 | |

Biedenharn - Willingham Tract Block C

Timber Marketing & Management, Inc.

Cruise Date: Thursday, January 25, 2018
 Owner's Name: Biedenharn-Willingham
 County/State: Powhatan County, VA

Hickory - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|-----------|----------|-------|-------|-----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 10 | | | | | 10 | 0.6 | 9.0% |
| 14 | 11 | 1 | | | | 12 | 1.1 | 16.9% |
| 16 | 4 | 5 | | | | 9 | 1.4 | 22.4% |
| 18 | 1 | 5 | | | | 6 | 1.4 | 22.1% |
| 20 | | 1 | 1 | | | 2 | 0.7 | 11.9% |
| 24 | | 1 | 1 | | | 2 | 1.1 | 17.8% |
| Total | 26 | 13 | 2 | | | 41 | 6.3 | |

Loblolly Pine - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|------------|--------------|------------|-------|--------------|--------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 10 | 28 | 12 | | | | 40 | 1.7 | 0.2% |
| 12 | 22 | 66 | 91 | | | 179 | 18.2 | 2.6% |
| 14 | 7 | 41 | 266 | 53 | | 367 | 67.3 | 9.7% |
| 16 | 4 | 46 | 389 | 256 | | 695 | 186.9 | 27.0% |
| 18 | 8 | 31 | 268 | 219 | | 526 | 186.9 | 27.0% |
| 20 | 3 | 17 | 160 | 113 | | 293 | 132.1 | 19.1% |
| 22 | | 21 | 63 | 29 | | 113 | 59.9 | 8.6% |
| 24 | 1 | 8 | 21 | 9 | | 39 | 24.5 | 3.5% |
| 26 | 1 | 3 | 4 | 3 | | 11 | 7.9 | 1.1% |
| 28 | | 1 | 2 | | | 3 | 2.5 | 0.4% |
| 30 | | 2 | 1 | | | 3 | 2.6 | 0.4% |
| 32 | | | 2 | | | 2 | 2.4 | 0.4% |
| Total | 74 | 248 | 1,267 | 682 | | 2,271 | 692.8 | |

Maple - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|-------|-------|-------|-------|-----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 7 | | | | | 7 | 0.4 | 50.1% |
| 14 | 2 | | | | | 2 | 0.2 | 21.2% |
| 16 | 2 | | | | | 2 | 0.2 | 28.6% |
| Total | 11 | | | | | 11 | 0.8 | |

Poplar - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|------------|------------|------------|----------|-------|------------|--------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 78 | 2 | | | | 80 | 4.6 | 4.5% |
| 14 | 25 | 82 | 9 | | | 116 | 15.3 | 15.0% |
| 16 | 12 | 56 | 61 | 2 | | 131 | 28.2 | 27.6% |
| 18 | 2 | 30 | 54 | 1 | | 87 | 26.3 | 25.7% |
| 20 | 3 | 16 | 16 | 4 | | 39 | 14.4 | 14.2% |
| 22 | 1 | 8 | 10 | | | 19 | 8.6 | 8.4% |
| 24 | | | 2 | | | 2 | 1.3 | 1.3% |
| 26 | | 1 | 2 | | | 3 | 2.1 | 2.0% |
| 28 | | 2 | | | | 2 | 1.3 | 1.3% |
| Total | 121 | 197 | 154 | 7 | | 479 | 102.1 | |

Red Oak - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|-----------|-----------|----------|-------|-------|------------|-------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 12 | 24 | | | | | 24 | 1.3 | 3.5% |
| 14 | 21 | 12 | | | | 33 | 3.4 | 8.9% |
| 16 | 13 | 22 | | | | 35 | 5.6 | 14.7% |
| 18 | 18 | 14 | | | | 32 | 6.1 | 15.8% |
| 20 | 14 | 9 | 1 | | | 24 | 5.8 | 15.1% |
| 22 | 2 | 13 | | | | 15 | 5.5 | 14.2% |
| 24 | 2 | 5 | 1 | | | 8 | 3.5 | 9.2% |
| 26 | | 5 | 1 | | | 6 | 3.6 | 9.3% |
| 30 | | 1 | | | | 1 | 0.8 | 2.0% |
| 32 | | 2 | | | | 2 | 1.7 | 4.5% |
| 36 | | 1 | | | | 1 | 1.1 | 2.9% |
| Total | 94 | 84 | 3 | | | 181 | 38.4 | |

