

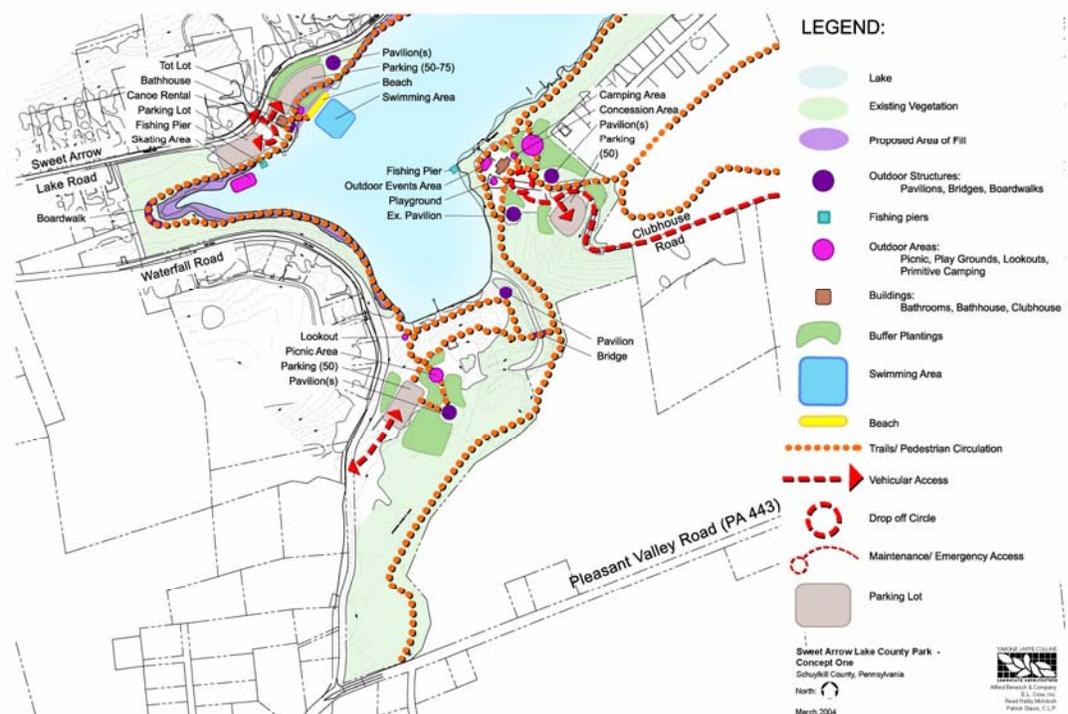
Site Plan

Concept Plan

Based upon feedback from the public meetings and steering committee meetings, a conceptual site plan was prepared to present initial design ideas and to study potential locations of proposed facilities within Sweet Arrow Lake County Park. The existing site conditions were considered as well as the functional relationships between proposed recreational facilities, parking areas, and site circulation.

