TIMBER APPRAISAL REPORT

Permit Holder: 
Sale Type: Intermediate Auction 
RAN: 221 
Permit Number: X018121 
Permit Date: 12/14/2021 
Expiration Date: 05/31/2024 

Minnesota DNR is Certified to the Sustainable Forestry Initiative® and/or the Forest Stewardship Council®. 
For information on our certificates go to mndnr.gov/forestry/certification/certificates.html

Appraisal includes one (1) cutting block:

<table>
<thead>
<tr>
<th>Block #</th>
<th>Legal Description</th>
<th>Sec-Twp-Rng</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NEST.NWSW,SENW,SWNW</td>
<td>17-145-27W</td>
<td>11: Cass</td>
</tr>
<tr>
<td></td>
<td>NESE,SENE</td>
<td>18-145-27W</td>
<td></td>
</tr>
</tbody>
</table>

Species/Products/Price (all quantities are estimates):

<table>
<thead>
<tr>
<th>Bid</th>
<th>SOAV</th>
<th>Species</th>
<th>Product</th>
<th>Quantity</th>
<th>UOM</th>
<th>Appraised Price</th>
<th>Appraised Value</th>
<th>Bid %</th>
<th>Bid Price</th>
<th>Bid Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td>Tamarack</td>
<td>Pulpwood</td>
<td>710.00</td>
<td>Cd</td>
<td>5.00</td>
<td>3,834.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black Spruce</td>
<td>Pulpwood</td>
<td>35.00</td>
<td>Cd</td>
<td>8.10</td>
<td>283.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sale Acres: 73.8
Advance Payment: 617.63
Total Appraised Value: 4,117.50
Total Bid Value: 

Top Diameter Utilization: Unless otherwise specified, each species product must be utilized down to a minimum merchantable top diameter inside bark (dib) as follows: woodsrun cordwood and pulpwood to 4 inches, except spruce to 3 inches; bolts to 6 inches; sawtimber to 10 inches; and veneer to 14 inches.

Optional Timber (may be purchased with an Added Timber Agreement):

<table>
<thead>
<tr>
<th>SOAV</th>
<th>Species</th>
<th>Product</th>
<th>Quantity</th>
<th>UOM</th>
<th>Appraised Price</th>
<th>Appraised Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any Listed Species</td>
<td>Biomass</td>
<td>500.00</td>
<td>Tons</td>
<td>0.65</td>
<td>325.00</td>
</tr>
</tbody>
</table>

Total Appraised Cords per Acre: 10.1

Mixed Species Description: 
(N/A)

Mixed Product Description: 
(N/A)

HARVEST SPECIFICATIONS

Cutting and Felling:
- Harvest tamarack and black spruce.
- Fell all live black spruce equal to or greater than 5 feet tall.
- Reserve 6 healthy tamarack per acre for seed trees scattered evenly across the site.
- Damaged reserve trees will be charged according to the liquidated damages schedule. Damage is defined as 10% of stem circumference and greater than 30% of live crown.

Season of Operations:
- Conduct sale operations on frozen soil conditions only, except with written permission from State.

Slash Disposal:
- Lop and scatter slash evenly over the harvest site to within 3 feet of the ground.
Slash Disposal (continued):
- If biomass is purchased with an Added Timber Agreement, 20% of the tops and limbs must be left on the site or hauled back from the landing and redistributed in the general harvest area. This percentage may be adjusted up or down to meet the 1/3 retention goal if incidental breakage is more or less than 10-15%.

Site, Soil and Water Protection:
- If site damage becomes apparent, alter or cease operations and contact State.

Landings Roads and Trails:
- Post "Trucks Hauling" signs 200 feet beyond either end of road/trail section being used.
- The location and construction of all temporary roads must be pre-approved by the State.
- Best access is across approximately .4 miles US Forest Service roads. If using USFS system roads, the permit holder shall obtain a road use permit from the USFS District Office before beginning sale operations. Provisions of this permit will become part of the terms and conditions for this sale.

