Sweet Water Park Master Plan

Sweet Water Park was given its final name after the park master plan was completed. The nearby Kanoheda Elementary School provided the site's working name during the master planning period. All references in this report to "Kanoheda Park" are for Sweet Water Park.

KANOHEDA PARK MASTER PLAN



GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES , PARKS DIVISION August 2003

Kanoheda Park Master Plan

Gwinnett County, Georgia

Prepared For: Gwinnett County Department of Community Services Parks Division 75 Langley Drive Lawrenceville, Georgia 30245-6900

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The Kanoheda Park Master Plan was prepared with the participation and guidance of the Master Plan Steering Committee members. We appreciate their time and efforts:

Special thanks to the Gwinnett County Board of Commissioners for their support and vision:

Chairman:	
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District 2:	
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SECTION **Project Goals and Objectives**

1.0 The Gwinnett County Parks and Recreation 2000 Capital Improvements Plan encourages the County to acquire smaller park properties in those densely populated and under served areas of the County in which larger Community Parks size parcels (120-140 acres) are unavailable. The Park Cluster concept encourages the acquisition of one or more smaller parcels in densely developed service gap zones to ensure that some park services are provided to all areas of the County.

In August of 2000, the Gwinnett County Recreation Authority approved the Passive Community Park as a fourth primary park type for the County (RE: Appendix - Passive Community Park Position Paper). The Passive Community Park would not have sports field complexes run by Youth Associates with ball field lights, extensive parking, or large community centers and aquatics centers. The Passive Community Park would fit on properties smaller than needed for the current Gwinnett County standard Community Park but would require a minimum of twenty contiguous acres to accommodate any significant range of passive recreation opportunities.

This report addresses the need for park services in a densely developed area of Gwinnett County on a recently acquired 25-acre site on Bethesda School Road near that roads intersection with Cruse Road. The goals driving this master plan include the following:

- Address need for park services in a densely developed area to ensure that park services are provided to all areas of the County.
- Realize goals of 1996 Comprehensive Plan and the 2000 CIP Plan
- Integrate a variety of diverse passive recreation activities
- Integrate a variety of diverse passive recreation activities which will serve all age groups.
- Create sidewalk, pedestrian or bike trail connections to surrounding neighborhoods.
- Ensure that no more than 25% to 33% of the site is developed with impermeable surfaces.
- Maintain a consistent passive atmosphere to the park while providing safety.

SECTION **Project Understanding**

2.0 The 25-acre Kanoheda Park Site is located in the most culturally diverse area of Gwinnett County, which is now Georgia's most culturally diverse county. Surrounded by densely populated neighborhoods, and a community church, Kanoheda Park will serve as the third passive community park within Gwinnett County. It will be host to a mixture of passive recreation amenities, chosen by the community, and preserved open spaces. The site itself is wooded with a mixture of pines and hardwoods punctuated with flowering under-story trees. A stream that feeds a tributary of the Yellow River cuts across the eastern end of the site. Wet-

lands associated with the banks of the stream are also in existence, however, no portion of the site falls within a designated flood hazard zone.

SECTION PROJECT APPROACH

- 3.0 Using a standard Master Planning project approach toward the Kanoheda park project, the project passed through a series of design stages before a final Master Plan was approved. The following represent the milestones completed along the way.
 - Notice to proceed issued to jon Benson + associates
 - Flyers advertising public meeting distributed, public meeting sign erected.



- Public Input meeting, Community Interest Forms and Steering Committee Membership applications distributed.
- Steering Committee Scheduling Meeting
- Steering Committee Park Tour with Consultant and County Representatives
- Inventory / Analysis, Conceptual Plans Presentation to Steering Committee
- Preliminary Master Plan and Cost Estimate Presentation to Steering Committee
- Final Master Plan Presentation w/ Phasing prioritization
- Presentation to Gwinnett County Recreation Authority
- Presentation to Gwinnett County Board of Commissioners.

The following provides a brief description and timeline of sequence of Meetings:

Preparation of Base Information

jon Benson + associates prepared AutoCAD base information utilizing GIS files and existing Kanoheda Park survey, obtained from Gwinnett County.

Community Interest Meeting

The first Public Meeting was held at the Kanoheda Elementary School Cafeteria on February 25, 2003 with a presentation of the park boundary survey, aerial photography, a description of Passive Community Park types, a description and the receipt of Community Interest form surveys and Steering Committee Applications.

Scheduling Meeting

The Steering Committee members met with the Consultant and Gwinnett County Staff on April 2, 2003 to schedule all meetings for the Kanoheda Park Master Planning Process.

Park Site Visit and Tour of County Parks

Gwinnett County Staff, Consultants and Steering Committee Members met at the project site on April 12, 2003, for an informative site walk. The intent of the site walk was to become familiar with the opportunities and constraints of the park site. Steering committee members actively participated in the site tour by voicing concerns and requests for their passive community park.

After completing the site walk, the Park team visited 4 additional parks to discuss specific elements. These parks included the following: Bethesda Park – The 1 ½ mile multi-use trail was visited and walked. Special attention was given to the way the trail was laid out to provide active drainage, and a positive user experience influenced by safety issues, visual interest, and trail materials. Mountain Park – A large playground, that could be used by a multitude of age groups, was visited. Adjacent to the playground is a large open turf area that could be used for sunbathing, Frisbee or drill practice. In addition to the playground and turf area, Mountain Park utilized a woodland trail for picnic tables and grills. Pinckneyville Park - The skate park and pavilion were visited. The skate park provides an active recreation area for a variety of age groups ranging from age 9 up, with the majority of the users being teens. The skate park area also provides an area for gathering and socialization. The Park team also looked at a 60' Pavilion area located next to a playground. It was decided that the 60' pavilion might be slightly large for the Kanoheda Park site and a couple smaller pavilions were requested. Also discussed was the importance of having socialization areas in the park. Webb Bridge Park –offered a large shaded playground, complete with playground equipment, shaded sand boxes, active water play area, lawn and seating areas. The shaded playground required fencing around the tree bases to minimize compaction in the root zone.

Inventory / Analysis, Concept Presentation

The Consultant presented the Park Site Inventory & Analysis diagrams to the Steering Committee on April 29, 2003. Diagrams including; Slope and Hydrology Analysis, Soils Analysis, Vegetation Analysis and an Opportunities and Constraints Analysis, plus 3 Alternative Concept Plans.

Preliminary Master Plan

A Presentation of the Preliminary Master Plan graphic and cost estimate was given to the Steering Committee on May 19, 2003, by the Consultant. A number of comments from the Committee and staff were given and the Consultant was asked to incorporate the comments into the Final Master Plan.

Final Master Plan Presentation

On June 10, 2003 the Consultant presented Final Master Plan graphic and cost estimate to Steering Committee. By majority acclamation the Steering Committee accepted the Master Plan as shown in the graphic presented (RE: Graphic Page. 29) with a minor modification. The Committee voted to accept specific elements for first phase development and then assigned priority numbers to all remaining park elements shown on the plan by means of discussion and majority vote (RE: Page 21). The proposed priority list of add alternates associated with the budget for the next phase of development was further refined by referencing the consultant's cost estimate. (RE: Appendix) Phase two development was also prioritized. (Re: Page 22). The Steering Committee then voted to submit the Graphic Plan and their development priorities to the Recreation Authority for their acceptance.

Presentation to Recreation Authority

The Steering Committee recommendations were presented to the Gwinnett County Recreation Authority on July 17, 2003. The plan was presented by the consultant with several committee members present. The Recreation Authority voted unanimously to recommend the plan endorsed by the Steering Committee to the Board of Commissioners.

Presentation to Board of Commissioners

Based on the Recreation Authority's endorsement, the plan was presented to the Gwinnett County Board of Commissioners on August 5, 2003. Several members of the Steering Committee were present. The Board of Commissioners unanimously voiced no objection to the Master Plan becoming the guiding document for the development of the Kanoheda Park Site.

SECTION SITE INVENTORY AND ANALYSIS

4.0 Prior to concept development a series of analyses were conducted. The following is a summary of each of these analyses; a graphic diagram accompanies each summarization.

Slope

The site is generally flat with very minimal slope variation, with the majority of the site (15.6 acres) falling within a 5-10% slope range. Having once been an agricultural site, the farmed terraces are still visible on the site. The high point (elev. 994) of the site exists where an old homestead use to stand off Bethesda School Road. (RE: Graphic Page 11)

The steeper slopes 5% to 15% will accommodate the multi-use and lawn areas with very little grading and will offer additional interest and challenge for the anticipated user.