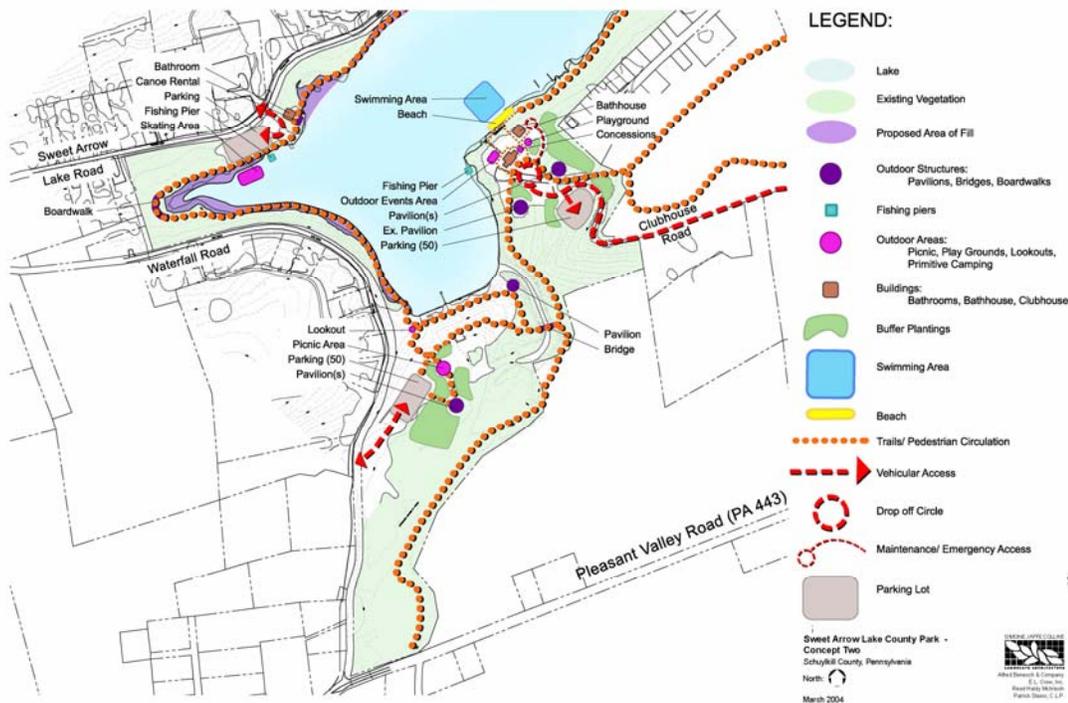
An excerpt of Concept Option 1 is shown below. This option proposes a beach and swimming area on the north side of the lake. To accommodate the lake swimming area, a new parking area, picnic pavilion, and bathhouse are proposed. These facilities are dependent upon additional land area that would be created by the placement of dredged fill material from the Army Corps Lake Restoration Project. This option was identified as the preferred option by the Steering Committee and was used as the basis for developing more refined and detailed site plans. A copy of this concept plan showing the entire park planning area is included at the end of this chapter.

A second concept option was prepared and presented to the Steering Committee. Concept Option 2 was developed based on Concept Option 1 and shows similar facilities, and circulation patters. The main difference between these concepts is the location of the proposed beach and swimming area. Conceptual Option 2 shows the proposed beach and swimming area located on



Concept Plan - Option 1.

Site Plan



Concept Plan—Option 2.

the south side of the lake adjacent to the Sweet Arrow Lake Clubhouse. A bathhouse with restrooms and changing facilities is proposed north of the Clubhouse. On the north side of the lake, the additional parking area and picnic pavilion shown on Concept 1 have been eliminated and a smaller restroom structure is proposed.

Site Plans

The clubhouse area, lower dam area, and the boat launch area were identified as the three main areas for the development of park facilities. A more detailed site plan was generated for these areas of the park to show a specific layout and orientation of proposed park improvements. The site plans incorporate preliminary feedback received from the public at the public meetings, and feedback received from the review of the plans with the Sweet Arrow Lake Steering Committee. The preferred location of the proposed beach and swimming area has not been finalized. The site plan for the Clubhouse Area includes an option with a beach and swimming area. Similarly, the site plans developed for the boat launch area include options showing how this area could be developed with or without the beach and swimming area.

A detailed site plan is included to show proposed improvements at the typical parking areas along Sweet Arrow Lake Road. Also, a site plan and elevation of the proposed pedestrian bridge over the Upper Little Swatara Creek is included at the end of this chapter.

Opinion of Probable Cost

A detailed estimate of cost for the construction of improvements at Sweet Arrow Lake County Park was completed based upon the proposed recreation facilities and improvements shown on the final site plans. The detailed estimate of cost can be found in the appendix of this report. Specific construction costs for improvements are broken out into smaller areas as outlined below to allow the County to consider construction costs in regards to project phasing and the availability of project funding.

