Invitation for Bids sent out: 12.13.05 closes: 1.20.05

## 1. SCOPE OF WORK:

1.1 GENERAL PROJECT DESCRIPTION: The Contractor shall convert approximately 3,370 linear feet (.64 miles) of old forest access road into a hiking-only trail at Buffalo Mountain Natural Area Preserve (BMNAP) located in Floyd County, VA (Figure 1). The project shall address: steep grades (25-30% in places), insufficient outslope, excessive tread-width, failing or non-existent water control structures, and severe trail erosion that has exposed bedrock in some places. Additionally, a large basin of impervious bedrock drains onto the trail, increasing the overall water load during rainfall events. Contractors submitting bids must have hiking trail design and construction experience. The trail climbs 550 feet for an average grade of 16%. The trail corridor is constrained to the old road corridor to limit impacts to Natural Heritage Resources. Workstations are identified in Figure 2 and are described in further detail in the narrative below.

Station	Trail Feature
0+00	Start
2+30	Rock Barrier
7+60	Switchback A
11+10	Switchback B
12+25	Slope >20%
14+80	Slope <20%
23+00	Slope <5%
25+75	Drainage Problem
33+70	Terminus-Summit

#### 1.2 CURRENT CONDITIONS:

- A. Station 0+00 to 2+30: The existing trail tread is too wide, nearly 8 feet wide in some places. Additionally, there is a berm that has formed on the outside edge of the trail. These two factors, combined with failed and failing drainage structures, contribute to excess trail erosion and weathering in the following ways: 1) the extra width of trail tread generates additional water runoff, and 2) an outslope berm prevents sheet flow from the trail. Trail grade is 9% here.
- B. <u>Station 2+30</u>: Motorized users are illegally circumnavigating these large rocks intended to impede motorized use.
- C. Station 2+30 to 7+60: The existing trail tread is too wide, nearly 8 feet wide in some places. Additionally, there is a berm that has formed on the outside edge of the trail. These two factors, combined with failed and failing drainage structures, contribute to excess trail erosion and weathering in the following ways: 1) the extra width of trail tread generates additional water runoff, and 2) an outslope berm prevents sheet flow from the trail. Trail grade is 15% here.
- D. Station 7+60: This is a switchback that is too wide in tread-width and has failing drainage structures.
- E. Station 7+60 to 11+10: The existing trail tread is too wide, nearly 8 feet wide in some places. Additionally, there is a berm that has formed on the outside edge of the trail. These two factors, combined with failed and failing drainage structures, contribute to excess trail erosion and weathering in the following ways: 1) the extra width of trail tread generates additional water runoff, and 2) an outslope berm prevents sheet flow from the trail. Trail grade is 17% here.
- F. <u>Station 11+10</u>: This is a switchback that is too wide in tread-width and has failing drainage structures.

At Stations 7+60 and 11+10 the switchbacks need to be reshaped in such a manner that water will not continue down the trail from above the switchbacks. The reworked switchbacks will follow standard U.S. Forest Service designs. The trail tread on the upslope approach (30 feet) to the switchback shall be reconstructed with an inslope of 3% - 10% to allow water runoff into a drain ditch that will divert water off the trail corridor. The trail tread on the downslope approach to the switchback shall be reconstructed with an outslope of 3% -10%. The trail tread shall be 36 to 48" wide; however, the "turning platform" or "landing" of the switchback shall be 96" wide with <8% outslope.

- E. From Station 23+00 to 25+75 the only work needed is to constrict the trail tread width to 36" to 48" using on-site materials.
- F. At Station 25+75 a significant water drainage problem needs to be fixed. A water diversion structure, e.g., a hardened swale, needs to be constructed here that drains water away from the existing trail, in an approximately southeasterly direction. This shall be constructed and stabilized using on-site materials. Rip-rap size rocks will be placed at the outflow of the drainage diversion here to ensure that water is adequately distributed on the south side of the trail to prevent gully erosion.
- G. Disturbed soil adjacent to the trail tread will be stabilized using a mix of annual rye, little bluestem, and red fescue grasses (1 lb. per 1000 square feet) provided by the Department of Conservation and Recreation and on-site materials.
- H. From Station 25+75 to 33+70 the trail tread will be reconstructed within the existing old road corridor, using machinery and hand tools to remove the outslope berm and restore an acceptable outslope (3% to 15%).
- 1.4 <u>RESTRICTIONS ON CONSTRUCTION WORK</u>: Mechanized equipment shall easily fit within the 8-foot trail corridor, to include turning radius. Visual damage to vegetation, either woody or herbaceous, must be avoided outside of the corridor. Cutting blades shall not exceed 48 inches. Trails are to be constructed using hand labor and low impact mechanized equipment such as trail dozers, miniexcavators and mini-skid steers. Use of and types of mechanical equipment will need to be approved by the Commonwealth prior to construction. The Contractor shall inspect the access for suitability of equipment transport.