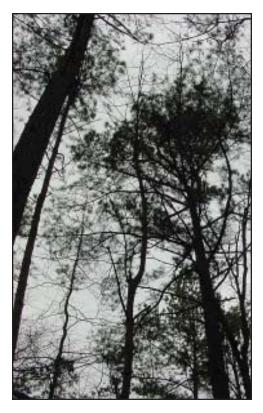
Hydrology

Due to the agriculture that once occurred on the site, the Kanoheda Park site does not exhibit defined drainage ways. Engineering will be necessary to acquire positive drainage and a detention pond will be needed to help manage runoff on the site. The stream cutting through the site is considered a "Blue Line" stream and will therefore be regulated under state waterway laws, however, due to years of siltation, a defined stream channel does not exist. If rehabilitation of the stream banks is needed, a variance could be considered. As mentioned earlier in this report wetlands associated with the banks of the stream are also in existence, however, no portion of the site falls within a designated flood hazard zone.

Storm water treatments (culverts, swales, etc.) will be placed where proposed trails or park facilities interrupt the flow of the drainage ways.

Soils

Also important in evaluating a site are the soil types, which help to determine the types of construction



that can occur on those soils (RE: Graphic Page. 12). The capacity of the soil to hold water, support vegetation, or to compact will determine the feasibility of each area for various types of recreation facilities. The soils within the Kanoheda Park site are generally sandy and clay loam type soils, all of which are favorable for passive recreation activities utilizing some planning and design techniques. Special emphasis will be needed to minimize the disturbance of the Congaree soils located along the stream banks.

Vegetation

Vegetation across the site was analyzed and located on the Vegetation Analysis map (RE: Graphic Page. 13). The site is dominated by "Old field Successional" Pine woodland exhibiting Loblolly and short leaf pines with a deciduous sub-canopy. The area on the northeast side of the stream is predominantly "Old Field Successional" Forest, with an oak, hickory, sourwood, and serviceberry canopy. Redbuds and dogwoods are characteristic in the sub-canopy. Nice native vegetation, such as native azaleas, lies along the stream banks, and offers textural and flowering interest to the area. Scrub brush including, privet, wild grape and honeysuckle, is located in mass throughout the site and should be removed for a more inviting park. Some "Homestead Vegetation" (plants such as hybrid narcissus, iris and holly have been introduced to the site) also exists on site near the foundation of the old Homestead.

Banks along the existing stream are lacking vegetation and may require bank revitalization and stabilization to help improve the quality of the water, and scenic qualities of the area. This could become a potential mitigation opportunity for stream bank restoration.

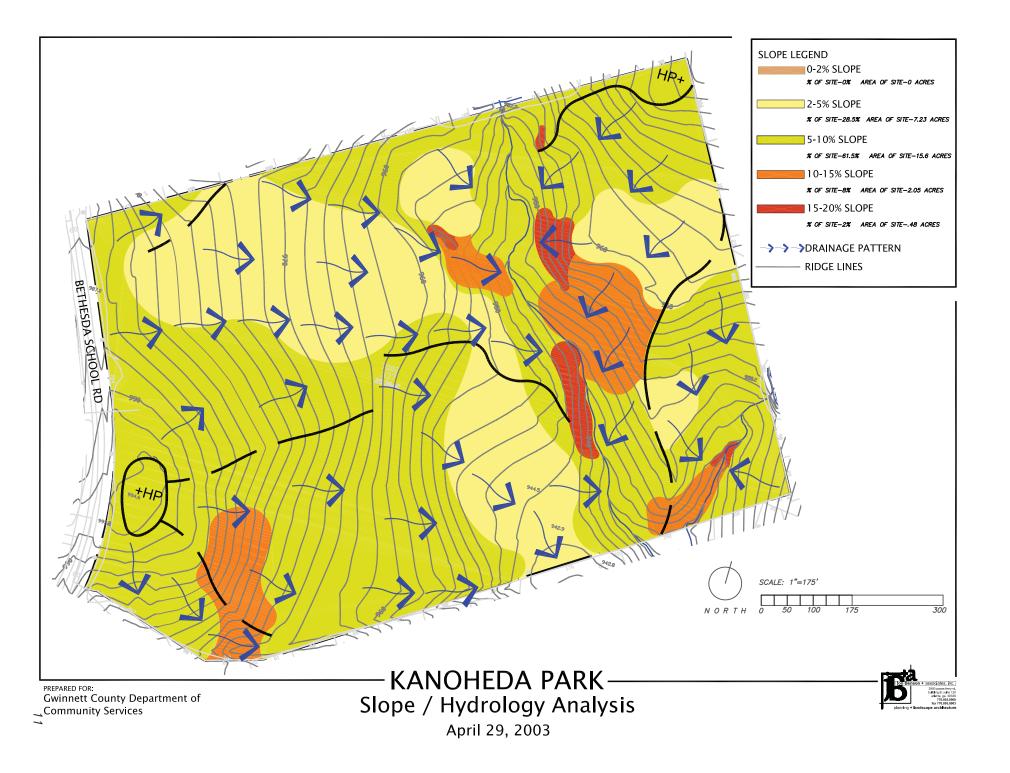
Opportunities & Constraints (RE: Graphic Page. 14)

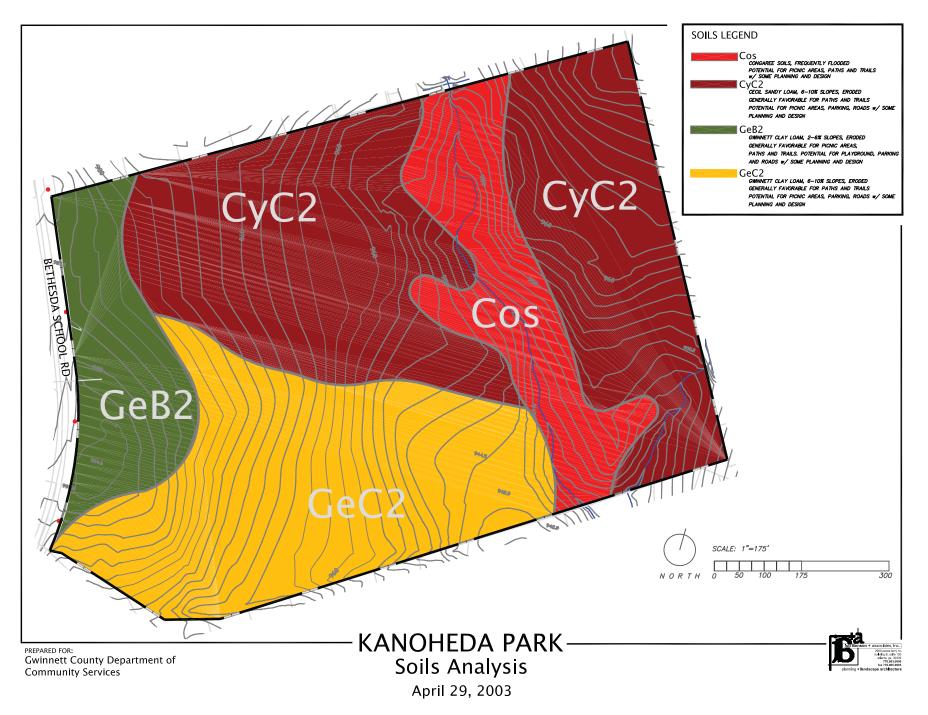
Constraints

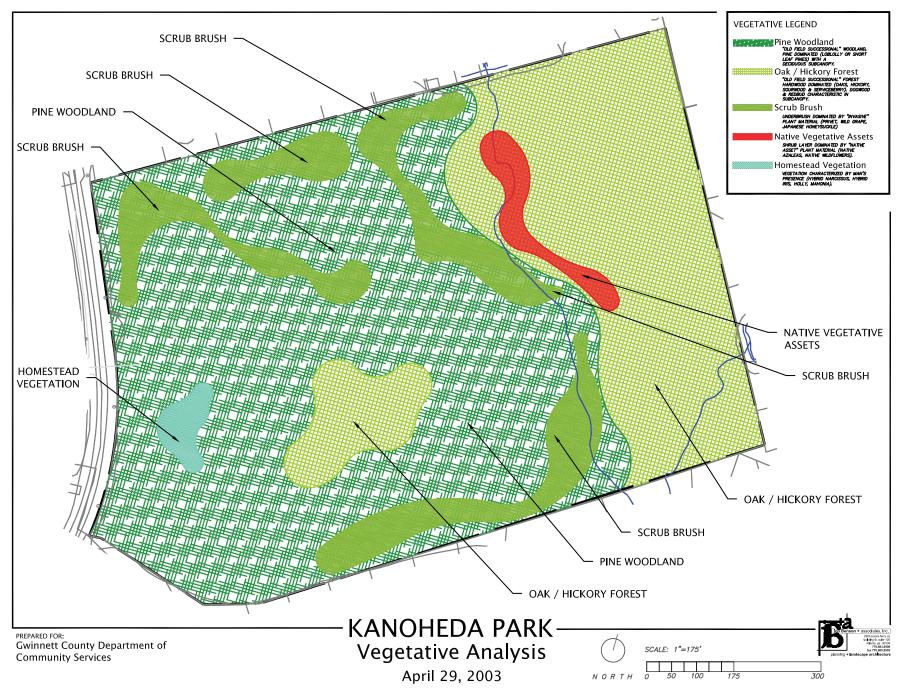
- Park site located on busy Bethesda School Road Pedestrian access to the site from across the road and vehicular access out of the site may be difficult at times.
- Minimal slope and lack of defined drainage ways undermine positive drainage substantial grading may be needed to create positive drainage.
- Strategic screening of surrounding neighborhoods- to allow adjacent residents some seclusion and filtering of noise associated from the park.
- 50' "Blue Line" Stream buffer Design will need to adhere to state waterway laws.