Sweet Arrow Lake County Park Improvement Costs:

• Clubhouse Entrance Drive	\$213,000
• Clubhouse Drop-off and Parking	\$178,000
• Clubhouse Area New Pavilions	\$213,000
• Existing Pavilion Renovations	\$26,000
• Fire Access	\$8,000
• Fishing Island	\$23,000
• Playground	\$89,000
• Clubhouse Outdoor Events Area	\$124,000
• Clubhouse Improvements	\$30,000
• Lower Dam Parking	\$72,000
• Picnic Area	\$110,000
• Dam Area Improvements	\$67,000
• Pedestrian Bridge	\$532,000
• Boat Launch Parking	\$31,000
• Boat Launch Area Site Amenities	\$234,000
• Controlled Access Boat Launch	\$30,000
• Loop Trail	\$316,000
• Sweet Arrow Lake Rd. Parking Areas	\$18,000
• Wolfes Road Area Parking Lot	\$8,000
• Beach/Swimming	\$160,000

Park Improvements Total: \$3,003,225

Unit cost figures are based upon construction fees for similar park projects and reflect prevailing wages that are required for public construction jobs. The park improvements total includes a 10% contingency and a 10% engineering and design fee. A complete copy of the detailed estimate of probable cost is contained within the Appendix of this report. The detailed estimate of probable costs shows the swimming area improvements as a separate option from park improvements because swimming within the lake is dependant upon satisfactory water quality conditions.

Park Maintenance

Maintenance Philosophy

Sweet Arrow Lake County Park will contain facilities for active, passive, and lake based recreation to accommodate a wide variety of users and age groups. Maintenance goals must strive to minimize any real or perceived risks of injury to users in addition to providing facilities that are highly regarded and attractive. Currently, the park is open to the public and is maintained by a variety of individuals including the County Environmental Coordinator, roving County maintenance crews, and volunteers.

Maintenance funding for parks has increasingly become a concern in communities throughout the country. “Best maintenance or management practices” should be considered to provide strategies, and actions that can make maintenance operations more efficient while reducing maintenance and operating costs.

The County must continually strive to achieve high quality maintenance with as few public funds as possible. Residents, scout groups, school students and other volunteer groups can greatly assist with maintenance efforts by undertaking “clean-up” events, sponsoring planting events, and encouraging residents to keep the park clean and litter free.

Maintenance Staffing Options

As recommended in the Peer to Peer Study, a park superintendent or parks director is required to oversee park operations including both programming and park maintenance. The park superintendent or director makes recommendations to the County regarding capital improvements and the annual operational budget. Additionally, the park superintendent schedules facility use and facility programs, issues user groups permits, and administers day to day park operations. The superintendent must have experience in park programming, maintenance issues, and must be a good ambassador in the community.

In House Maintenance

In house maintenance staff positions include a parks foreman and seasonal parks laborers. The parks foreman reports to the park superintendent and is responsible for facility maintenance. The parks foreman position requires an individual that is skilled in all aspects of maintenance such as plumbing, electric, carpentry, and landscaping. The parks foreman completes a daily log of work, schedules work assignments, and recommends equipment to the park superintendent. Seasonal parks laborers report directly to the park foreman and assist the foreman in providing for the daily maintenance and upkeep of the park facilities.

Benefits of an in-house maintenance staff:

- Workers treat the facility like their own property, resulting in “extra

special” care.

- Workers are more familiar with the property in a very short time.
- Park patrons see familiar faces at the site throughout the year, which provides for a safe atmosphere.
- Workers gain knowledge from past experiences / maintenance problems at the site which allows for a quick and more effective response.
- Maintenance staff are familiar with the facilities and prepared to deal with maintenance issues as they arise.
- The County has direct control over all work and workers.
- An in-house maintenance staff allows for ease of partnership with other groups.
- Maintenance staff is on-site to handle issues as they arise.

Concerns with in-house maintenance staff:

- It may be more expensive to hire year round full time workers.
- Employee retention.
- Finding qualified people to fill these highly demanding positions.
- Dealing with worker concerns such as illness and vacation.
- Costs associated with equipment purchases and annual repairs.
- Equipment storage is necessary and equipment must be protected from vandalism.

