Facility plan for the Renovation, Reconfiguration and Expansion of East Norbeck Local Park



Prepared for:

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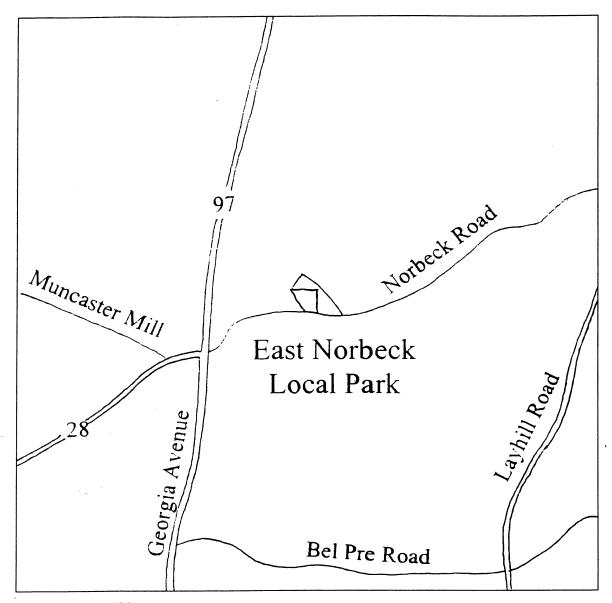


Figure 1: Vicinity Map

INTRODUCTION AND HISTORY

East Norbeck Local Park is comprised of approximately 24.75 acres and is located on the north side of Norbeck Road, east of Georgia Avenue. The park is bounded by Norbeck Road (MD 28) along the southern boundary, RE-2 zoned land developed with single-family homes to the southwest, undeveloped forest along the northwest boundary, and formerly cultivated fields along the eastern boundary. A 300-foot-wide right-of-way for the Intercounty Connector is proposed along the north and eastern property line.

The original ten-acre park was developed in the 1970's and contains one softball and one baseball field with a soccer field overlay, two lighted tennis courts, two lighted basketball

courts, a playground, a picnic shelter with restrooms, and a small asphalt parking lot. In July of 1997, after repeated requests from the community and the County Department of Recreation, the M-NCPPC purchased an adjoining 14.75-acre parcel for the purpose of adding additional parking and expanding the recreational opportunities for the community.

The purpose of this facility plan is to incorporate the acquired 14.75-acre parcel into the existing park, provide an adequate amount of parking to support park facilities, improve the existing, functionally obsolete facilities within the park, and accommodate future road improvements.

In February 2002, the Commission contracted with the RBA Group, a multi-disciplinary firm, for facility planning the renovation, reconfiguration, and expansion of East Norbeck Local Park. M-NCPPC staff and The RBA Group have worked closely to develop a facility plan that meets the recreational needs of the community, provides the minimum amount of parking necessary to support the recreational facilities, provides appropriate access for people with disabilities, and protects the site's invaluable resources.

FACILITY PLANNING PROCESS

The planning process for the creation of the Facility Plan for the Renovation, Reconfiguration and Expansion of Existing facilities in East Norbeck Local Park included the following steps:

- 1. Collection of Data.
- 2. Inventory and Analysis of Site
- 3. Preparation and approval of a Natural Resources Inventory/Forest Stand Delineation
- 4. Development of three Design Concepts
- 5. Presentation of Site Inventory and Analysis and Design Concepts to community at a public meeting
- 6. Development of two detailed plans based on community and staff comments
- 7. Preparation of Facility Plan based on County, State, and M-NCPPC comments
- 8. Presentation of Facility Plan at 2nd public meeting
- 9. Revision to Facility Plan based on community and staff comments
- 10. Preparation and approval of Storm Water Management (SWM) Concept Plan
- 11. Revision of Facility Plan Based on M-NCPPC, County and MDSHA comments and preparation of Construction Cost Estimate
- 12. Development and approval of Preliminary Forest Conservation Plan
- 13. Presentation of revised Facility Plan at Plan Review Meeting
- 14. Presentation of Facility Plan at Planning Board Hearing

Data Collection

Information was collected in the form of maps and plans, during site visits, and a field topographical survey. At the kick-off meeting, held March 14, 2002, the M-NCPPC staff provided the RBA Group the following items to begin the data collection phase:

- Site Plan of original 10-acre park
- Topographic survey of original 10-acre park dated 1971
- Grading, Sediment Control and SWM of original 10-acre park dated 1973
- GIS maps
- Water Resource Analysis map
- Preliminary Program of Requirements (POR)