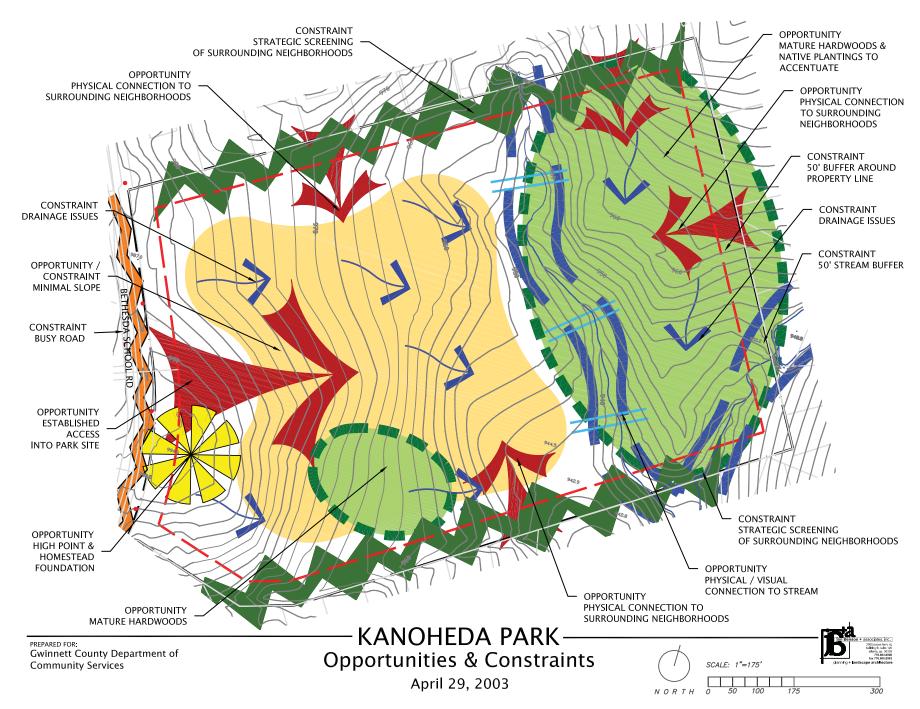
Opportunities

- Minimal Slope conducive to passive recreation activities.
- Established access into park site (from development across Bethesda School Road). Also by restricting ingress and egress to one location, security and control factors can be greatly enhanced.
- Potential Feature area at homestead foundation highpoint- Architectural / Cultural interest on site.
- Physical connection to surrounding neighborhoods
- Physical / visual connection to stream
- Mature hardwoods and native plantings to accentuate.
- Soils favorable to passive park construction Site is comprised of predominantly sandy and clay loams, both of which allow for passive recreation construction.









SECTION PROGRAM OPTIONS

5.0 In order to understand the changing needs and new recreation trends in the community, the Gwinnett County Department of Community Services developed a Public Interest Form to distribute at the first Public Input meeting held on February 25, 2003. These forms are used to assess the needs and wants of the local community. The interest forms are then collated, and tabulated. The information in the appendix contains the complete results.

Top five community interests are as follows:

- 1. Multi purpose Trails Walking, Jogging, Biking, Roller blading,
- 2. Playgrounds
- 3. Picnic Pavilion & Family Picnic Areas w/ grills
- 4. Nature Trails
- 5. Tennis, Basketball & Sand Volleyball

The results of the interest forms are then included in the Park program for consideration in light of the County's definition of a Passive Community Park as well as the County wide needs assessment survey (1995 and 1999). This information, supported by input from staff and Steering Committee members yielded the program of park elements that the Consultant was tasked with providing for the newly acquired park acreage. The program elements included the following:

- Smaller Pavilion (2)
- Multi Purpose Trail
- Nature Trail Connector or Spur
- Variety of Picnicking Opportunities
- Shaded Playground / grotto/ turf area
- ¹/₂ Court Basketball
- Mini Skate Park
- Tennis courts (1 pair)
- Dog Park
- Plaza Area w/ shade structure central area / hub

SECTION **Program Development**

6.0 Working with the Steering Committee, and representatives from Gwinnett County, the consultant, jon Benson + associates developed a program outline. What follows is the design stage progression from concept through the final master plan design. A description of each of the stages is included.

6.1 Concept Development

A total of three concept plans were prepared and presented to the Steering Committee on April 29, 2003. Each concept was depicted utilizing bubble diagrams and they each followed the same program requirements. They differed only through spatial relationships and layout locations. All concepts were developed based around a "Central or Focus Meeting Area" as requested by the Steering Committee. Each plan also utilized the same entrance as determined by the subdivision across Bethesda School Road.

Concept 1 (RE: Graphic Page. 18)

- Main entrance drive terminates at an open lawn which would serve as a "Soft Plaza" or a "Big Yard"
- Two (2) picnic pavilions would flank the lawn. One would service the Playground area; the other would service the tennis courts.
- Tennis courts would be located away from the interior of the park to minimize disturbance.
- Teen area will be sited well within view of the road and parking, to allow for policing of the facilities by park users and passing traffic.
- ³/₄ mile 10' multi-use trail connects all element of the park. Trail crossed the entrance drive at one point, and crossed the stream twice using pedestrian bridges.
- A woodland picnic area connects the open lawn area to the Natural Area on the NE side of the stream utilizing a 6' wide pervious trail.
- A ³/₄ acre fenced dog park is located on the NE side of the stream in the natural area.
- A single restroom facility is sited for the park near the playground.

Concept 2 (RE: Graphic Page. 19)

- Main entrance drive pulls straight into site terminating with a drop off area at a paved plaza area. Parking area is one way in and out with angled parking.
- Central plaza area would be paved with a main pavilion (30'). Plaza area also shows trellises but could be utilized in a variety of ways. Restroom facilities are also located on the plaza nearest the Playground.
- On the Southside of the park a woodland playground associated with a lawn area is located, as well as a shaded picnic area. Both elements are enclosed by the multi-use trail.
- The multiuse trail is ³/₄ of a mile long, 10' wide and connects all elements of the park, including the natural area on the NE side of the stream using 2 pedestrian bridges
- The Multi use trail is self-contained within the park area and does not cross any vehicular traffic areas.
- The North side of the park allows for a different feel to the park. It is the area where the teen area and dog park are located. Both elements share a pavilion.

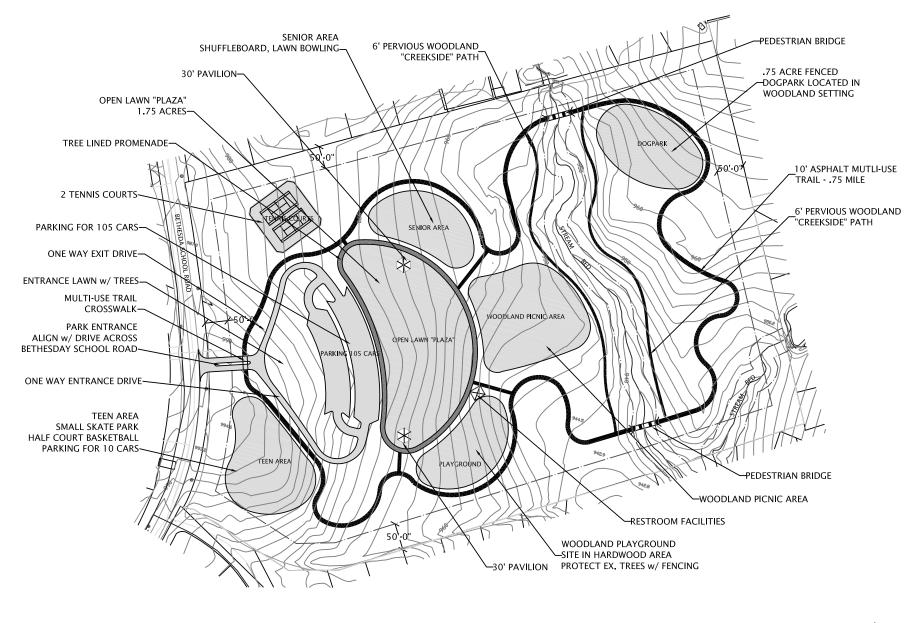
- Teen area is again located close to Bethesda School Road and Parking for internal park user policing.
- Concept 2 offers 3 picnic areas. A playground picnic area, a woodland picnic area and a "creek side" picnic area.
- The area NE of the stream will be kept in its natural state, with only the multi-use trail encircling the perimeter and a 6' wide pervious nature trail through native plantings.