#### 1.5 TRAIL CORRIDOR SPECIFICATIONS:

Maximum Tread Width: 48 inches

Horizontal Clearance beyond trail width: 2 feet

Clearing Width: 8 feet

Vertical Clearing Limit: 8 feet

- A Use of On-site Materials: On-site or native materials such as rocks, trees, soils, etc. within the 100 feet general trail corridor can be used to construct trail features/structures when it has been determined that their use will not adversely impact the natural resources on the site based upon a field review between the Commonwealth and Contractor.
- B Use of Quarry Materials: Contractor shall attempt to use native materials to the extent possible. The determination to allow quarry materials such as rock, rip-rap, or crusher run, will be based upon a field review between the Commonwealth and Contractor.
- C. Trail Tread: Native mineral soil and/or quarried stone with a cross slope of 315% for sheet drainage. All organic materials shall be removed leaving an even, compacted, uniform surface free

of indentations. Organic materials shall be scattered off of the trail on the downhill side. Organic materials are not to be used for cut and fill.

- D. Tree Cutting Diameter Limits: No tree shall be removed that is >10 feet from the edge of the trail. When removing trees that are growing in the downslope berm along the trail, Contractor shall attempt to leave all trees > 6 inches diameter at breast height (dbh). Exceptions will be made based on a field review between the Commonwealth and Contractor. Woody stems less than 6 inches in dbh in the trail tread shall be dug up. Woody stems greater than 6 inches dbh shall be cut as close to the ground as possible.
- E. Brush Removal: Trees and brush cut from the corridor shall be removed to a distance of at least 15 feet from the centerline on the downhill side of the trail. Cut trees and brush shall be cut up so it lays near the ground, not exceeding three feet in height.

#### 1.6 OTHER ITEMS:

- A. On Site Storage: All tools and machinery may be cached at the parking lot, or other areas as determined based upon a field review between the Commonwealth and Contractor.
- B. Camping: The Contractor shall be allowed to camp within a designated area approved by the Commonwealth. All waste materials will be packed out and sanitation practices shall adhere to the Leave No Trace concept. The Contractor shall provide and use a portable toilet for human solid wastes. No fires are allowed. Camp stoves may be used.
- 1.7 <u>COMPLETION DATE</u>: Work shall be completed by October 1, 2006.

## 2. <u>SPECIAL TERMS AND CONDITIONS</u>:

- 2.1 <u>ADVERTISING</u>: In the event a contract is awarded for supplies, equipment or services resulting from this bid, no indication of such sales or services to the Department of Conservation and Recreation will be used in product literature or advertising. The Contractor shall not state in any of its advertising or product literature that the Commonwealth of Virginia or any agency or institution of the Commonwealth has purchased or uses its products or services.
- 2.2 <u>eVA BUSINESS-TO-GOVERNMENT CONTRACTS AND ORDERS</u>: The contract will result in one eVA purchase order(s) with the 1% transaction fee capped at \$500 per order.

The eVA transaction fee will be assessed approximately 30 days after each purchase order is issued. Any adjustments (increases/decreases) will be handled through eVA change orders.

The eVA internet electronic procurement solution, web site portal <a href="www.eva.state.va.us">www.eva.state.va.us</a>, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following:

If this solicitation is for a term contract, failure to comply with the requirements in A. and B. below will be just cause for the Commonwealth to reject your bid or terminate this contract for default.

A. Submit a fully executed American Management Systems, Inc. (AMS) Trading Partner Agreement, a copy of which can be accessed and downloaded from <a href="www.eva.state.va.us">www.eva.state.va.us</a>. AMS is the Commonwealth's service provider to implement and host the eVA e-procurement solution.

- B. Provide an electronic catalog (price list) or index page catalog for items awarded under a term contract. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from <a href="www.eva.state.va.us">www.eva.state.va.us</a>. Contractors should e-mail Catalog or Index Page information to <a href="eva-catalog-manager@dgs.state.va.us">eva-catalog-manager@dgs.state.va.us</a>.
- 2.3 <u>AWARD</u>: The Commonwealth will make the award on a lump sum basis to the lowest responsive and responsible Bidder. The purchasing office reserves the right to conduct any test it may deem advisable and to make all evaluations. The Commonwealth also reserves the right to reject any or all bids, in whole or in part, to waive informalities and to delete items prior to making the award, whenever it is deemed in the sole opinion of the procuring public body to be in its best interest.
- 2.4 <u>BID ACCEPTANCE PERIOD</u>: Any bid in response to this solicitation shall be valid for 60 days. At the end of the 60 days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at that time it remains in effect until an award is made or the solicitation is canceled.
- 2.5 <u>INSPECTION OF JOB SITE</u>: By submitting a bid, the vendor certifies they have inspected the job site and are aware of the conditions under which the work must be accomplished. Claims, as a result of failure to inspect the job site, will not be considered by the Commonwealth. To arrange a site visit, contact Claiborne Woodall at 276-676-5673 or <u>claiborne.woodall@dcr.virginia.gov</u>.
- ..6 PRIME CONTRACTOR RESPONSIBILITIES: The Contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using their best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime Contractor. The Contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.
- 2.7 <u>WORK SITE DAMAGES</u>: Any damage to existing utilities, equipment or finished surfaces resulting from the performance of this contract shall be repaired to the Commonwealth's satisfaction at the Contractor's expense.