Subsequent to the kick-off meeting, the RBA Group completed a field survey to collect accurate topographical, utility, property boundary, and environmental information. Coincident with the field survey, members of the RBA Group conducted site visits to observe and record the character and usage of the park and to examine the existing facilities and their condition

Site Inventory and Analysis

Using the data and information collected in the first phase of the project, the RBA Group completed an inventory and analysis of the physical aspects of the park. These included:

- Physical condition of all existing facilities
- Location and condition of streams and site drainage
- Topography, slopes and soils
- Tree inventory of existing shade and evergreen trees greater than six-inches in caliper and ornamental trees greater than four-inches in caliper
- Environmental buffers and physical constraints
- Natural Resources Inventory/Forest Stand Delineation (NRI/FSD)

The Existing Park

The existing layout and facilities within East Norbeck Local Park were examined during the site visit and a number of deficiencies were observed. The park, which was constructed in the early to mid 1970's, includes two ball diamonds, one designated for baseball with a 300-foot field depth, and a softball field with a 225-foot field depth. An outfield corner of each ball field overlaps, making it difficult for the two fields to be used simultaneously. In addition, a soccer field overlays both ball diamonds. This type of configuration was popular in the 1970's-80's as an attempt to broaden the type of recreational opportunities available to the community in limited space. In addition to the obvious functional limitations created by the overlapping and overlaying configuration, of greatest concern, is that with the increased popularity of soccer has extended the soccer season, and the fields no longer have the requisite time to rest and regenerate. As a result, more maintenance is required to maintain a lower quality stand of grass.

Another problem associated with the original and now outdated design is with the softball field depth. When the park was designed in the 1970's, a softball field depth of 225-250 feet was considered the standard and sufficient. Since that time, due largely to the introduction of metal bats, the minimum acceptable softball field depth is 275 feet. The existing field designated for baseball has a 300-foot depth and is designated for youth play. Unfortunately, due to space limitations the existing baseball field will remain at 300-feet and will be restricted to youth play.

The existing 38-space asphalt parking lot is undersized forcing park users to park along Norbeck Road or across the road along Bailey's Lane. At times traffic moves very quickly along Norbeck Road and sight distance to the east of the park is restricted creating a very hazardous situation for both park users and commuters. In addition, residents of Bailey Lane have complained that park users regularly block driveways. The parking shortage is what originally prompted the Commission to purchase the adjacent 14.78-acre parcel. The condition of the existing asphalt is also poor in some places.

The facilities within the park are not accessible. No paved pathway exists from the parking lot to the existing ball fields, playground, or court. Park users must walk over turf, in places through drainage swales, to reach the facilities. In addition, the picnic shelter and restrooms do not meet ADA guidelines and are also in very poor condition with numerous cracks visible throughout the concrete slab.

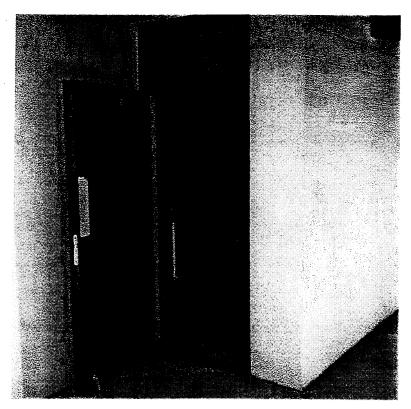


Figure 2: Non-ADA Compliant Bathroom



Figure 3: Cracked Concrete Slab

Environmental Features

The site topography is characterized as gently rolling with slopes generally between 3% and 15%. Several areas with slopes steeper than 15% are located along the stream banks. The majority of the soils are deep and well drained with several areas of poorly drained soils located within the stream buffer.

Two intermittent category IV streams, part of the Northwest Branch Watershed, essentially divide the site into three distinct areas before flowing northeast off the site. The existing 10-acre park drains to these streams through the use of swales and sand filters. The upper reaches of these streams are considered ephemeral (water flows only as a result of a storm event).

Environmental buffers consist solely of stream valley buffers. Category IV intermittent streams have a required 125' buffer on both sides from the centerline of the stream. The only major physical constraint is the future widening of Norbeck road. An ultimate right-of-way of 150' (75' from existing centerline) extends into the site approximately 50'.