Concept 3 (RE: Graphic Page 20)

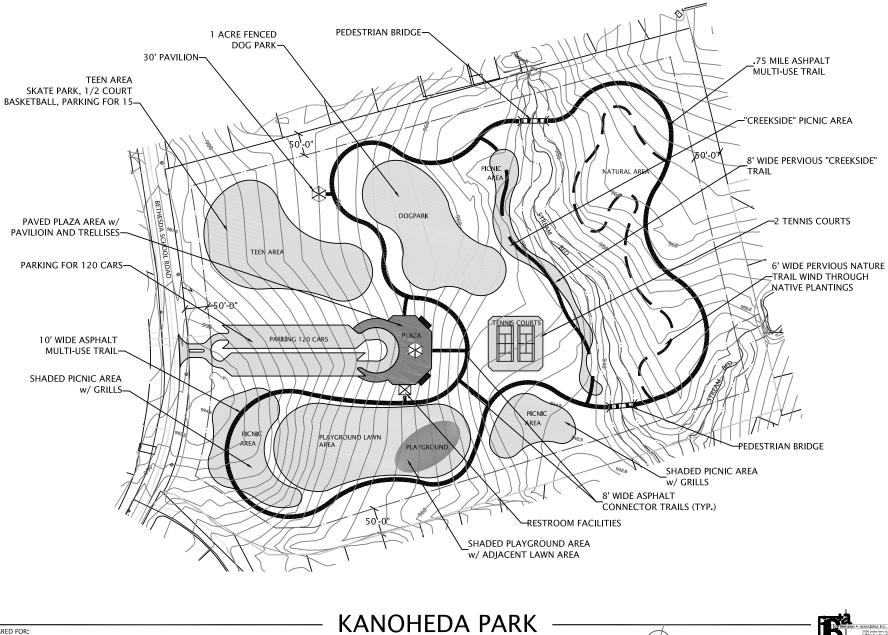
- Entrance drive brings park user into a curved parking area with a drop off area located at a central plaza at one side of the parking lot.
- Paved plaza area has a single pavilion and multiple trellises or vineries. Restroom facilities are also located on the plaza.
- NW of the parking area is an open lawn / picnic area. Tennis courts are also located in this area with easy access to parking.
- The southern side of the park sites the teen area (located near the road and parking for easy policing), a woodland picnic area, and a 1-acre dog park.
- An additional picnic area is located along the creek.
- All elements of the park are connected with a .5 mile, 10' asphalt multi-use trail. The trail crosses the stream at 1 point utilizing a pedestrian bridge. The trail then changes to a ¼ mile 10' wide pervious woodland trail (Total trail circuit is ¾ mile with 1 point crossing vehicular traffic) on the NE side of the stream.
- The playground area is located within the woodland part of the site (NE side of the stream.

Using the spatial bubble diagrams of Concept 2, real diagrammatic form was given to each of the park program elements. The Concept Plan 2 was adjusted based on comments from the Steering Committee and Staff, and further developed into the Preliminary Master Plan for the next meeting (May 19, 2003). The comments relating to the progression of Concept 2 toward the Preliminary Master Plan are as follows:

- Woodland playground, with fencing to protect trees
- Picnic area w/ path though it; pervious surface
- Comfort level w/ 50' buffer where residences border park property
- Consolidation of courts in NW quad, create a "court area"
- Separation between dog park and playground
- Pavilion near playground
- Individual picnic shelters with grills
- 6' high fence around dog park
- Sweeping lawn to connect plaza to woodlands.
- Adult swings at plaza and throughout park.

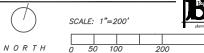




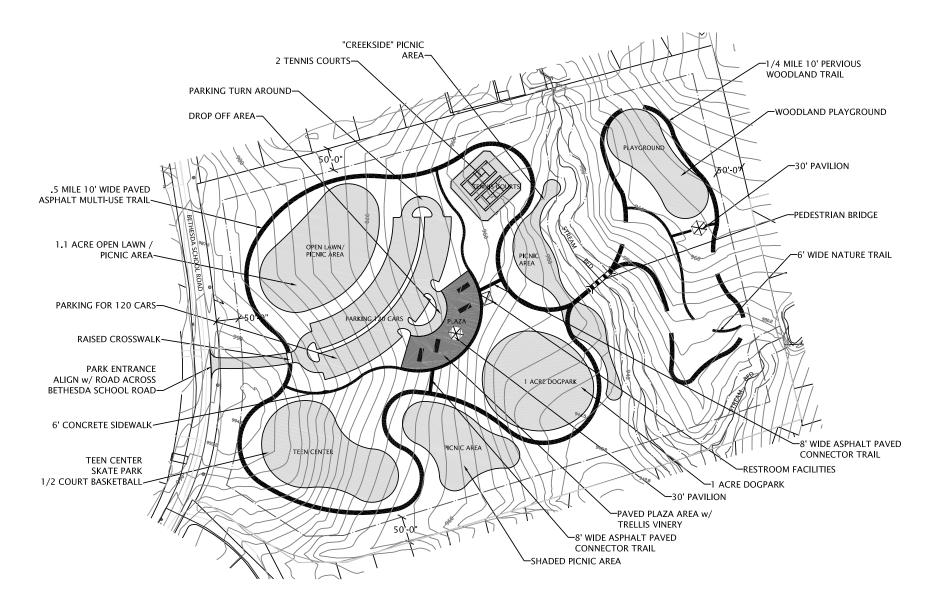




ANOHEDA PARK Concept Plan 2 April 29, 2003



400





6.2 **Preliminary Master**

The Preliminary Master Plan (RE: Graphic Page. 28) was presented and a preliminary cost estimate was distributed to the Steering Committee on May 19, 2003. Based on comments from the Steering Committee and Staff, the Preliminary Master Plan was revised and further developed into the Master Plan for the next meeting (June 10, 2003). The comments relating to the progression of the Preliminary Master Plan toward the Master Plan are as follows:

- Maintenance has requested a 12' multi-use trail for access to their vehicles.
- Maintenance also requests access to park via parking lot. Need correct turning radii to get around.
- Reduce the size of the drop off area and the turn around. Increase the size of the plaza slightly. Redesign corners for more usable space.
- Need pedestrian access on north side of parking similar to that on south side. Possibility of using center-parking island as walkway. Fill with structural soil and pave the entire island. Trees would still be able to survive in this area.
- Site dog run of dog park in sunny area. Also add concrete pad at each entrance and in water areas.
- Show fence between skate area and Multi-use trail.
- Show paved connections to all park elements
- Move sand volleyball court off multi-use trail, currently too close.
- Is there a potential for a rental pavilion? Design team is to look at enlarging the pavilion in the plaza area to 40x40, potential for this to be used as a rental area.

6.3 Master Plan

jon Benson + associates developed a final color graphic, and cost estimate and presented them to the Steering Committee on June 10, 2003. There was one final refinement requested by the Gwinnett County staff, to widen the Creek side trail to 12' wide in order to complete an ADA compliant loop for Phase one. The discussion of the cost estimate was the focus of the meeting. The result of the discussion was confirmation of the basic Phase one park elements, and prioritization of add alternates. It is hopeful that lower bids will allow for the inclusion of most of the add alternates. Phase two park elements were also prioritized. Phasing will be as follows:

Phase I - Base Park Cost

- 1. Infrastructure elements Site preparation, site work (excluding stream renovation) utilities, irrigation, park construction sign, new park entrance sign, internal signage.
- 2. Parking for 120 cars including curb and gutter, striping, lighting, trees
- 3. Restroom Building

- 4. Playground (excluding 30' pavilion)
- 5. Multi-use trail .83 mile (increase 8' ADA trail to 12')
- 6. Full Plaza excluding arbor wings and bench swings
- 7. Emergency phone

Phase 1 - Add Alternates (in order of importance)

- 1. Woodland Shaded Picnic area
- 2. Sand Volleyball Courts
- 3. Dog Park
- 4. Tennis courts
- 5. Plaza Pavilion arbors
- 6. Basketball Court
- 7. 30' Playground shelter
- 8. Landscape

<u>Phase II</u>

- 1. Skate Park
- 2. Bocce Courts
- 3. Horse Shoes
- 4. Eastern side of park full construction.

The final color master plan and cost estimate were prepared and presented to the Recreation Authority on July 17, 2003, and several Steering Committee members were in attendance. The Recreation Authority voted unanimously to accept the master plan for presentation to the Board of Commissioners.

Based on the Recreation Authority's endorsement, the final master plan and cost estimate were present by the Consultant to the Board of Commissioners on August 5, 2003. Several Steering Committee members were in attendance. The Board of Commissioners unanimously voiced no objection to the Master Plan becoming the guiding document for the development of the Kanoheda Park Site.

6.4 **Program Elements**

Entrance / Paved Asphalt Parking

The entrance drive to Kanoheda Park is to align with the entrance drive to the subdivision across Bethesda School Road. The parking will extend deep in to the heart of the park for centralized access to all park elements. A one-way drive system with striped angled parking with a drop off area will terminate at the plaza area.