Outsourced Park Maintenance

The second option for providing maintenance at Sweet Arrow Lake County Park is to out-source all maintenance work through contracts with private vendors.

Benefits to outsourcing park maintenance:

- The County may select different vendors to accomplish different types of work.
- Annual proposals are prepared to obtain the lowest possible price for services.
- The County does not need to hire a maintenance staff and can avoid staffing problems.
- The County does not need to purchase as much in the way of maintenance equipment and will experience low annual maintenance and repair expenses on equipment.
- Contracts are in place to enforce exactly what is expected of the contractor and written penalties are provided if work is not accomplished as outlined.

Concerns with out-sourcing park maintenance:

- The county does not have total control over park maintenance. For example, if it rains and the grounds contractor has other assignments – they may elect to pass on mowing at the facility.
- The possibility exists that vendors will change annually based on the lowest bid.

Site Plan

- The same workers will not necessarily be at the park each week; therefore, different qualities in work may be evident.
- The contractor is not on site to handle issues as they arise.
- An immediate response to a maintenance issue is often not possible.

Roving County Maintenance

The third option for providing park maintenance is to utilize existing County employees.

Benefits to roving maintenance:

- The County maintains some control over when work is completed and scheduled, but not total control.
- County employees completing the work are responsible to County staff.
- County employees are available to do other assignments throughout the County.
- County employees, over time, will become familiar with the facility.
- Staff may already exist, and the County may not need hire additional personnel.
- Additionally, some maintenance equipment may already be in place possibly reducing the amount of equipment that needs to be purchased.

Concerns with roving maintenance:

- County employees will not be at the site each day to provide the “extra” care needed.
- Park patrons will not see the same faces daily.
- Personnel will not be on site to handle issues as they arise.
- Existing employees may not be skilled in all aspects needed for the proper function of the facility.
- Transportation of equipment is necessary and damage may result.
- County wide related work orders may result in park maintenance work taking a longer period of time to be completed than expected.
- If an emergency arises at another location, the crew may not be able to perform duties needed.

Of the existing Pennsylvania Counties that have a parks and recreation department, the overwhelming majority provide for an on-site maintenance staff. It is a common belief that a small maintenance staff with an intimate knowledge of a facility provides the best care to that facility. Many volunteers are also used as are seasonal workers when necessary. Prison work release labor is used as well.

Maintenance Schedule

It is recommended that the County develop a maintenance management plan which sets quality and performance standards for maintaining Sweet Arrow Lake Park. The following is a monthly outline of basic maintenance tasks that should be completed at Sweet Arrow Lake County Park. The frequency, per month, of these maintenance tasks is indicated in parentheses

January

Pick up and remove trash (8)

Tree pruning

Inspect play equipment, etc. / make repairs (1)

Inspect and repair all vehicles and equipment

Snow removal from parking areas and formalized Clubhouse walkways

February

Pick up and remove trash (8)

Inspect play equipment, etc. / make repairs (1)

Supplement aggregate and wood chip trails (1)

Signage inspection and repairs

Snow removal from parking areas and formalized Clubhouse walkways

March

Pick up and remove trash (8)

Inspect park trees for winter damage / perform work

Inspect play equipment, etc. / make repairs

Snow removal from parking areas and formalized Clubhouse walkways

Inspect open lawn areas for winter damage and perform necessary repair work

Aeration of all open lawn areas / top-dress as necessary and over seed with perennial rye

Sweep play courts and pavilions (1)

Reline play courts as required (every other year)

First mowing of open lawn areas (1)

Fertilize and lime lawn areas (possibly April) (1)

Apply pre-emergent crab grass controls if warranted (possibly April)

Apply dormant oil sprays to trees if warranted

Inspect play equipment, etc. / make repairs (1)