### 3. METHOD OF PAYMENT:

The Contractor shall be paid on the basis of invoices submitted at the completion of the project. Invoices shall be submitted to:

Department of Conservation and Recreation Attn: Accounts Payable 203 Governor Street, 4<sup>th</sup> Floor Richmond, VA 23219

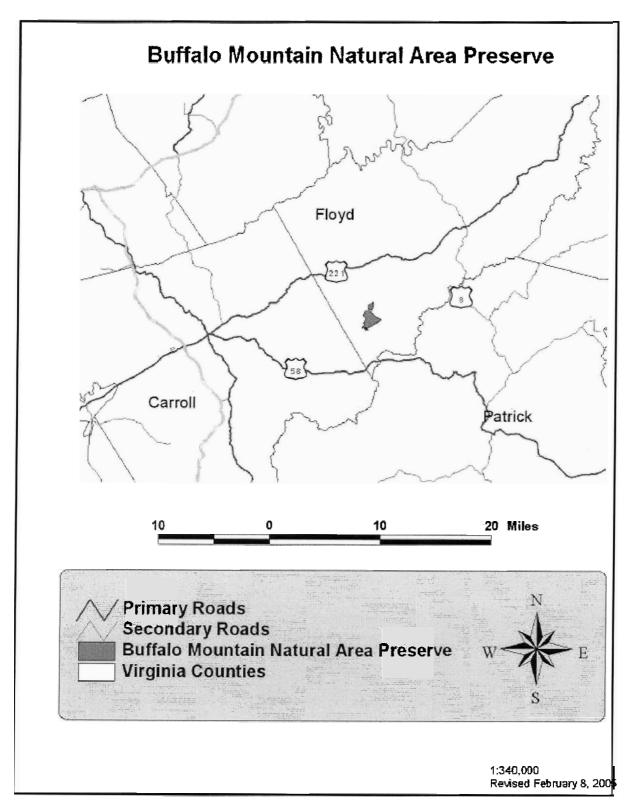
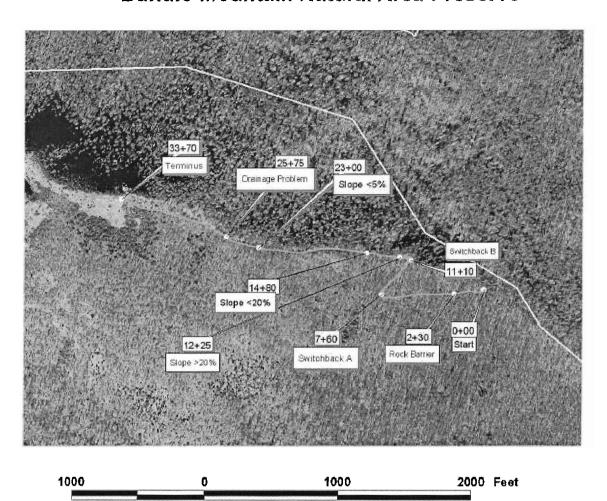
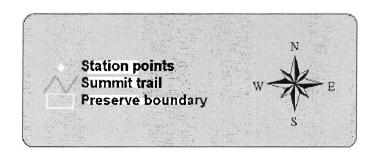


Figure 1. Map showing the location of Buffalo Mountain Natural Area Preserve in Floyd County, Virginia.

# **Buffalo Mountain Natural Area Preserve**





1:5,500 Revised February 10, 2005

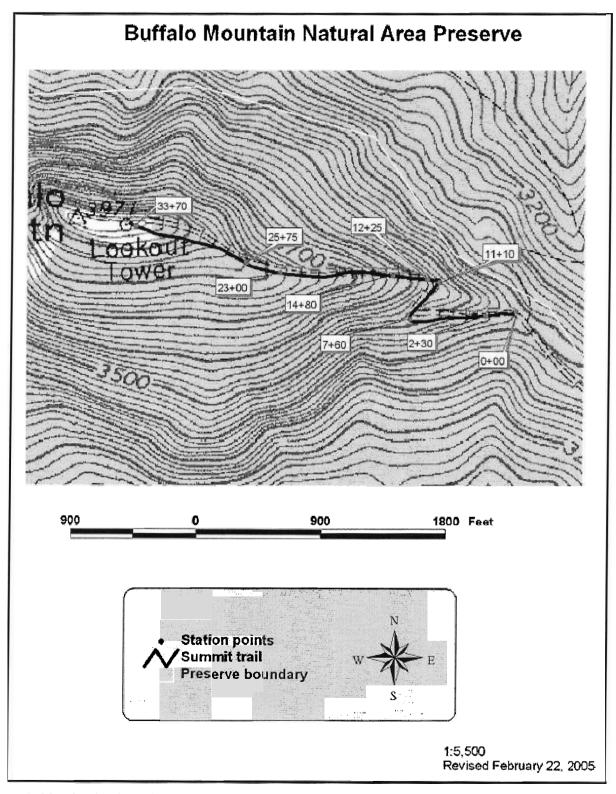


Figure 2. Map showing the station points, Buffalo Mountain NAP.