The surface profile will be vehicular grade asphalt with curb and gutter to be provided along the length of each parking bay and terminate at the drop off area, by merging into grade and forming a ramp up to the plaza. The layout will provide 120 parking spaces. Storm water inlets will be required at the low points of the parking area.

Maintenance vehicles will have access to the surrounding park via the multiuse trail at the front of the park. Removable bollards will limit vehicular traffic to maintenance vehicles only.

Plaza Area

The plaza area will be comprised of concrete or clay pavers laid on top of structural soil to aid in permeability. The plaza will be broken down into smaller gathering areas to allow for a variety of activities to take place. Shade trees placed in at grade planters will help to provide these spaces. The focal point of the Plaza area will be a group pavilion with arbors that will overlook the dog park area. Access to the surrounding park will be via two paths that will lead down to the multi-use trial on both the north and south sides of the plaza. A freeze resistant drinking fountain and freeze proof bib will be provided in the zone of the plaza nearest the "Court" area.

Group Pavilion / Arbors

A mid sized (40x40) square group pavilion with cupola will be the focal point of the Plaza area. It would be available for reservation through the County, or would be available on a first come first serve basis. Two (2) covered arbor structures (15x50 approx.) will flank the group pavilion and will provide additional shaded gathering space. Picnic tables, benches and adult swings will be available in these areas and will overlook the Dog Park area. A freeze resistant drinking fountain and freeze proof bib will be provided in the zone of the plaza nearest the "Court" area.

Restroom

A standard Gwinnett County Restroom building will be located within the park. One 580square foot (approx.) restroom will provide three commodes / urinals per sex, sink and a diaper changing station will also be provided. The footprint will include a small supply closet incorporated into the plumbing chase with an access door between the men's and women's restrooms. Facilities are to be sited for convenience from the plaza, playground and parking lot, and so that doors face the most active areas of the park for safety.

Teen Skate Area

A skate park will serve the local community. The design will be a bowl shape and should include a variety of concrete and metal fabrications suitable for skateboards and in-line skates. The Teen Skate area will be connected with concrete sidewalks and small plaza area for

socializing. Picnic tables under trees and benches will also be provided. The County will develop posted rules for skate area usage, set fines for infractions, and will determine the extent of supervision and rule enforcement. The venue will be separated from the multiuse trail by a fence structure for pedestrian and user safety.

Tennis Courts

Two tennis courts will be provided. Court fencing color, equipment will be regulation and County Standard. These courts will not be lighted.

Sand Volleyball Court

A single sand volleyball court will be located in the "court area" in the Northwestern portion of the site. Subsurface drainage will be provided to remove excess water. Base is to be a deep sand base contained by a timber edge. Net and dimensions will be per County Standards.

Basketball Courts

Two (2) half-court basketball courts will be provided in the "court area". Court dimensions, fencing, color, and equipment will be regulation and County Standard.

Bocce Courts

Also provided in the "court area" will be two (2) gravel field bocce courts. Subsurface drainage will be provided to remove excess water. Gravel base will be contained by timber edge. Courts will be regulation and per County Standards.

Horse Shoe Courts

Provide two horseshoe courts, graded and dimensioned per regulation, in the "court area". Field is to be turf with concrete surrounds and sand pits. Concrete is to meet all ASTM standards.

Open Lawn

Adjacent to the "court area" will be a 1.1-acre grass field for unstructured play, kite flying, Frisbee, sunbathing, and blanket picnics. Open lawn area will be irrigated and maintained as and open lawn.

Dog Park Area

The dog park is a 2 acre fenced area that allows people and their dogs to play together without the restriction of leashes. This area also allows dogs to socialize with other dogs and owners with fellow owners. The dog park will feature a 6' black vinyl fence with double gates. It will be cordoned off into three sections; a dog run, an area for all dog play and an area for

small dogs. A Kiosk displaying dog park rules, benches, adult swings, trash receptacles and water fountains for both owners and dogs will also be located.

The dog park is to be irrigated, grassed, and maintained by the County. Perimeter trees and trees within the fenced area that are healthy and in good quality will be preserved.

Woodland Playground Area and Pavilion

A woodland playground will be located roughly per the master plan concept. Playground area is to be located in terraced form to take advantage of shade from existing trees. Steps will connect the terraces and a paved 8' wide ADA compliant walk will allow the playground to be accessible to all people. Special attention is to be made to limit the impact of the existing trees by grading outside the drip line of said trees and by installing 5' black fencing around tree groupings to minimize compaction within the root zone.

The playground will include a variety of prefabricated play equipment including: swings, compound structures, and free standing equipment. Play equipment will be separated into zones for toddlers and K-6 age groups. ADA compliant transfer stations will also be provided on each of the compound structures. Subsurface drainage will be provided under dense wood chip mulch playground safety surface. "Wear areas" such as under swings, slides will need additional coverage.

A 30' hexagonal pavilion will be located near the playground, and will have picnic tables, trash receptacles and grills available on a first come first serve basis. A freeze resistant drinking fountain and freeze proof bib will also be provided.

Playground Lawn

Adjacent to the playground will be a 1.07 acre open lawn for unstructured or casual play, but not conducive to structured games or organized practices. The lawn is to be irrigated and maintained as a lawn area. The Playground lawn will flow into the adjacent hillside lawn

Hillside Lawn

Adjacent to the playground lawn will be an .80-acre open space located on a hillside. This lawn will be irrigated and maintained as an open space utilized for unstructured play, winter sledding, rolling, tumbling, and sunbathing.

Picnic Areas

Picnic tables will be provided throughout the site and at two (2) designated picnic areas. The "shaded" picnic area will be located near the existing homestead at the top of the hillside

lawn. The "creek side" picnic area will be located on the eastern portion of the site outside the stream buffer zone. A 6' pervious trail will allow access to the both picnic areas, and picnic tables, shelters and grills will be available on a first come first serve basis at both locations.

Multi-use Trail

The master plan calls for a 12' wide paved trail loop that connects all elements of the park. The 1-mile trail loops around the entire perimeter of the park. Spur trials connect this loop to the individual activity areas. The multi-use trail winds throughout the park, allows for a variety of park experiences and views. Vehicular traffic will be limited to maintenance vehicles only. Two pedestrian bridges will allow access to and from the eastern side of the stream.

Beginning at the Plaza area and following the trail clockwise through the site, the multiuse trail will wind up through the "court area" and around both the skate park and tennis courts. The trail will then cut back toward the open lawn area and the northern edge of the dog park, cross a pedestrian bridge at the stream and enter onto the eastern portion of the site. The trail will wind its way through this natural section taking care not to disturb the existing vegetation and native plants, back to the southeastern part of the site where it will cross back over the stream via a second pedestrian bridge. At this point the trail will skirt the southern edge of the dog park and wind down around the lawn area associated with the playground and then cut back up the hillside lawn area to the shaded picnic area at the front of the park. The multi-use trail will then parallel the parking area and pass by both the restroom facility and playground area, ending once again at the plaza area. The section of the multi-use trail located on the eastern section of the site exceeds the 5% ADA maximum slope requirement in some locations.

Creek side Trail

The 12' paved creek side trail will serve as a spur to the multi use trail and will complete an .83-mile ADA compliant loop. The creek side trail will allow for scenic enjoyment along the stream. The accessible loop will follow the same route as the one described above, but will not utilized the pedestrian bridges to the eastern portion of the site. Instead a spur trail located just before the first pedestrian bridge will wind down along the stream and along the eastern edge of the dog park. This creek side trail will then tie back into the Multi-use trail just after the second pedestrian bridge. The ADA compliant loop will then continue around the park at the southern edge of the dog park, as described above.

Nature Trail

The nature trail will be located on the eastern side of the stream. The 6' wide pervious trail is to be field located to minimize disturbance of existing vegetation and to take advantage of highlighting the most aesthetic areas. The nature trail will serve as a spur of the multi-use trail and also provide access to the "creek side" picnic tables and shelters.

Deceleration Lane

One deceleration lane will be located at the park entrance. The deceleration lane is to follow all guides and regulations set forth by the Georgia Department of Transportation and all County regulations.

Site Lighting

The parking lot and the plaza area will be the only elements to be lighted in the park. The poles will be decorative residential scale poles. The lights will be operated to turn on and off per a timer system and will not burn all night. This system will allow visitors in the park from dawn until dusk. The multi-use trail will not be lighted.

Irrigation system

The entrance, plaza trees, dog park and open space areas are to be irrigated. Use economical large diameter turf irrigation heads. All controllers heads, piping, irrigation emitters and supporting elements will be per Gwinnett County standard.

Park Signage

Provide one (1) standard Gwinnett County Park entrance sign. The sign should be located at the new entrance to the park. Signs should be visible to motorists but not encroach on sight triangles. Internal directional, vehicular and posted park rules will also be per County standard.

Site Amenities

Benches are to be located along the entire length of the multi-use trail at a rate of 1 per every 500'. Picnic tables, benches, trash receptacles are to be located at each facility. Water fountains are to be freeze / thaw resistant. One (1) will be located in the Plaza area near the "Courts" and one (1) will be located at the Playground.