Paint all facilities if warranted

Turn on water supply to all exterior buildings

Prune trees as needed

Site Plan

April

Pick up and remove trash (12)
Clean rest rooms twice weekly (8)
Mow open lawn areas (3-4)
Sweep play courts and pavilions (3-4)
Inspect play equipment, etc. / make repairs (1)
Fish Stocking
Begin applying mosquito control measures

May

Pick up and remove trash (12)
Clean rest rooms twice weekly (8)
Mow open lawn areas (4)
Aerate open lawn areas (1)
Sweep play courts and pavilions (4)
Inspect play equipment, etc. / make repairs (1)
Plant flowers and other landscape items
Add sand to beach area if needed
Replace the swimming area delineation markers
Spray for poison ivy control
Mosquito control measures

June

Pick up and remove trash (12)
Clean rest rooms thrice weekly (12)
Mow open lawn areas (4)
Sweep play courts and pavilions (4)
Inspect play equipment, etc. / make repairs (1)
Mosquito control measures

July

Pick up and remove trash (12)
Clean rest rooms thrice weekly (12)
Mow open lawn areas (3)
Aerate athletic fields (1)
Sweep play courts and pavilions (4)
Inspect play equipment, etc. / make repairs (1)
Mosquito control measures

August

Pick up and remove trash (12)
Clean rest rooms thrice weekly (12)
Mow open lawn areas (3)
Sweep play courts and pavilions (4)
Inspect play equipment, etc. / make repairs (1)
Supplement aggregate and wood chip trails (1)

Mosquito control measures

September

Pick up and remove trash (12)
Clean rest rooms twice weekly (8)
Mow open lawn areas (4)
Aerate open lawn areas (1)
Sweep play courts and pavilions (4)
Fertilize open lawn areas fields (1)
Mark invasive species for winter removal
Inspect play equipment, etc. / make repairs (1)
Mosquito control measures

October

Pick up and remove trash (12)
Clean rest rooms twice weekly (8)
Mow open lawn areas (2-3)
Sweep play courts and pavilions (4)
Aerate and top-dress open lawn areas (1)
Repair damage / compacted areas - seed with fescue
Inspect play equipment, etc. / make repairs (1)
Fall leaf pick-up (1)
Fall tree fertilization

November

Pick up and remove trash (8)
Clean rest rooms once weekly (4)
Fertilize open lawn areas (1)
Mow open lawn areas (1)
Sweep play courts and pavilions (2)
Inspect play equipment, etc. / make repairs (1)
Fall leaf pick-up (1)
Winterize all exterior buildings and turn off all water