Natural Resources Inventory/Forest Stand Delineation (NRI/FSD)

Maps provided by M-NCPPC and the field survey completed by the RBA Group were sent to J. Cook Consultants to complete an NRI/FSD. The FSD identifies two forested

areas that essentially follow the two streams and contain a mixture of species typical of "old field" succession. The FSD also identifies extensive areas of invasive/exotic species along the wooded stream edge and recommends physical or chemical control. The streams were examined and are noted as highly eroded with deeply incised banks. The FSD recommends that a bridge be used for any stream crossings.

The NRI/FSD was approved on 7/29/02 by the M-NCPPC Environmental Planning Division.

Transportation Improvements

The Olney Master Plan. recommends a 150-foot-wide right-of-way for Norbeck Road. The edge of the existing parking lot falls just within the proposed right-of-way. The proposed facility plan includes the right-of-way as recommended by the Master Plan.

The Maryland State Highway Administration has initiated a MD 28/MD 198 Corridor Improvement Study and is currently in the "Alternatives Retained for Detailed Study Phase." It is anticipated that the study will be completed in the Spring of 2004 with approval from the FHWA in the Winter of 2004.

A three hundred foot-wide right-of-way for the ICC is proposed along the northern property line of the park. The proximity to the future highway was considered in the design of the park.

Concept Development

Three illustrative concepts were developed using a preliminary Program of Requirements (POR) provided by the M-NCPPC at the kick-off meeting. The program element list given to The RBA Group included the following facilities:

- 2 soccer/lacrosse fields
- 2 softball/baseball fields, reoriented with no overlap
- 2 tennis courts
- 1 multi-age playground
- 2 basketball courts
- Picnic pavilion
- Parking for 230 vehicles (250 was preferred)

The RBA Group produced three conceptual layouts that ranged in scope from a plan that proposed minimal changes to a complete redesign of the Park. All three concepts included a pedestrian path system and additional parking.

Concept #1 — This concept proposed the least amount of change from the existing park layout. The only program element changes were the addition of a pedestrian path system and additional parking. The current baseball/softball/soccer field overlay prohibits use of more than one active ball field facility at one time. This concept relocated the existing soccer field to the large open pasture area along MD 28 to allow concurrent uses of facilities. While this concept does provide a separate soccer field, it does not fully meet the POR because the two existing baseball/softball fields overlap in such a way that it is difficult to utilize both facilities simultaneously.

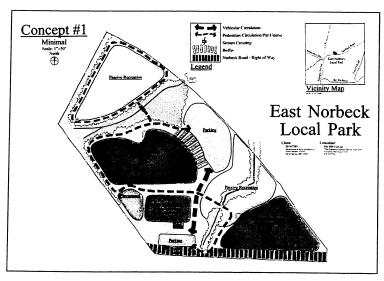


Figure 4: Concept Plan #1

Concept #2 – This concept, labeled 'Medium', expands on the idea behind Concept #1 by adding a second soccer field and relocating the picnic pavilion. Once again, a pedestrian path system and additional parking are incorporated. This concept meets the POR listed above.

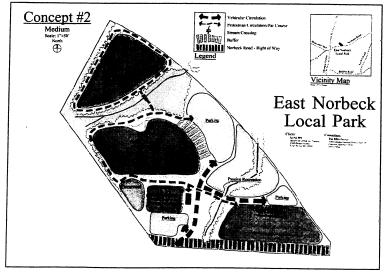


Figure 5: Concept Plan #2

Concept #3 – This concept incorporates all the items listed above and relocates facilities to allow for the best functional use. The active field sports such as baseball, softball and soccer are located roughly within the limits of the existing 10-acre park while the picnic area, playground and the tennis and basketball courts are located at the southeast corner of the 'new' park. The pasture located in the northwest corner of the site remains undisturbed except for the addition of a trail for passive recreation.

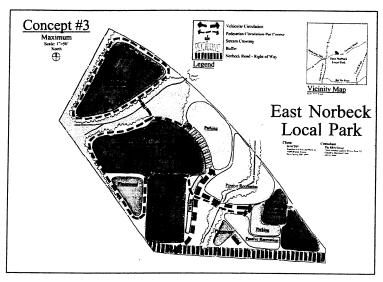


Figure 6: Concept Plan #3

1st Public Meeting

MNCPPC and the RBA Group together coordinated the first of two public outreach meetings with the intent of presenting the project to the community and getting community input. Fliers, developed by the RBA Group describing the project and announcing the meeting, were sent to residents and community groups located adjacent to and near East Norbeck Local Park. The site inventory and analysis and the three concepts were presented at the meeting and questions/comments were recorded. The majority of the participants at the first meeting preferred Concept #3. The most notable comments made were:

- Do not locate the soccer field along Norbeck Road
- Provide additional lighted basketball courts
- Improve the picnic pavilion and continue to include restrooms in addition to portable toilets
- Leave the northwest corner of the site alone
- Update lighting of the basketball and tennis courts to include current cut-off fixtures. Set fixtures to turn off no later than 10:00 pm.