Gwinnett County Department of **Community Services**

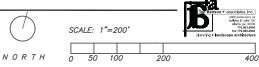
May 19, 2003

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PREPARED FOR: Gwinnett County Department of Community Services KANOHEDA PARK Master Plan July 17, 2003



SECTION APPENDICES

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Appendix A: Cost Estimate	page	31
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APPENDICES

Appendix A: Cost Estimate Refer to the attached itemized Master Plan level Spreadsheet



COST ESTIMATE FOR KANOHEDA PARK GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES

July 10, 2003

Item Description	Quantity	Unit	U	nit Price	TOTAL
phase one par SITE PREPARATION	rk element	S			
DEMOLITION / EARTHWORK / GRADING					
VEGETATIVE CLEAR & GRUB	11	AC		\$4,600.00	\$50,048.0
TREE PROTECTION FENCING	7,563	LF		\$2.00	\$15,126.0
EROSION CONTROL FENCING	6,073	LF		\$2.00	\$12,146.0
SELECTIVE INVASIVE SCRUB BRUSH REMOVAL	10	AC		\$2,500.00	\$25,000.0
TOTAL FOR SITE PREPARA	TION				\$102,320.0
SITE WORK					
WATER MANAGEMENT					
BMP SETTLING POND	1	LS		\$8,000.00	\$8,000.00
DETENTION POND (S)	1	LS		\$20,000.00	\$20,000.0
GRADING	1	LS		\$9,600.00	\$9,600.00
ROADWAY DECELERATION LANE	1	LS		\$20,000.00	\$20,000.00
DECELERATION LANE	1	LS		\$20,000.00	\$20,000.00
ENTRANCE / PARKING AREA					
GRADING IN CUT	1	LS		\$7,794.00	\$7,794.00
GRADING IN FILL	1	LS		\$94,150.00	\$94,150.00
CURB & GUTTER	2,055	LF		\$11.00	\$22,605.00
PARKING LOT - ASPHALT (2" ASPHALT & 6" BASE)	33,560	SF		\$1.60	\$53,696.00
PARKING STRIPING	2,160	LF		\$0.25	\$540.0
PARKING LIGHTING	2,100	EA		\$2,500.00	\$10,000.0
LANDSCAPE (PARKING LOT TREES PER ORDINANCE)	24	EA		\$300.00	\$7,200.00
TOTAL FOR SITE W	VORK				\$253,585.00
PARK ELEMENTS					
PLAZA AREA					
GRADING IN FILL	1	LS	\$	160,875.00	\$160,875.00
CONCRETE PAVERS	21,414	SF	\$	3.50	\$74,949.00
GRANITE FACED RETAINING WALL	392	LF	\$	175.00	\$68,600.00
4' GRANITE FACED MASONRY COLUMNS (30' O.C.)	11	EA	\$	700.00	\$7,700.0
3' BLACK RAILING	331	LF	\$	13.50	\$4,468.5
40' PAVILION w/ CUPOLA	1	LS	\$	60,000.00	\$60,000.0
RESTROOM BUILDING	1	LS	\$	110,000.00	\$110,000.0
TRASH RECEPTACLES	3	EA	\$	450.00	\$1,350.0
REMOVABLE BOLLARDS	5	EA	\$	125.00	\$625.0
BENCHES	10	EA	\$	500.00	\$5,000.0
BIKE RACKS	2	EA	\$	200.00	\$400.0
EMERGENCY PHONE	1	EA	\$	3,500.00	\$3,500.0
WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT)	1	EA		\$2,000.00	\$2,000.0
PLAZA LIGHTING	6	EA	\$	2,500.00	\$15,000.0
SUBT					\$514,467.5

PLAYGROUND AREA				
GRADING	1	LS	\$ 11,100.00	\$11,100.00
PLAY STRUCTURES	1	EA	\$100,000.00	\$100,000.00
ENGINEERED WOOD CHIP MULCH - 6" DEPTH	7,000	SF	\$2.00	\$14,000.00
6' WIDE ASPHALT CONNECTOR TRAIL	1,812	SF	\$1.60	\$2,899.20
TRASH RECEPTACLES	3	EA	\$450.00	\$1,350.00
PICNIC TABLES	3	EA	\$500.00	\$1,500.00
GRILLS	3	EA	\$200.00	\$600.00
WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT)	1	EA	\$2,000.00	\$2,000.00
BENCHES	4	EA	\$500.00	\$2,000.00
5' BLACK VINYL TREE FENCING (INCLUDES GATES)	824	LF	\$13.50	\$11,124.00
6' BLACK VINYL PERIMETER FENCING (INCLUDES 3 GATES)	78	LF	\$15.50	\$1,209.00
STAIRS BETWEEN PLAY TERRACES	1	LS	\$4,000.00	\$4,000.00
STARS DETWEENTERT TERRACES	1	LS	\$7,000.00	\$4,000.00
SUBTOTA	L			\$151,782.20
OPEN LAWN AREAS				
TEEN AREA LAWN-SEEDING	40,946	SF	\$0.07	\$2,866.22
PLAYGROUND LAWN - SEEDING	48,379	SF	\$0.07	\$3,386.53
HILL SIDE LAWN - SEEDING	40,876	SF	\$0.07	\$2,861.32
SUBTOTA TRAIL SYSTEM	L			\$9,114.07
IRAIL SISTEM 12' WIDE - ASPHALT MULTI-USE TRAIL	40.416	SF	\$1.60	\$70.065.60
	49,416			\$79,065.60
12' WIDE CREEKSIDE TRAIL- ASPHALT	8,820	SF	\$1.60	\$14,112.00
6' WIDE CONCRETE SIDEWALK	7,242	SF	\$4.50	\$32,589.00
BENCHES (APPROX. 1 EVERY 500')	7	EA	\$450.00	\$3,150.00
REMOVABLE BOLLARDS	4	EA	\$125.00	\$500.00
SUBTOTA	T			\$129,416.60
MISCELLANEOUS				\$129,410.00
CONSTRUCTION SIGN	1	LS	\$400.00	\$400.00
NEW PARK ENTRANCE SIGN	1	LS	\$5,000.00	\$5,000.00
SIGNAGE (PARK RULES, TRAFFIC-PARKING)	1	EA	\$400.00	\$400.00
SUBTOTA	L			\$5,800.00
TOTAL FOR PARK ELEMENT	ſS			\$810,580.37
LANDSCAPE				
LANDSCAPE (PLAZA TREES ONLY)	1	LS	\$10,000.00	\$10,000.00
SEEDING - OPEN SPACE AREAS	192,239	SF	\$0.07	\$13,456.73
SEEDING - OF EN SEACE AREAS	· · · · · · · · · · · · · · · · · · ·	51	30.07	\$23,456.73
IRRIGATION	L			\$23,430.73
SITE IRRIGATION	1	LS	\$40,000.00	\$40,000.00
SUBTOTA		LS	\$40,000.00	\$40,000.00 \$40,000.00
5001014	L			340,000.00
TOTAL FOR LANDSCAPE / IRRIGATIO	N			\$63,456.73
UTILITIES				
SITE ELECTRICAL	1	LS	\$20,000.00	\$20,000.00
SITE UTILITIES - WATER				
WATER METER	1	EA	\$1,200.00	\$1,200.00
PIPE	370	LF	\$22.00	\$8,140.00
FIRE HYDRANTS	1	EA	\$2,000.00	\$2,000.00
FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1	LS	\$4,701.00	\$4,701.00
SITE UTILITIES - SEWER		LF	\$18.00	\$8,460.00
SITE UTILITIES - SEWER 6" SEWER SERVICE	470	LI		
	470 1	LS	\$1,269.00	\$1,269.00
6" SEWER SERVICE	1			\$1,269.00 \$45,770.00
6" SEWER SERVICE FITTINGS, ATTACHMENTS, ETC (15% TOTAL)	1 L			

GRAND SUBTOTAL	\$1,275,712.10
MOBILIZATION, FEES, BONDS, ETC. (10% TOTAL)	\$127,571.21
SUBTOTAL	\$1,403,283.31
15% CONTINGENCY FOR MASTER PLAN LEVEL COST ESTIMATE	\$210,492.50
-	
SUBTOTAL	\$1,613,775.81
12% DESIGN, ENGINEERING AND PROGRAM MANAGEMENT FEES	\$193,653.10
-	
PHASE ONE PROJECT TOTAL	\$1,807,428.90