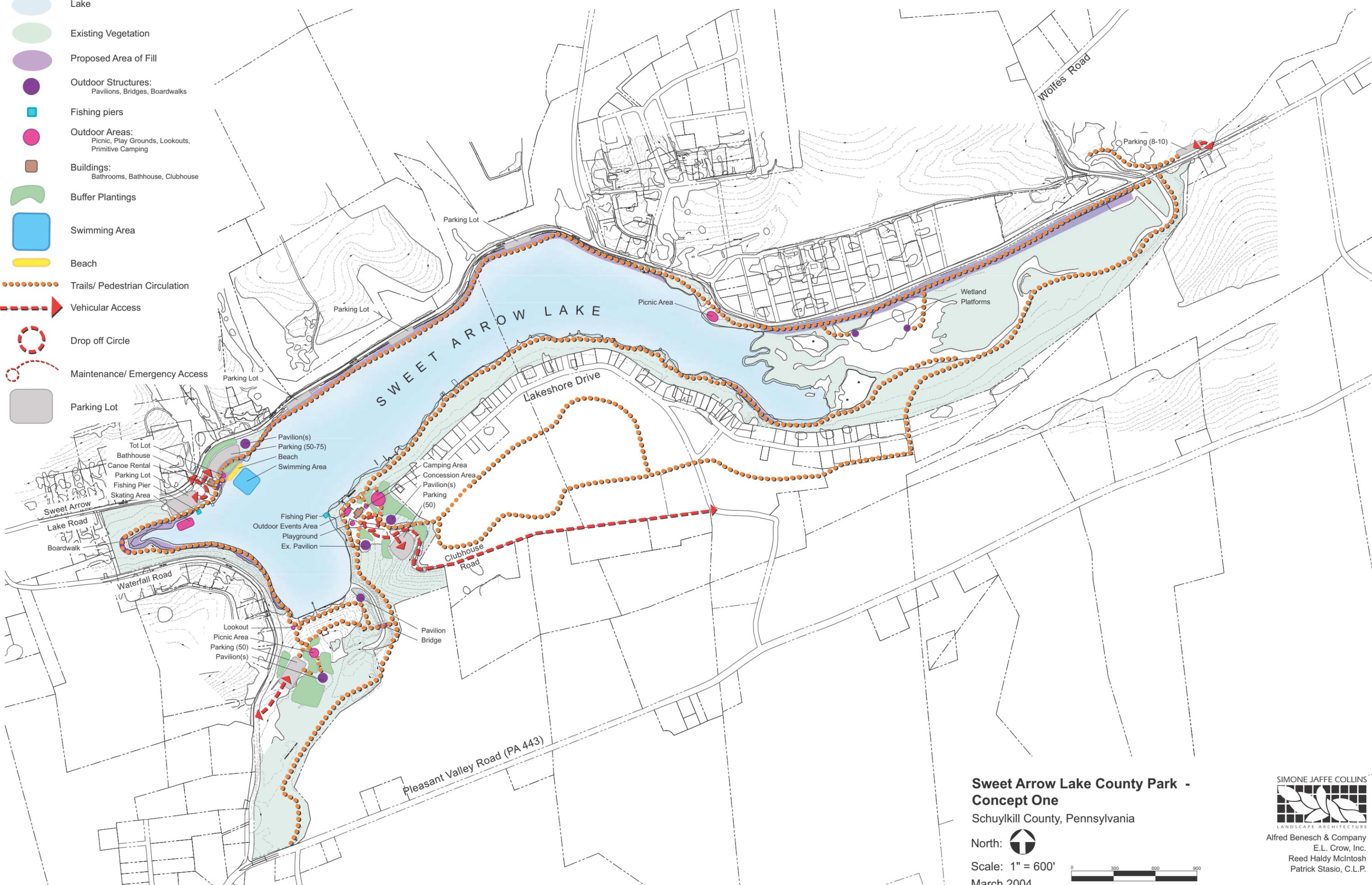
December

Pick up and remove trash (8)
Inspect play equipment, etc. / make repairs (1)

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LEGEND:

-  Lake
-  Existing Vegetation
-  Proposed Area of Fill
-  Outdoor Structures:
Pavilions, Bridges, Boardwalks
-  Fishing piers
-  Outdoor Areas:
Picnic, Play Grounds, Lookouts,
Primitive Camping
-  Buildings:
Bathrooms, Bathhouse, Clubhouse
-  Buffer Plantings
-  Swimming Area
-  Beach
-  Trails/ Pedestrian Circulation
-  Vehicular Access
-  Drop off Circle
-  Maintenance/ Emergency Access
-  Parking Lot



**Sweet Arrow Lake County Park -
Concept One**

Schuylkill County, Pennsylvania



Scale: 1" = 600'