Sale Conditions:
- Access is across USFS and State land.
- Permission to cross USFS land must be obtained by permittee.

Marketing and Special Conditions:
Black Spruce Pulpwood: Average 6" DBH and 2 sticks
Tamarack Pulpwood: Average 7" DBH and 3 sticks

Tree sizes are averages based on field estimates, actual sizes will vary larger or smaller.
Sale is located off of USFS road #3017, off of Cass County # 9 (Winnie Dam Road).

Price Adjustments:
Road Construction Costs: 0%
Haul Distance to Nearest Mill: 0%
Stand Density: -10%
Operational Constraints: 0%
Other Price Factor: 0%

Permits Required:
Access Permit

Forestry Area Office:
Deer River Area Forestry Office
P.O. Box 157 (403 Division St.)
Deer River, MN 56636-0157
Telephone: 218-246-8343
Permit Holder
Sale Type
Intermediate Auction
Permit Date
12/14/2021
Expiration Date
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Legal Description
NESW,NWSW,SENW,SWNW
NESE,SENE
Sec-Twp-Rng
17-145-27W
16-145-27W
County
11: Cass

GPS Location: Latitude - 47 22 30, Longitude - 94 8 22

(Cutting Block Map (may not print to scale))
SOAV Eligible: No

Stand Management Information - Appraisal only includes one (1) cutting block:

<table>
<thead>
<tr>
<th>Site</th>
<th>Harvest Prescription</th>
<th>Stand</th>
<th>Cover Type</th>
<th>Plan Status</th>
<th>Planned</th>
<th>Examined</th>
<th>Appraised</th>
<th>Deferred</th>
<th>Altered</th>
</tr>
</thead>
<tbody>
<tr>
<td>t14527wl170381</td>
<td>Regen Harvest-Even-Aged-Clearcut-w/Rsrv - Nat Seeding</td>
<td>t14527wl170381</td>
<td>T42</td>
<td>New</td>
<td>49.3</td>
<td>49.3</td>
<td>49.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>t14527wl180378</td>
<td></td>
<td>t14527wl180378</td>
<td>T41</td>
<td>New</td>
<td>10.1</td>
<td>10.1</td>
<td>9.3</td>
<td>0.0</td>
<td>0.8</td>
</tr>
<tr>
<td>t14527wl181018</td>
<td></td>
<td>t14527wl181018</td>
<td>T21</td>
<td>Adopted</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site</th>
<th>Harvest Prescription</th>
<th>Stand</th>
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<th>Plan Status</th>
<th>Planned</th>
<th>Examined</th>
<th>Appraised</th>
<th>Deferred</th>
<th>Altered</th>
</tr>
</thead>
<tbody>
<tr>
<td>t14527wl170380</td>
<td>Regen Harvest-Even-Aged-Clearcut-Natural Seeding</td>
<td>t14527wl170380</td>
<td>BSL 42</td>
<td>New</td>
<td>11.1</td>
<td>11.1</td>
<td>9.2</td>
<td>0.0</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Totals: 76.5  76.5  73.8  0.0  2.7

Forty/Lot Information:

<table>
<thead>
<tr>
<th>Twp - Range</th>
<th>Sec</th>
<th>Forty / Lot</th>
<th>Land Status</th>
<th>Acres</th>
<th>% Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>145-27W</td>
<td>17</td>
<td>NESW 09: School</td>
<td></td>
<td>16.3</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NWSW 09: School</td>
<td></td>
<td>33.4</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SENW 09: School</td>
<td></td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWNW 09: School</td>
<td></td>
<td>8.2</td>
<td>11</td>
</tr>
<tr>
<td>145-27W</td>
<td>18</td>
<td>NESE 09: School</td>
<td></td>
<td>13.6</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SENE 09: School</td>
<td></td>
<td>1.8</td>
<td>2</td>
</tr>
</tbody>
</table>

Totals: 73.8  100

Specifications included in Notice Of Sale:

Cutting and Felling:
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