Virginia Pine - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|----------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 10 | 2 | | | | | 2 | 0.1 | 11.0% |
| 12 | 4 | | | | | 4 | 0.2 | 34.4% |
| 14 | 2 | | | | | 2 | 0.2 | 25.5% |
| 16 | | 1 | | | | 1 | 0.2 | 29.1% |
| Total | 8 | 1 | | | | 9 | 0.7 | |

White Oak - Sawtimber International 1/4 Scale

| Number of Logs | | | | | | | | |
|----------------|----------|-------|-------|-------|-------|----------|------------|------------|
| DBH | 1-Log | 2-Log | 3-Log | 4-Log | 5-Log | # Trees | Volume | % of Total |
| 14 | 3 | | | | | 3 | 0.2 | 100.0% |
| Total | 3 | | | | | 3 | 0.2 | |

Biedenharn - Willingham Tract Block C

Timber Marketing & Management, Inc.

Cruise Date: Thursday, January 25, 2018
Owner's Name: Biedenharn-Willingham
County/State: Powhatan County, VA

Sawtimber Volume by Timber Type

| <u>Timber Type</u> | <u># Trees</u> | <u>Volume</u> | <u>Avg BF/Tree</u> | <u>% of Total</u> |
|--------------------|----------------|---------------|--------------------|-------------------|
| Hardwood | 862 | 166.1 | 192.7 | 19.3% |
| Pine | 2,280 | 693.4 | 304.1 | 80.7% |
| Total | 3,142 | 859.5 | 273.6 | |

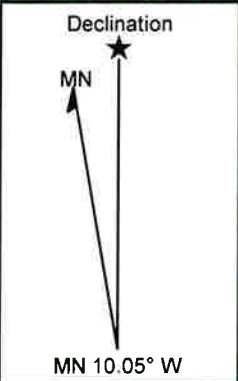
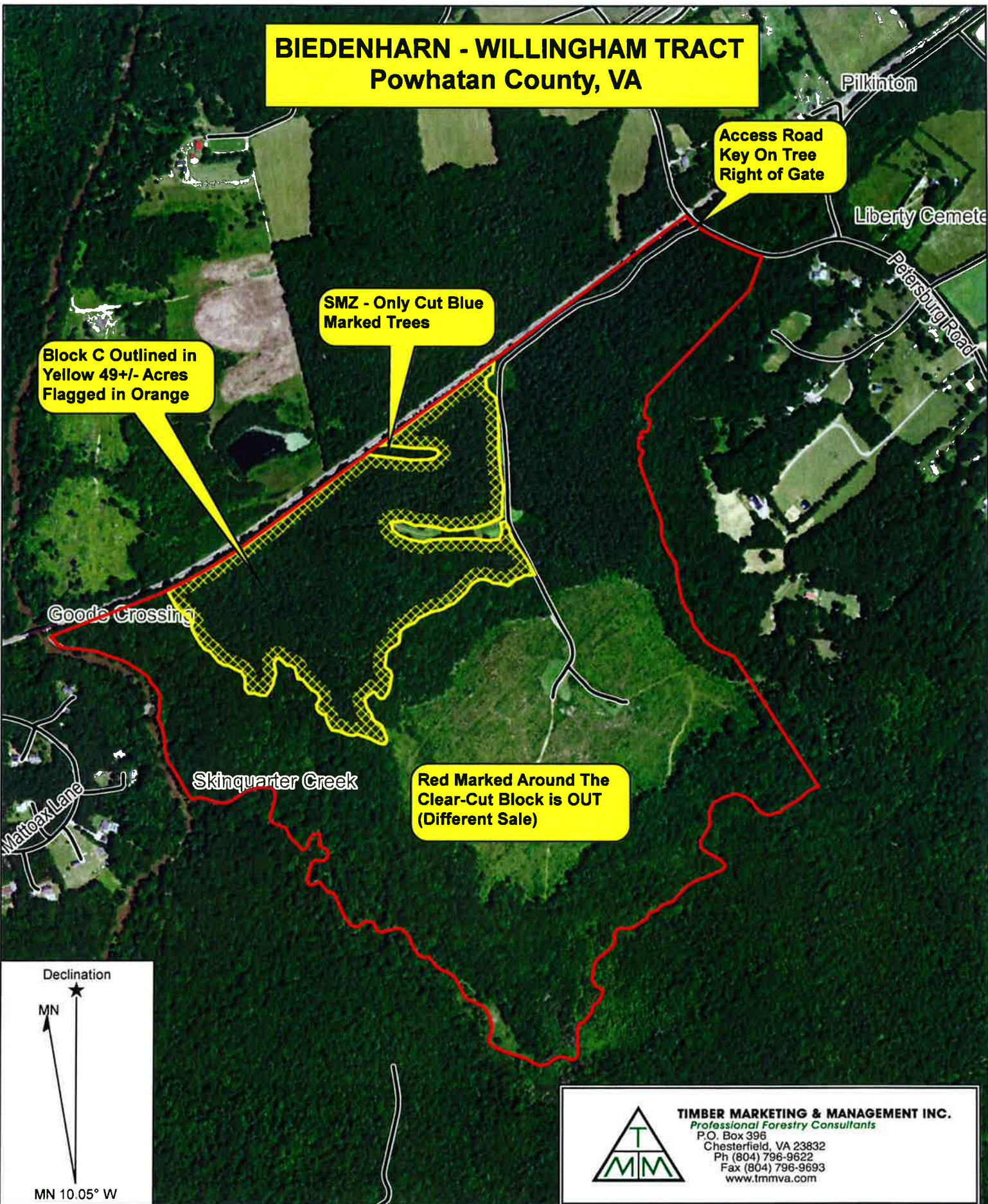
Sawtimber Volume by DBH

