

# NIKE MISSILE SITE PARK LAND PLAN



Prepared by:  
Nike Site Reuse Advisory Committee  
for the Board of Selectmen  
October 2007

## **NIKE SITE PARK LAND PLAN**

The following information is part of a preliminary plan to turn Lot 1A (comprising Parcel A and D on the attached Plan of Land) of the former Nike Missile Site into a park for passive recreation while leaving flexibility for future alternative passive or active use. The 10.71-acre parcel includes the western part of the original site and part of the 50' buffer that runs along the north and east sides of Lot 2A (comprising Parcels B and C on the attached Plan of Land), all of which was part of the former Nike Missile site at 89 Oxbow Road. The original site was divided into two parcels [Lot 1A, a 10.71 acre parcel for park land; and Lot 2A, a 2.75 parcel for community housing]. The park parcel is divided into two parts with two separate jurisdictions. The 50' buffer surrounding the original property (all of which is part of this Lot 1A) is under the jurisdiction of the Conservation Commission; the interior of the lot (bordered by the buffer on the west and north sides, by Oxbow Road on the south side and by the community housing Lot 2A on the east side) is under the jurisdiction of the Parks and Recreation Commission.

This plan for the park parcel includes several major tasks, some of which should be considered and implemented concurrently:

- Permanently fill and cap missile silos.
- Remove fencing that runs along the edge of the property.
- Develop wheelchair accessible trail within buffer.
- Develop modest parking area.
- Install permanent sign.
- Implement landscape plan.

This park plan has been prepared by the Nike Site Reuse Advisory Committee (NSRAC) for the Board of Selectmen. The NSRAC recommends that this draft preliminary plan be: reviewed and approved by the Selectmen, the Conservation Commission and the Parks and Recreation Commission; be presented to and discussed with interested residents and neighbors at a meeting on October 10, 2007; and that funding requests be prepared for all relevant programs including a potential request for CPA funding at the 2008 Annual Town Meeting. The three boards noted above have reviewed this plan and comments from the Parks and Recreation Commission are included in the text where relevant.

### **I. Silo Management**

Two missile silos on the site are presently covered with large concrete slabs (over metal doors) and concrete chunks (on top of bulkheads). In order to support using this land for future passive recreational activities the silos should be permanently closed and covered with park-like material (6" of earth material and 6" of topsoil) and plantings.

This project requires a Beneficial Use Determination (BUD) permit, the application for which was prepared by Beta Inc. using funds from the \$200,000 allocated by the 2004 ATM to demolish structures on and clean the overall site. The BUD permit was issued to the town by the Massachusetts Department of Environmental Protection (DEP) on August 21, 2007. This provides the town with the necessary approval to fill the silos prior to closing.

The silos and associated bunkers must be filled with ABC (asphalt-brick-concrete) rubble and/or soil after metal and standing water has been removed and the several core holes have been made in the floor of each silo. Preliminary estimates range from \$55,000 to \$92,000. These are rough estimates and will need refinement as well as other estimates to help the NSRAC understand the full impact of this project to the budget. These estimates are based on being able to use fill from town road projects, which will require coordination with the Wayland Highway Department and contractors involved. A scope of work has been

prepared by the NSRAC and will be refined prior to seeking final bids. The Committee is also exploring the possibility of receiving payment from an outside contractor who would provide the fill material. The NSRAC recommends that material not be “stockpiled” at the site until a plan for filling the silos has been approved and funding has been secured. It may be cost effective, once a plan and funding are in place, to transport material (that would ordinarily be stored at the property in front of the town landfill) to the Nike Site in order to reduce trucking costs. This should only occur in the event that there is less than (6) months between delivery and commencing fill work.

Sources for funding this part of the overall project are scarce. This is not a “brown-fields” site, therefore not eligible for various clean-up funds. It has been suggested that the Selectmen put this on a list of items to discuss with the state legislators for projects that must be implemented, that are costly, and that have not been caused by the town itself. It is likely that CPA funding will be one of the alternatives to consider. Once the methodology and funding has been established the town is advised to complete this part of the parkland project.

## **II. Fence Removal**

Presently there is chain link fencing around the entire property topped with strands of barbed wire. Much of the fencing is set in from the property line by 20’. Exceptions are at the road edge and along the eastern boundary where it follows the property line for the most part. The NSRAC recommends removal of this fencing upon determination that the site is safe. Removal specifications require removal of fencing and posts and disposal of the same. Posts are to be cut just below grade. Removal of concrete footings would require equipment that would substantially and detrimentally disturb the natural area of the buffer, thereby removing natural features that are to be preserved to enhance the wheelchair accessible trail. Concrete footings should be below grade – not protruding above the ground.

