

Penn State Forestland Management Office

8' High Woven Wire Fence Specifications

1. FENCE REQUIREMENTS

- **Hazard Trees**

All hazard trees, which are within a tree length of the fence, must be felled before the fence is erected. Hazard trees are defined as dead and dying trees, split trees, heavily leaning trees, and/or root sprung trees that are in a position to fall across the fence. A Forestland Management Office representative will consult with the vendor to identify hazard trees.

Any hazard trees determined by the Forestland Management Office to be merchantable may be required to be skidded to a landing area assigned by a Forestland Management Office representative.

- **Clearing Fence Area**

It is the responsibility of the contractor to clear and level a path between 6 and 8 feet wide of all brush, stumps, rocks, or other obstructions. Obstructions that cause undue construction or maintenance costs may be left in place at the discretion of a Forestland Management Office representative.

The path will lie on the outside edge of the fence and will serve as the access corridor for equipment during construction, a level location for the fence installation, and as a maintenance corridor. In those areas of the fence perimeter where the ground is level and free of stumps and/or rocks, no path clearing is required.

The contractor will be responsible for, and may be charged for, damage to standing trees outside the cleared corridor. Values of damaged trees will be calculated from the Timber Market Report, using average values for the region and species. The stumpage value will then be singled or tripled depending on the severity and/or amount of contractor negligence. A Forestland Management Office representative will determine the severity of negligence, and The Pennsylvania State University reserves the right to having determination in all damage disputes.

- **Erosion and Sedimentation Control**

Equipment will not be operated when ground conditions may result in excessive soil disturbance, as determined by a Forestland Management Office representative. The contractor will be required to repair areas that become heavily rutted and install water bars in areas of sufficient slope as

to present an erosion hazard. Small intermittent or perennial streams, adjacent stream banks, and seeps that are unavoidable will be cleared by hand. The Forestland Management Office representative reserves the right to determine which areas are to be cleared by hand.

- **Fence Supports**

The contractor will erect the fence by fastening the fence to suitable trees along the treatment boundary. All trees must be protected by having a 2 inch by 4 inch board of sufficient length attached to the tree with nails. The fence will be attached to the board. The Forestland Management Office reserves the right to waive the use of attachment boards in instances where tree damage is not a concern.

In areas where tree spacing or suitability is a problem, posts must be installed. The maximum distance between fence supports can be no greater than 40 feet between trees and 30 feet between posts. In-line posts must be 4 inch x 4 inch treated square posts, or 4 inch round posts, or steel posts that weigh no less than 2 pounds per foot. Line posts are to be 10 feet long and placed in the ground at least 2 feet. Corner posts must be 6 inch x 6 inch treated square post or 5 inch round post, and braced or supported in such a manner as to prevent the post from bending, leaning, or pulling free from the ground. Corner posts must be at least 12 feet long with 3 feet underground. This requirement may be waived by a Forestland Management Office representative if adverse digging, driving, or drilling conditions exist.

All bracing and guy wires outside the fenced area must be clearly marked to prevent a safety hazard to any and all persons.

- **Fence Materials**

The fence will be at least a 7 foot high fence using two 47 inch high rolls of galvanized steel woven-wire fencing, or one 8-foot high roll of galvanized steel woven-wire fencing. Wire fencing materials will have no more than 6 inches between stay wires and have at least ten graduated line wires. The top and bottom wires will be 12½-gauge wire and stay wires will be continuous strand 14½-gauge high-tensile wire from top to bottom. No aluminum may be used in the construction of the fences.

- **Fence Stretching and Fasteners**

The fence will be at least 7 feet high and stretched so that the wire is pulled against a corner or turning support. If two 47inch high rolls are used, the top and bottom rolls of fence will be fastened to each other every

3 feet by twisting, tying, or fastening the bottom wire of the top roll to the top wire of the bottom roll. Stainless steel or galvanized hog rings may be used for fastening, or galvanized wire of 14½-gauge. The rolls will be installed so that the small squares of the top roll are adjacent to the smaller squares of the bottom roll. Where a post is used, the top wire of the top roll must be secured to the post. Each roll of fence will be fastened to the board or post at the top, middle, and bottom of the roll. When using metal poles, ties must be 14½-gauge galvanized or stainless steel wire ties or other commercially suitable ties.

Staples used to secure the fence to the 2 inch x 4 inch boards will be 1½ inch galvanized steel. No staples will be driven into trees. Nails are to be used to fasten the boards to the trees and must hold the board securely to the tree during stretching.