| <u>DBH</u> | <u># Trees</u> | <u>Volume</u> | <u>Avg BF/Tree</u> | <u>% of Total</u> |
|------------|----------------|---------------|--------------------|-------------------|
| 10 | 42 | 1.8 | 42.6 | 0.2% |
| 12 | 357 | 28.3 | 79.2 | 3.3% |
| 14 | 586 | 93.2 | 159.0 | 10.8% |
| 16 | 901 | 227.9 | 252.9 | 26.5% |
| 18 | 657 | 221.9 | 337.8 | 25.8% |
| 20 | 366 | 155.7 | 425.4 | 18.1% |
| 22 | 148 | 74.5 | 503.3 | 8.7% |
| 24 | 51 | 30.4 | 596.5 | 3.5% |
| 26 | 20 | 13.5 | 675.0 | 1.6% |
| 28 | 5 | 3.8 | 754.0 | 0.4% |
| 30 | 4 | 3.3 | 831.0 | 0.4% |
| 32 | 4 | 4.2 | 1,041.5 | 0.5% |
| 36 | 1 | 1.1 | 1,121.0 | 0.1% |
| Total | 3,142 | 859.5 | 273.6 | |

Sawtimber Volume by Species

| <u>Species</u> | <u># Trees</u> | <u>Volume</u> | <u>Avg BF/Tree</u> | <u>% of Total</u> |
|----------------|----------------|---------------|--------------------|-------------------|
| Ash | 2 | 0.2 | 83.0 | 0.0% |
| Beech | 2 | 0.2 | 118.5 | 0.0% |
| Black Cherry | 4 | 0.4 | 98.3 | 0.0% |
| Black Walnut | 11 | 1.2 | 106.7 | 0.1% |
| Elm | 24 | 2.5 | 104.3 | 0.3% |
| Gum | 101 | 13.7 | 135.6 | 1.6% |
| Hackberry | 3 | 0.2 | 56.0 | 0.0% |
| Hickory | 41 | 6.3 | 152.4 | 0.7% |
| Loblolly Pine | 2,271 | 692.8 | 305.0 | 80.6% |
| Maple | 11 | 0.8 | 71.1 | 0.1% |
| Poplar | 479 | 102.1 | 213.1 | 11.9% |
| Red Oak | 181 | 38.4 | 212.4 | 4.5% |
| Virginia Pine | 9 | 0.7 | 72.4 | 0.1% |
| White Oak | 3 | 0.2 | 83.0 | 0.0% |
| Total | 3,142 | 859.5 | 273.6 | |