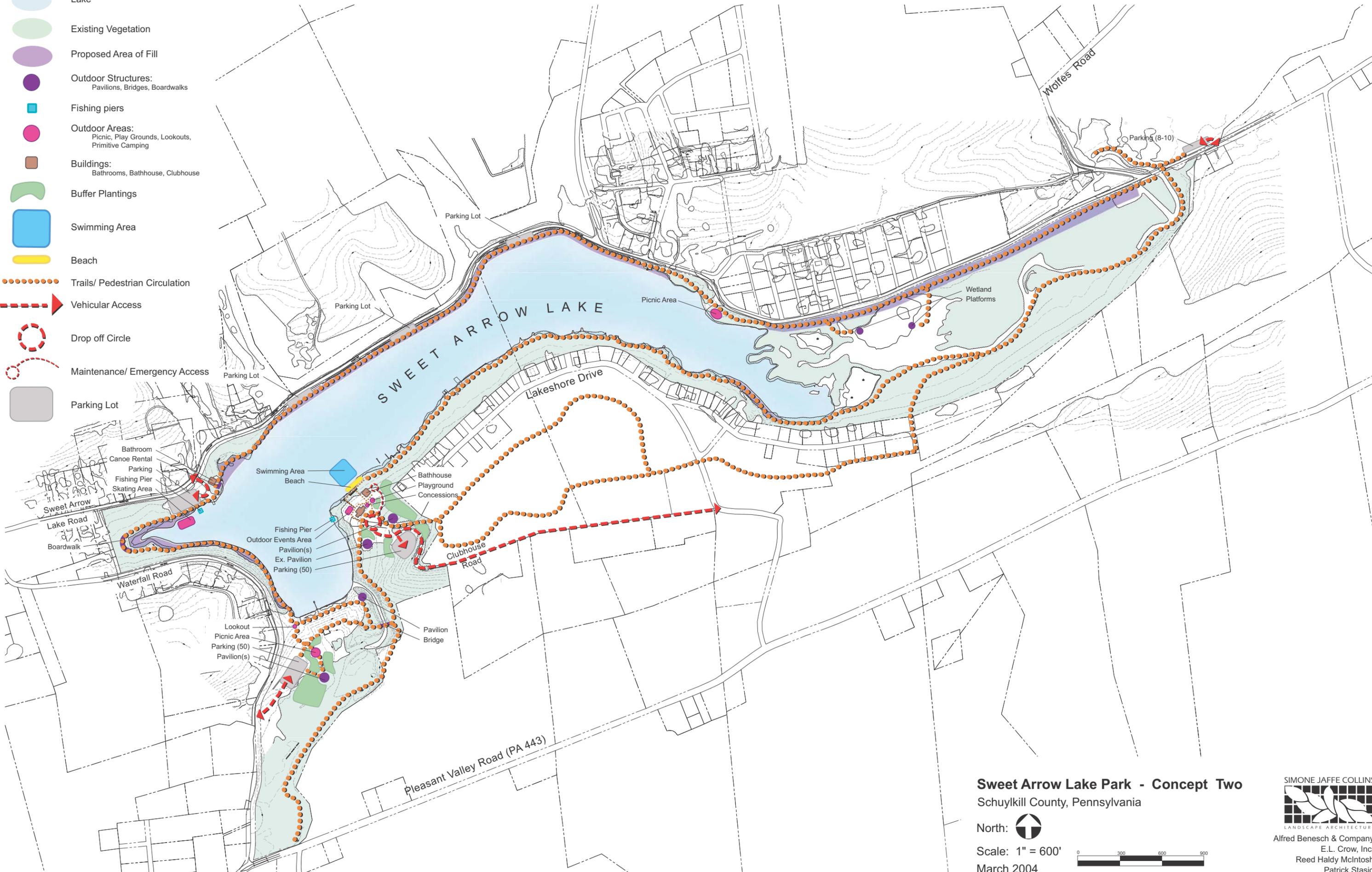
March 2004



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE
Alfred Benesch & Company
E.L. Crow, Inc.
Reed Haldy McIntosh
Patrick Stasio, C.L.P.

LEGEND:

-  Lake
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-  Proposed Area of Fill
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Pavilions, Bridges, Boardwalks
-  Fishing piers
-  Outdoor Areas:
Picnic, Play Grounds, Lookouts,
Primitive Camping
-  Buildings:
Bathrooms, Bathhouse, Clubhouse
-  Buffer Plantings
-  Swimming Area
-  Beach
-  Trails/ Pedestrian Circulation
-  Vehicular Access
-  Drop off Circle
-  Maintenance/ Emergency Access
-  Parking Lot



Sweet Arrow Lake Park - Concept Two
Schuylkill County, Pennsylvania



Scale: 1" = 600'

March 2004



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