- **Securing Fence Bottom**

The fence must be constructed so that deer will be unable to crawl under the fence by leaving a 1 foot overlap on the ground on the outside of the fence. The fence is to be anchored to the ground with stakes or stapled to sound wood every 10 feet. Stakes must be driven into the ground 12 inches. Gaps of over 3 inches in height and 6 inches in length between the ground and the fence will be filled with sound wood and the fence stapled at the bottom to the wood. Other means may be used if approved by the Forestland Management Office representative.

- **Access**

See attached maps for access gate types and locations.

- **Operating Area**

The contractor may operate vehicles on the cleared fence path. Vehicles may not cross the area to be fenced without prior approval.

- **Debris and Garbage**

The contractor will remove all trash generated during the completion of this contract. This is to include all materials generated from the construction of the fence and items from contractor employees.

- **Work Schedule**

The contractor will notify the Forestland Management Office 3 days prior to the start of construction. The contractor may work at times other than

the schedule of the Forestland Management Office representative. The contractor may be present at final inspection.

- **Deer Drive**

The contractor must drive all deer from the fenced area prior to closing the fence. The contractor will notify the Forestland Management Office 2 days prior to conducting the deer drive. The fence will be closed the same day that the deer drive takes place.

2. SITE INSPECTION

No formal pre-bid site inspection will be conducted. Contact this office to arrange a pre-bid site tour. NOTE: Motorized vehicle access is restricted in some areas unless a Forestland Management Office representative is present.

3. CONTRACT REQUIREMENTS

- Operator agrees to furnish the University with a Certificate of Insurance to verify having Workers' Compensation Insurance or an exemption form from the State Department of Labor and Industry.
- Contractor must include with the bid proposal evidence of General Liability Insurance for \$1 million per occurrence, in force, for all operators, agents, and subcontractors to be working on the site.
- The operator is responsible for insuring that all subcontractors comply with the terms of this contract. This includes a Certificate of Insurance to verify having Workers' Compensation Insurance or an exemption form from the State Department of Labor and Industry, and verification of general liability insurance for \$1million per occurrence.
- The laws of Pennsylvania will govern all activities. Venue for all legal actions in regard to erecting the deer fences shall be the courts of Huntingdon County.

4. PERFORMANCE AND COMPLETION BOND:

In order to secure the faithful performance of the conditions of the contract, the lowest responsible bidder must deliver a performance guarantee in the amount of \$5,000. This must be in the form of a certified check, cashier's check, letter of credit, or official check from a bank or

savings institution, insurance bond, surety performance bond, or other negotiable security. This performance guarantee must be presented before fence construction may commence. This guarantee will be held until the contract is complete.

5. CONTRACT TERM

- The term shall commence upon execution of the contract and completion of the timber harvest and terminate June 1, 2004.
- The contract may be extended at the discretion of the Forestland Management Office representative.

6. PAYMENT TERMS

- Payment will be made following the satisfactory completion of the fence. Payment will be for the total length in feet actually installed if the above specifications are met. If any of the specifications are not met the following schedule may be used to reduce the final payment for services rendered. The payment reduction may be the full amount of each item of group listed below or a fraction of each percentage as determined by the Forestland Management Office for incomplete or inadequate work.

A payment schedule based on percentages for a single item or grouping of items dealing with the above specifications has been established. Below is a list of items or groupings and the assigned percentage of contract value:

- Hazard trees: 5%
- Clearing fence area: 5%
- Erosion and sedimentation control: 5%
- Fence supports, materials, stretching, fasteners, securing fence bottom: 70%
- Operating area, debris and garbage, and work schedule: 5%
- Deer drive: 10%

7. BID AWARD:

- The bidder shall complete and return the signed bid form for awarding of the bid. Bids must be received by 3:00 p.m. on Friday, September 20, 2002 at the Penn State Forestland Management Office.

The Forestland Management Office reserves the right to request references upon opening of the bids. The contract quantities herein are estimated only and may increase or decrease depending on the needs of the Forestland

Management Office. The contractor shall be paid at the unit price for actual work performed. Bidding will be on a per-foot basis. Fence will be awarded on a total sum.

THE PENNSYLVANIA STATE UNIVERSITY

School of Forest Resources

BID FORM

I _____

(print or type)

bid an amount of \$ _____ per lineal foot for the construction of
approximately _____ lineal feet of woven-wire deer fence on The Stone Valley
Forest, Huntingdon County, Pennsylvania, under the terms of the sample agreement
given to me.

The Pennsylvania State University reserves the right to reject any or all bids.

(Signature) (Date)

(Phone number)