Program of Requirements and Detailed Concept Plans

After the first public meeting, M-NCPPC staff and the RBA Group met to further define the POR. The decision was made to scale back the number of facilities originally proposed. The revised program consisted of:

- 2 ball fields
- 1 soccer/lacrosse field
- 1 picnic pavilion with restrooms
- 1 multi-age playground
- 2 lighted tennis courts
- 2 lighted basketball courts
- An eight foot-wide trail with a 10 foot-wide Bridge
- At least 175 parking spaces

The RBA Group then developed two detailed concept plans based on concepts #2 and #3. Scheme A and scheme B were then presented to M-NCPPC staff for discussion and review. M-NCPPC requested cost estimates for each Scheme and made some general observations. One observation was that the soccer field and the softball fields were too small. The RBA Group was advised to make the soccer field 195' x 330' and to make the foul line on the softball field 275'. The RBA Group was directed to locate facilities so that no existing trees would be removed along the common property line with adjoining residences.

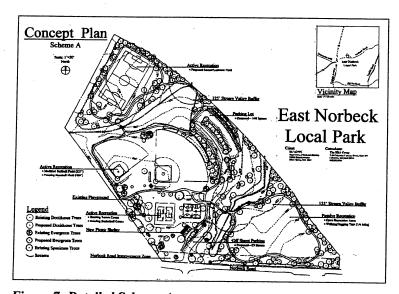


Figure 7: Detailed Scheme A

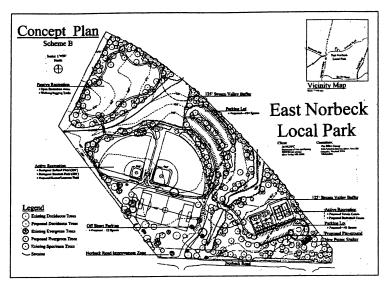


Figure 8: Detailed Scheme B

M-NCPPC staff members met in December of 2002 to discuss the two schemes. Upon reviewing the grading that would be required in order to locate the soccer/lacrosse field in the northwest pasture and recognizing potential access and safety issues associated with scheme A, they chose scheme B for the RBA Group to further develop.

Facility Plan

The facility plan takes into account many factors and products of the planning process described in this report. The facility plan is a further development of Scheme B, however, it incorporates the approved SWM Concept, environmental issues and community input.

The arrangement of the proposed facilities is based on keeping the field sports together and keeping the more intense use facilities (tennis, basketball, playground) together while minimizing the disturbance of the northwest pasture. The play fields are consolidated into one area of the site, realigned so that they no longer overlap and are usable simultaneously. The picnic pavilion with restrooms, is relocated in the southeast portion of the site near the playground, basketball, and tennis courts.

All of the proposed facilities and parking areas are connected by over .7 miles of paved paths, including a 1/3-mile loop, which is compliant with the American with Disabilities Act. This path system connects to the northwest pasture area and allows access to a natural area.

The proposed landscape plan provides a buffer to the adjacent homes west of the park and also enhances the existing stream valley buffers.

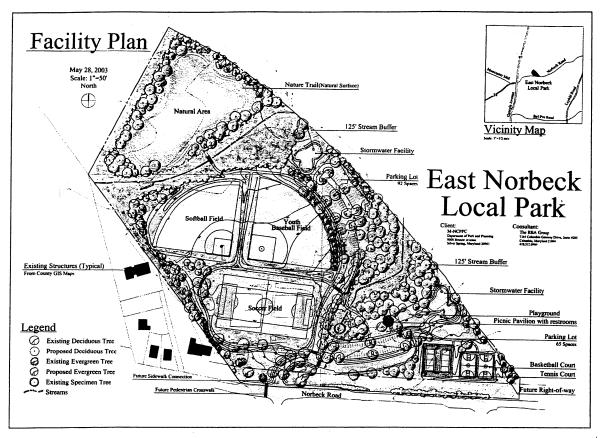


Figure 9: Facility Plan

A construction cost estimate was generated based on the Facility Plan. This cost estimate includes demolition of existing structures, proposed utilities, grading, storm water management and forest conservation. The detailed cost estimate can be found in the appendices section.