BIEDENHARN - WILLINGHAM TRACT Powhatan County, VA

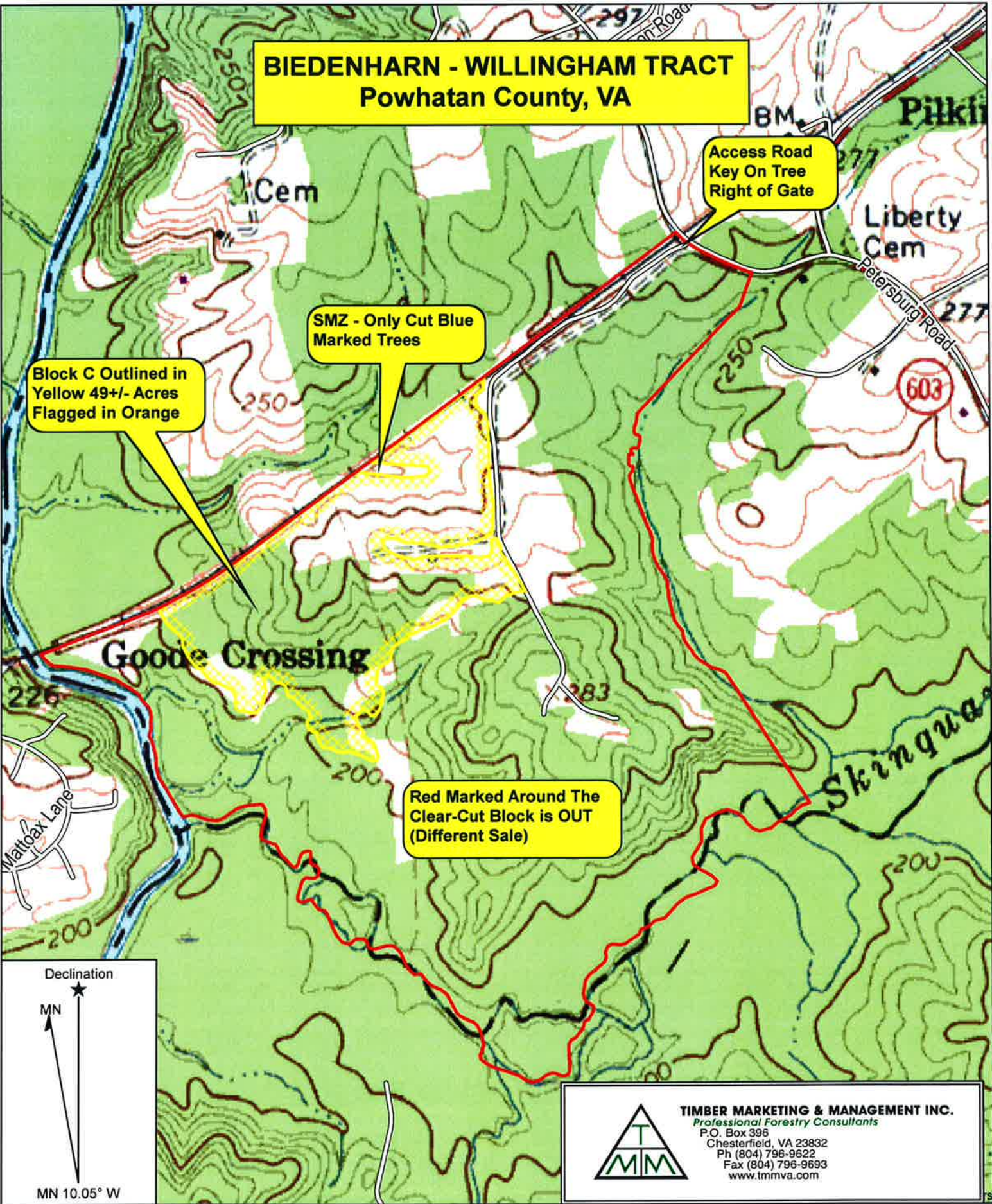


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www.tmmva.com

Name: Biedenharn - Willingham Tract
Date: 04/24/18
Scale: 1 inch = 752 ft.