SUBTOTAL VOLLEYBALL COURT GRADING GRADING SAND VOLLEYBALL COURT USBTOTAL OFF-LEASH DOG PARK GRADING 6' BLACK VINYL PERIMETER FENCING (INCLUDING 5 DBL GATES, 3 SGL GATES) 1; WATER FOUNTAIN W/ DOGGIE DISH FILLER (FREEZE RESISTANT) BENCHES INFO KIOSK w/ BAG DISPENSER TRASH RECEPTACLES SEEDING FOR TURFGRASS 90, BENCH SWINGS 8' WIDE CONNECTOR TRAIL - ASPHALT 2; SUBTOTAL TENNIS COURTS GRADING TENNIS COURTS (INCLUDES EQUIPMENT) 10' BLACK VINYL PERIMETER FENCING (INCLUDING GATES) CONCRETE PLAZA AREA 1; PICNIC TABLES BENCHES BIKE FACKS TRASH RECEPTACLES WATER FOUNTAIN (FREEZE RESISTANT) SUBTOTAL PLAZA STRUCTURE PLAZA ARBORS BENCH SWINGS SUBTOTAL PLAZA STRUCTURE PLAZA ARBORS BENCH SWINGS SUBTOTAL	5 524 1 1 456 412 4 4	EA EA EA EA SF LS EA EA EA EA SF EA SF EA EA EA EA EA EA EA EA	\$ \$500.00 \$1,500.00 \$200.00 \$450.00 \$2,50 \$1,950.00 \$15,000 \$15,50 \$2,000.00 \$330.00 \$450.00 \$330.00 \$450.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,60	\$2,000.0 \$4,500.0 \$1,400.0 \$900.0 \$7,455.0 \$16,255.0 \$15,000.0 \$15,000.0 \$30,256.0\$\$30,256.0\$\$\$30,256.0\$\$\$30,256.0\$\$\$30,256.0\$\$\$30,256.0\$\$\$30,256.0\$\$\$30,256
COVERED PICNIC SHELTERS GRILS IRASH RECEPTACLES 5 WIDE NATURE TRAIL -PERVIOUS 2, SUBTOTAL 5 5 5 5 5 5 5 5 5 5 5 5 5	3 7 2 982 1 1 1 1 952 1 1 0 3 3 810 5 524 1 1 456 412 4 4	EA EA EA SF LS EA EA EA EA EA EA SF EA SF EA	\$ \$1,500.00 \$200.00 \$450.00 \$2.50 \$1,950.00 \$15,000.00 \$15,000 \$15,500 \$2,000.00 \$330.00 \$450.00 \$330.00 \$450.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$1,500.00 \$2,500 \$1,500.00 \$2,000 \$2,000 \$1,500.00 \$2,500.00 \$2,500	\$4,500.0 \$1,400.0 \$900.0 \$7,455.0 \$16,255.0 \$1,950.0 \$1,950.0 \$1,950.0 \$1,500.0 \$30,256.0 \$2,000.0 \$30,256.0 \$2,000.0 \$1,350.0 \$6,321.7 \$7,500.0 \$4,198.4 \$59,116.1 \$4,521.0 \$54,520.0 \$11,400.0 \$54,550.0
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BENCH SWINGS 8' WIDE CONNECTOR TRAIL - ASPHALT 2, SUBTOTAL 2, GRADING GRADING TENNIS COURTS (INCLUDES EQUIPMENT) 10' BLACK VINYL PERIMETER FENCING (INCLUDING GATES) CONCRETE PLAZA AREA 1, PICNIC TABLES BENCHES BIKE RACKS TRASH RECEPTACLES WATER FOUNTAIN (FREEZE RESISTANT) SUBTOTAL PLAZA STRUCTURE PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL	5 524 1 1 456 412 4 4	EA SF LS PAIR LF SF EA	\$ \$1,500.00 \$1.60 \$4,521.00 \$54,500.00 \$25.00 \$4.50	\$7,500.0 \$4,198.4 \$59,116.1 \$4,521.0 \$54,500.0 \$11,400.0 \$6,354.0
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BIKE RACKS TRASH RECEPTACLES WATER FOUNTAIN (FREEZE RESISTANT) SUBTOTAL PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS		EA	\$500.00	\$2,000.0
TRASH RECEPTACLES WATER FOUNTAIN (FREEZE RESISTANT) SUBTOTAL PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS	1	EA	\$500.00	\$2,000.0
WATER FOUNTAIN (FREEZE RESISTANT) SUBTOTAL PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS	1	EA	\$200.00	\$200.0
SUBTOTAL PLAZA STRUCTURE PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS	2	EA	\$450.00	\$900.0
PLAZA STRUCTURE PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS	1	EA	\$2,000.00	\$2,000.0
PLAZA PAVILION ARBORS BENCH SWINGS SUBTOTAL BASKETBALL COURTS				\$83,875.0
BENCH SWINGS SUBTOTAL BASKETBALL COURTS				
SUBTOTAL BASKETBALL COURTS	1	LS	\$ 60,000.00	\$60,000.0
BASKETBALL COURTS	6	EA	\$ 1,500.00	\$9,000.0
				\$69,000.0
GRADING	1	LS	\$3,609.00	\$3,609.0
BASKETBALL COURT 1/2 COURT (INCLUDES EQUIPMENT)	2	EA	\$25,000.00	\$50,000.0
CONCRETE STEPS	1	LS	\$600.00	\$600.0
5' WIDE CONCRETE SIDEWALK 1,	272	SF	\$4.50	\$5,724.0
SUBTOTAL				\$59,933.(
PLAYGROUND SHELTER				
30' PICNIC PAVILION	1	EA	\$25,000.00	\$25,000.0
SUBTOTAL				\$25,000.0
PARK LANDSCAPE				
ADDITIONAL LANDSCAPE THROUGHOUT PARK			\$43,000.00	\$43,000.0
SUBTOTAL	1	LS		

\$373,129.10	TOTAL ADD ALTERNATES
\$37,312.91	MOBILIZATION, FEES, BONDS, ETC. (10% TOTAL)
	-
\$410,442.01	SUBTOTAL
\$61,566.30	15% CONTINGENCY FOR MASTER PLAN LEVEL COST ESTIMATE
	-
\$472,008.31	SUBTOTAL
\$56,641.00	12% DESIGN, ENGINEERING AND PROGRAM MANAGEMENT FEES
	-
\$528,649.31	ADD ALTERNATE SUBTOTAL
\$2,336,078.21	TOTAL PHASE ONE + ADD ALTERNATES

phase	two park	elements			
COURT RECREATION AREA	*				
GRADING		1	LS	\$3,489.00	\$3,489.
FREESTYLE SKATING AREA		6,500	SF	\$10.00	\$65,000
' GRANITE FACED RETAINING WALL		113	LF	\$175.00	\$19,775
HORSE SHOE PITS (INCLUDES EQUIPMENT)		2	EA	\$1,600.00	\$3,200
BOCCE COURTS		2	EA	\$6,000.00	\$12,000
PICNIC TABLES		3	EA	\$500.00	\$1,500
BIKE RACKS		1	EA	\$200.00	\$200.
TRASH RECEPTACLES		1	EA	\$450.00	\$450.
	SUBTOTAL				\$105,614.
EASTERN PARK SIDE - FULL CONSTRUCT	ION				
TREE PROTECTION FENCING		1,552	LF	\$2.00	\$3,104.
EROSION CONTROL FENCING		1,448	LF	\$2.00	\$2,896
STREAM RENOVATION		8,000	SY	\$4.80	\$38,400
2' WIDE - ASPHALT MULTI-USE TRAIL		19,200	SF	\$1.60	\$30,720
PEDESTRIAN BRIDGE		2	EA	\$60,000.00	\$120,000
BENCHES (APPROX. 1 EVERY 500')		3	EA	\$450.00	\$1,350
	SUBTOTAL				\$196,470.
CREEKSIDE PICNIC AREA					
PICNIC TABLES		7	EA	\$500.00	\$3,500
COVERED PICNIC SHELTERS		4	EA	\$1,500.00	\$6,000
GRILLS		11	EA	\$200.00	\$2,200
TRASH RECEPTACLES		3	EA	\$450.00	\$1,350
5' WIDE NATURE TRAIL - PERVIOUS		7,794	SF	\$2.50	\$19,485
	SUBTOTAL	,			\$32,535.
				TOTAL PHASE TWO	\$334,619.
		MOBILIZATION, FE	ES, BON	DS, ETC. (10% TOTAL)	\$33,461
				SUBTOTAL	\$368,080
	15% CONTE	NGENCY FOR MASTER	PLAN LI	EVEL COST ESTIMATE	\$55,212
				SUBTOTAL	\$423,293
	12% DESIGN,	ENGINEERING AND PF	ROGRAM	MANAGEMENT FEES	\$50,795
			РНА	SE TWO SUBTOTAL	\$474,088
	тот	AL DUASE ONE + ADD	ALTED	NATES + PHASE TWO	\$2,810,166.

Appendix B: Passive Community Park Position Paper approved by the Gwinnett County Recreation Authority on August 15, 2000.

PASSIVE COMMUNITY PARKS

Position Paper – Approved by the Gwinnett County Recreation Authority - August 15, 2000

The Gwinnett County Parks and Recreation 2000 Capital Improvements Plan encourages the County to acquire smaller park properties in those densely populated and under served areas of the County in which larger Community Park size parcels (120-140 acres) are unavailable. The "Park Cluster" concept encourages the acquisition of one or more smaller parcels in densely developed service gap zones to ensure that some park services are provided to all areas of the County.