2nd Public Meeting

Following the first Community meeting, staff continued to meet and discuss the plans with members of the community. After learning that members of the community east of the park did not receive notice of the first community meeting, a second community meeting was scheduled and notices were mailed to a much larger group of residents. Once again the site analysis, the three concepts, and a revised facility plan, were presented to an audience of over 20 residents and concerned neighbors. Following the staff and RBA's presentation, the community commented and asked questions including the following:

How wide is the Steam Buffer? - Buffers are 125' on either side of centerline
of intermittent/perennial streams. Streams are classified based on the State of
Maryland system. Ephemeral streams, basically drainage swales, have no
required buffer.

- Where did the second access point from Norbeck road go? The second access point was removed from the concept plan due to site and area constraints.
- Are there statistics that show the need for all proposed program elements? Yes, a park user survey conducted in 2000 based on 20 random site visits, reported 75% playing or watching baseball/softball/soccer and 7.6% playing basketball
- Can the number of fields be reduced thereby reducing the number of parking spaces? The fields are heavily used and there is a demand for more facilities. East Norbeck is a Local Park as opposed to a neighborhood park and provides recreational opportunites, by definition, to a larger population.
- What defines a local park? The definition of a local park was read from the PROS Plan.
- What defines the area that a local park serves? Generally, the area is within driving distance. Neighborhood parks are walkable.
- Why is East Norbeck Local Park to get a soccer field rather than another park in the Olney Master Plan? There is a need for a soccer/lacrosse field in this area. A soccer field already exists at the park as an overlay over the baseball diamonds. A stand-alone field will be more useable to the community.
- How will noise be dealt with? During design, the noise will be examined again. We don't expect the noise in the park to greatly exceed the existing levels. If it is determined that the park will generate excessive noise, there are measures that can be employed to mitigate the noise, such as fencing and berming. It is expected that the noise generated by the traffic on Norbeck Road will be greater than the noise from the Park.

The most notable comments were:

- The picnic shelter is used a lot.
- There are no trails within the existing park for people to walk or bike.
- Provide additional picnic tables beyond what would be in the pavilion.
- Use native plants and planting stock of a good size in reforestation areas.
- Do not provide lights-close the park at dark.
- Provide lights up to a certain hour and use more efficient lights with minimal overflow.
- Provide benches along trail.
- The Norbeck Conservation Society asked that the M-NCPPC consider simply upgrading existing facilities, agreed that parking should be increased to a

- reasonable level, questioned the true need of a soccer field, and asked that there be no lights provided after dark.
- The Norbeck Civic Association supported the proposed facility plan, requesting that lighting be provided sensitively, and agreed that the number of parking spaces shown on the facility plan is necessary.

Following the second community meeting, and after meeting with County and MDSHA staff, several minor revisions were made to the facility plan.

Preliminary Forest Conservation and SWM Concept

The final facility plan was used to create both a Preliminary Forest Conservation plan and a Stormwater Management (SWM) concept plan. The SWM concept plan was submitted to the Montgomery County Department of Permitting Services and approved in April 2003. The Preliminary Forest Conservation Plan was submitted to the Natural Resources Division of the M-NCPPC and is recommended for approval.

The SWM concept plan provides both water quality treatment and water quantity treatment. Water quality is provided through the use of a combination of grass swales and pocket sand filters. The grass swales collect and slow down run-off, which in turn allows for water to recharge or percolate back into the ground. Water that does not recharge will enter the sand filters via the grass swales. After water passes through the grass swales and sand filters it enters one of the detention facilities where water quantity is provided. Two, 12-hour extended detention facilities are proposed to detain the volume of water produced by a 1-year storm event. The purpose of these facilities is to control the rate at which water discharges from the site. In general, the rate of discharge after development should be equal to the rate of discharge before any development.

Forest conservation requirements are provided through a combination of retention, reforestation and afforestation. The goal is to retain as much of the existing woodland as possible. Recognizing the importance to the community, approximately 97% of the existing woodlands will be retained. The preliminary numbers from the forest conservation worksheet indicate that minimal reforestation is needed, however, nearly an acre of afforestation is needed to bring the site up to the afforestation threshold of 3.51 acres. This scenario is typical of situations where former agricultural land is converted into another use.