Fencing is to be removed in two phases that correlate with construction of the wheelchair accessible trail. The sections of fencing along the buffer on the north and east sides of Lot 2A – the community housing lot – will remain in place until the community housing construction has been completed. The developers for the housing will remove those sections upon completion at no additional cost to the town.

Estimates for removal and disposal of the fencing range from \$25,000 to \$33,000.

## **III. Wheelchair Accessible Trail**

A wheelchair accessible trail will be created substantially within the 50’ buffer along the outer edge of the original property all of which is part of Lot 1A that runs along the edge of the original Nike Missile Site property in Wayland. The town is obligated to build this trail by May 2010. A Town Meeting vote (2006) approved the relocation of this trail (meandering) outside the buffer in order to preserve certain natural features provided that the Selectmen, Parks and Recreation and Conservation Commissions concur with such relocations.

The NSRAC recommends that the wheelchair accessible trail be built of a hard packed pervious surface that conforms to regulations for such trails such as stone dust. It will be 4’ or 5’ wide and will lead from the parking area to the buffer and run along the edge (within the buffer) of Lot 1A on the west and north sides and Lot 2A on its north and east sides. The Parks and Recreation Director has noted that maintenance of a pervious surface may be difficult due to town policy not to use chemicals to reduce weeds and poison ivy that may push through the surface of the trail. Recommendations of types of materials that may be used to reduce the weeds issue and that are pervious will be explored. It should be noted that much of the path of this trail has little or no vegetation on the ground now and construction of a hard surface would necessitate heavy equipment that will destroy much of the surrounding vegetation.

According to the Massachusetts Architectural Access Board the minimum width of an accessible trail is three feet (3'); however the regulations also refer to "walkways" as having a minimum width of four feet (4'). In addition to these width minimums, there must be areas that are five feet (5') minimum for turn-around and passing space; thus many communities choose to build wheelchair accessible trails at five feet. The cross slope of the walkway must be less than 1:50, or 2%, at all points along the walkway. When the side slope is greater than 2%, wheelchairs are very hard to control. In addition running slopes should not exceed 1:20 or 5% grade change in order to avoid ramps which must be of asphalt. For these grade reasons the trail will meander outside of the buffer in order to avoid substantial changes in grade.

In Spring 2006 the Conservation Director, Brian Monahan, several NSRAC members and at least one Conservation Commission member were joined by abutters to the property to walk the perimeter. Several sensitive places were identified where the trail should meander outside of the buffer in order to avoid lady slippers, stands of trees or substantial grade changes that would require fill in order to build a trail in compliance with grade changes (slopes) permitted on accessible trails or paths. These areas have been identified on the conceptual plan (attached). Final route of the trail will have to be marked again and areas to be avoided will be rechecked in the field. Prior to construction and after the final route has been selected and marked in the field it will be necessary to seek approval of Parks and Recreation, Conservation and Selectmen for those sections that meander outside the 50' buffer.

The trail will be built in two phases: that part of the trail around the edge of the main part of Lot 1A as one project, and the trail adjacent to Lot 2A as a separate project. The latter part will be built after the community housing has been completed. The first phase has been estimated to be approximately 2,600 linear feet. Final design including marking the path of the trail and the specifications for construction are estimated to cost around \$5,000. Trail construction at a cost of \$1.40 per square foot is estimated to cost approximately \$18,200. The section of trail to be developed in the second phase of the trail development is approximately 800 linear feet. This part of the trail will be constructed at the end of the community housing construction project (estimated to be June 2009).

#### **IV. Parking Area**

It has been assumed that some parking will be provided for the park land at this site. The developers of the community housing will be responsible for constructing an entrance road that will lead to the park land ending at the property line. A modest parking area for up to 10 cars constructed close to the road terminus at the property line (between Lots 1A and 2A) is recommended. A pervious surface that also is wheelchair accessible is recommended if specifications can be identified. Gravel will not be acceptable and in the event that there is not a low maintenance pervious surface, the parking area surface will have to be asphalt. A trail will lead from the parking area to the wheelchair accessible trail around the perimeter.

#### **V. Property Sign**

A permanent sign must be erected on the park land parcel to replace the existing temporary sign which now is mounted on the chain link fence facing Oxbow Road. The lettering on the sign must state:

"The National Park Service, U.S. Department of the Interior, donated this land to the Town of Wayland for public recreational use through the Federal Lands to Parks Program."

This sign refers to Lot 1A and should be mounted inside the entrance to the property on a roadway or path that leads from Lot 2A to Lot 1A or along the Oxbow Road frontage of this lot.

The permanent sign shall not exceed 40 square feet and must be setback from the property line by 15 feet. Prior to installation of the permanent sign, the design and materials of the sign must be determined as well as the cost and source of funding.