To meet the anticipated primary needs of the intended users on a smaller sized site requires that a new category of park type be added to the kinds currently constructed by Gwinnett County. At this time, we construct and manage three principal park types: Regional Open Space Parks, Community Parks and Special Purpose Parks.

Open Space Parks are typically several hundred acres in size, and are therefore an inappropriate model for a much smaller park.

Community Parks always include one or more organized sports field complex with an associated need to provide ballfield lighting and hundreds of ballfield related parking spaces. The acreage needed to accommodate such sports field complexes would so dominate a smaller park site that there would be little space left to provide facilities for the general public's daily use. Additionally, the impact on park neighbors of placing sports field lighting within a densely developed existing residential area would be significant. The 1996 Gwinnett County Parks and Recreation Master Plan states that between 120 and 140 acres of land are needed to provide for the needs of both organized sports plus the open space and typical recreation needs of the general public. Obviously, then, a twenty to forty acre park cannot do both. Therefore, the typical program of a Community Park must be significantly altered to provide for general recreation and open space needs on a small site.

Special Purpose Parks typically occupy small sites. They may be dedicated to a single sports program (Harmony Grove Soccer Complex, Lillian Webb Field, Cemetery Field) or the site might be dominated by a single building and its associated parking (Singleton Road Activity Building, Collins Hill Aquatic Center). As these sites are focused on satisfying one primary recreation need, and as they typically develop most of their available acreage to satisfy that need, this type of park is not a proper model for satisfying a more varied mix of general park facility and open space needs.

Therefore, we propose the adoption of a fourth park type called Passive Community Parks. Such a park would not have sports field complexes run by Youth Associations with ballfield lights and hundreds of supporting parking spaces. We would not site Tennis or Basketball Complexes (as opposed to single or paired courts) in Passive Community Parks. Additionally, Passive Community Parks would not be the place where we would site large Community Centers and Aquatics Centers, with their associated hundreds of parking spaces. Passive Community Parks would fit on properties smaller than needed for our current standard Community Park but would require a minimum of twenty contiguous acres to accommodate any significant range of passive recreation opportunities. The County should strive to create sidewalk, bike trail and pedestrian trail connections between Passive Community Parks, surrounding neighborhoods and significant bikeways and greenways.

Instead, we propose a park program for these parks which will satisfy a broad variety of recreation needs for the complete cross section of age groups while simultaneously insuring that no more that 25% to 33% of any given site is developed with impermeable surfaces (parking, paved trails, sports courts, rooftops, sidewalks). This strategy will ensure that most of the park is left in some combination of Pond, Turf, Meadow or Woodland.

By **Pond**, we mean a body of water sufficiently large and deep to support a variety of aquatic life forms. Unlike the engineered look of "detention ponds" we propose that our park ponds would have curvaceous edges with gently sloping pond banks designed so that children can safely walk and fish the entire perimeter of the pond without fear of sliding into the water.

By **Turf**, we mean a graded area with irrigated and well-maintained turf grass that enables sustainable use for informal, non-organized sports and free play.

By **Meadow**, we mean an area with mildly rolling topography with grass (non-irrigated and mown higher) suitable for free play (picnicking, kite flying, Frisbee tossing).

By **Woodland** we mean retained existing woods, newly reforested areas or some combination of both.

The park program for the developed portions of the Passive Community Park would have some mix of the following recreation facilities:

Activity Building and its associated parking (does not require permanent assigned staff) in lieu of Community Center.

Perimeter paved Multi-Purpose Trail (for walking, jogging, biking and skating) with mileage markers and optional Exercise Stations.

Outdoor Seniors Activities (Horseshoe Pits, Pavilion with permanent Checker/Chess tables, etc.)

Nature Trails through areas of scenic or natural beauty.

Irrigated Turf Fields for informal sports and non-irrigated Meadows for free play.

Tennis, Basketball and Sand Volleyball Courts (two of each maximum).

Fishing Pond.

Picnic Pavilions with dedicated parking, free standing Restroom Building, and Grills.

Playgrounds with separate zones and equipment (multiple play structures and swings) designed to serve children from toddler to pre-teen ages.

"Splash Ground" aquatic play structure (does not require lifeguards) in lieu of Aquatic Center.

Skate Park and Disk Golf facilities to serve teens and pre-teens.

Dog Park (2-3 acre fenced area with: pooper scoopers, trash cans, paved double check entrance gate area, paved watering/hosing zone, signage, dedicated parking, optional Dog Agility Course if larger space is available).

Retained **Meadow** and **Woodland** to provide shade plus variety of scenery and topography for the routes of both the multi-purpose and nature trails.

The facilities/activities listed above are intended to serve as a guide for planning Passive Community Parks. The specific mix of facilities would be determined through each site's master planning process with community input.

Appendix C: Community Input Meeting Results Refer to the attached Spreadsheets for a summary of the tabulated Community interests and concerns information collected at the initial public meeting.

Kanoheda Park Master Plan

Community Interest Form Tabulations

March 6, 2002

Gwinnett Dept. of Community Services jB+a park design studio

Dreaven er Fesility	Times Mentioned	Ranking					
Program or Facility		First	Second	Third	Fourth	Fifth	No Rank
Perimeter Paved Multi-Purpose Trail	25	12	8	1	1		3
Playgrounds	22	1	6	4	4	2	5
Picnic Pavilions	20	2	2	7	4	3	2
Nature Trails	16	5	4	4		2	1
Tennis,Basketball and Sand Volleyball Courts	12			3	3	2	4
Dog Park	10	1	2		1	6	
Fishing Pond	8	3		3			2
Activity Building	7	1		2	1	1	2
Outdoor Seniors Activities	7		2	2	1		2
Retain Meadow/Woodland	7			3	3	1	
Irrigated Turf Fields/Meadows	6	1	1		3		1
Splash Ground	5				4		1
Skate Park and Disk Golf	3	1				1	1
Free Standing Restrooms	2				1	1	
Bocce Courts	1						1
Outdoor/Indoor Classroom	1		1				
Butterfly Garden	1				1		
Peace or Meditation Area	1						1
General Seating and Lounge Area	1				1		
Planted flower gardens around parking	1						1
Captain Area	1						1
Pool	1		1				
Restaurant	1						1
Cooking Facilities	1		1				
Sidewalks	1		1				
Streetlights	1			1			

Kanoheda Park Master Plan

Park Concerns Form Tabulations March 6, 2002

Gwinnett Dept. of Community Services jB+a park design studio

Community Concern	Times Mentioned	Ranking
Supervision/Police/Security/Safety	12	1
Maintenance/Cleanliness	9	2
Criminal Activity/Vandalism	9	2
Teens/Gangs	8	3
Amt. Paved Area/Taking Away Trees	5	4
Noise	4	5
Drainage	4	5
Lights	3	6
Need to Change Name of Park	3	6
Traffic	3	6
Homeless Coming There	2	7
Lack of Handicap Access	2	7
Drug Dealer Hangout	2	7
Hours of Operation	2	7
Lack of Privacy	1	8
Project May Run Out of Money	1	8
Splash Ground Not Usable Year-Round	1	8
Don't Want Road to be Widened	1	8
Inability to Cross Bethesda Road	1	8

Appendix D: 1955 Kanoheda Site Aerial Photograph Refer to the attached aerial photo.



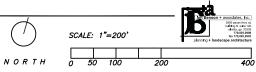
KANOHEDA PARK ——— 1955 Aerial Plan

\bigcirc	SCALE: 1"=200'		Jon Benson + associates, Inc. 2000 passes from rf. 2000 passes f
NORTH	0 50 100	200	400

Appendix E: 1972 Kanoheda Site Aerial Photograph Refer to the attached aerial photo.



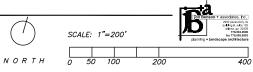
PREPARED FOR: Gwinnett County Department of Community Services KANOHEDA PARK 1972 Aerial Plan



Appendix F: 2000 Kanoheda Site Aerial Photograph Refer to the attached aerial photo.



— KANOHEDA PARK — February 2000 Aerial Plan



Appendix G: Meeting Minutes Refer to the attached meeting minutes for a summary of the discussion and presented materials at each steering committee meeting.



Gwinnett County Department of **Community Services**

Master Plan July 17, 2003

PEDESTRIAN BRIDGE

MULTI-USE TRAIL 1 Mile asphalt loop 12' wide

"CREEK SIDE" TRAIL 8' Wide Asphalt, ADA compliant

NATURE TRAIL 6' Wide Pervious material, to wind through native plantings.

> "CREEK SIDE" PICNIC AREA Tables w/ benches and grills Covered picnic shelters

DOG PARK

2 acre fenced area for off-leash play. Includes dog run, all dog play area, and small dog play area, benches, trash cans, water.

PEDESTRIAN BRIDGE

DETENTION BASIN



TOTAL ACREAGE: 25.3632

SCALE: 1"=130

NORT