Location: Powhatan County, VA
49+/- Acre Clear-Cut

BIEDENHARN - WILLINGHAM TRACT Powhatan County, VA



Declination

MN

MN 10.05° W



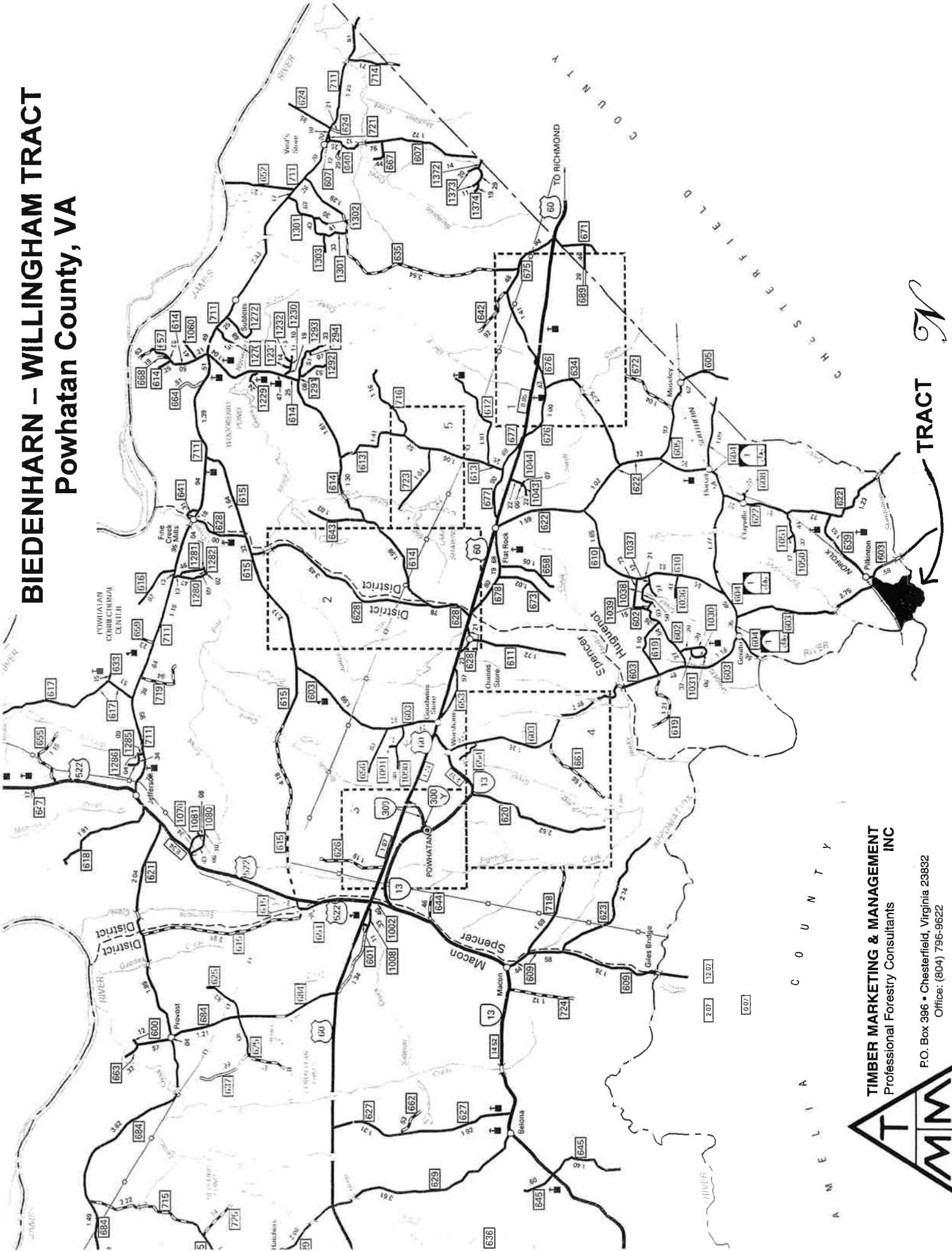
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Scale: 1 inch = 752 ft.

Location: Powhatan County, VA
49+/- Acre Clear-Cut

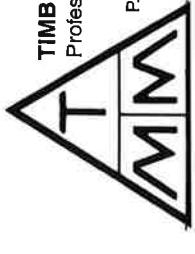
BIEDENHARN – WILLINGHAM TRACT

Powhatan County, VA



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TRACT