In the early stages of this project the NSRAC prepared an application for design phase of sign and accessible trail to the Fields Pond Foundation. The foundation recommended that the town develop the design and come to the foundation for construction funds. Therefore it is recommended that the NSRAC develop a design for the sign and follow this with an application for funds to construct and erect the sign.

## **VI. Landscape Plan**

A Site Plan has been developed by former co-chair Bill Sterling who is a registered architect. Known as the Sterling Plan it shows passive recreation, a connection with the Bay Circuit Trail and retention of the native species of plant material that are now on the site.

The major tasks of the landscaping plan which have not yet been scoped for cost include:

- Covering silo area (including concrete pads) with 12" of soil including 6" of clean fill and 6" of top soil in preparation of planting.
- Plant hardy grass over silo area.
- Develop interior trails.
- Add other plant material as needed.

Material to cover the silo area must have enough topsoil to allow grass to grow during dry seasons; therefore has been increased to 6" over top of other clean cover of 6" also. Depending upon timing it is possible that there may be some material for the first 6" from the housing site. Once this is covered it should be planted with hardy, drought resistant grass.

Interior trails are shown on the Sterling Plan – connecting with the wheelchair accessible trail, the Bay Circuit Trail and climbing the crescent shaped vegetated berm in the northeast corner of this parcel. These will be modest trails made only by cutting scrub bushes and trees in order to create these trails.

Addition of plant material may be considered once all other tasks have been completed. Low blueberry bushes and other native plant material have been suggested.

## **VII. Implementation of Plan**

Implementation of this plan requires a number of steps beginning with discussions among NSRAC, Park and Recreation Commission, Conservation Commission, and the Board of Selectmen. The Plan has been presented to each of these boards and comments are incorporated into the text.

A public meeting to discuss the plans with neighbors and other interested parties should be held as soon as possible and is scheduled for October 10, 2007 at 8:00 PM at the Town Building.

Once this plan has been accepted in concept the NSRAC should identify volunteers to assist with clearing trails; identify funding sources (other than CPA); develop public relations for each step; and coordinate work with housing construction.

## NIKE SITE PARK PARCEL PLAN

### Tasks

- 1) Fill silos and eliminate bulkheads
  - a) Obtain BUD Permit – *received August 2007.*
  - b) Determine cost of filling silos – *preliminary estimate attached.*
  - c) Identify possible sources of fill – *town road projects.*
  - d) Develop RFP for contractors to fill silos – *draft RFP done.*
  - e) Identify possible sources of funding.
  - f) Fill silos after removing metal and demolishing bulkheads.
  
- 2) Remove fencing around entire property
  - a) Specs for fencing removal.
  - b) Estimates for removal of fencing.
  - c) Remove fencing.
  
- 3) Design and Construct Wheelchair Accessible Trail
  - a) Identify minimum standards.
  - b) Determine route of trail within and without buffer in consultation with P&R, ConCom, and BoS. Mark trail.
  - c) Determine surface of trail – *hard packed pervious.*
  - d) Identify funding sources – *application made to DCR Recreational Trails Program.*
  - e) Construct trail.
  
- 4) Design and Construct Parking Area
  - a) Using conceptual plan locate 4,000 sf for parking area – *DCR Trails Program application.*
  - b) Construct parking area with pervious surface that is also wheelchair accessible.
  
- 5) Design, Construct and Install NPS Parkland Sign
  - a) Determine size, shape and materials for sign.
  - b) Contest or bid for design.
  - c) Identify funding sources (Fields Pond, etc.).
  - d) Construct and erect sign.
  
- 6) Adopt and Implement Landscape Plan for Passive Recreation
  - a) Refine Sterling plan for passive recreation.
  - b) Prepare silo area for landscaping by covering silo area with soil and grading.
  - c) Plant.

## **Park Plan Costs Estimates**

- I. Close Silos = **\$55,000 - \$92,000**  
Tasks: remove metal, remove standing water, core holes in bottom of each silo, crush lids, backfill (materials [from town projects], excavator, bobcat, compactor, labor), check compaction at 3 months and 12 months after work completed, manage project and contingency.
- II. Remove Fencing = **\$25,000 - \$33,000**  
Figure is for fencing surrounding three sides of Lot 1A and includes removal and disposal of fence – posts cut flush with ground level.
- III. Build Accessible Trail = **\$23,200**  
Based on trail of 5' x 2,600' hard packed pervious surface –200 hours of volunteer efforts to clear trail area and \$1.40/sq foot of trail surface.
- IV. Build Parking Area = **\$5,000**  
Based on pervious surface that is wheelchair accessible – 4,000 sf area for up to 10 cars.
- V. Erect Sign = **\$3,000**  
Design and construction of permanent sign acknowledging the Land to Parks program of NPS
- VI. Landscaping = unknown  
Topsoil and clean fill over silo area.  
Interior trails accessing berm and meandering through site.  
Native low maintenance plant material.