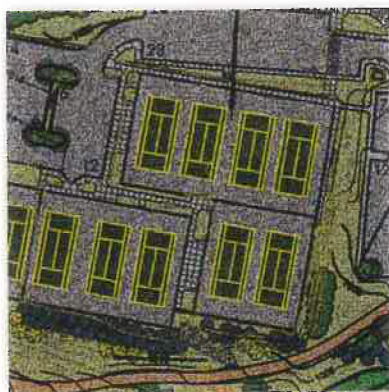




Best Friend Park Master Plan

Gwinnett County, Georgia



Prepared by

Lose & Associates, Inc.

Landscape Architecture • Architecture • Engineering

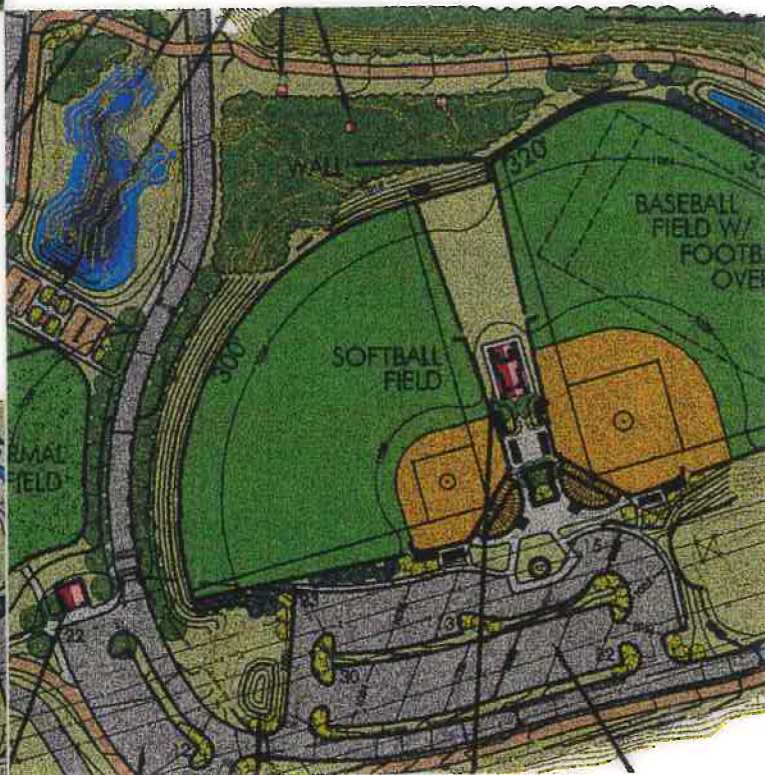
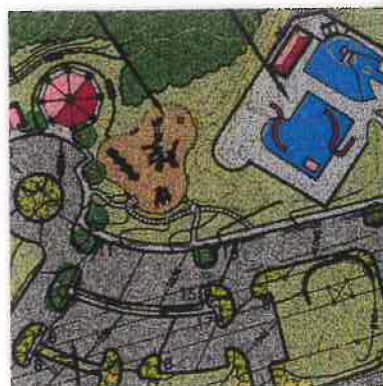


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Introduction

Gwinnett County is the Atlanta area's fourth most highly populated county. Gwinnett increased in population by 47 percent over the past ten years, and now has over one-half million residents. Demographic projections prepared by the Atlanta Regional Commission indicate that the County population will more than double over the next 25 years. This unprecedented growth has led to a highly pro-active effort on the part of the Board of Commissioners and the Recreation Authority to plan for the present and future recreational needs of Gwinnett County's citizens.

In 1997, the citizens of Gwinnett County passed a special local option sales tax earmarking \$60 million for the purchase of parkland and the development and renovation of new and existing parks and facilities. The Parks and Recreation Division is charged with administering those funds and with the planning, design and construction of new parks, as well as improvements to existing facilities. This Master Plan for Best Friend Park is a direct response on the part of the Division to the expressed desire of local citizens for more and better recreation opportunities.

Previous Planning Reports

The Gwinnett County Comprehensive Parks and Recreation Master Plan was published in January, 1996. The Master Plan was the result of an inclusive public planning process that identified local citizens' needs and desires for parks and recreation in their community. Additionally, the planning process included an analysis of each park facility.

Relevant to Best Friend Park, the Comprehensive Plan stated that the " . . . constraints of a small site are evident here, where property lines dictate the arrangement of facilities. It is difficult to negotiate the existing parking lots at the tennis center. Parking divides the tennis center in two with an expanse of asphalt and cars. This center currently hosts many tournaments and has great potential for revenue generation.

"The lack of landscaping at the gymnasium makes it look unfinished. Wood trim and soffit elements need repair. The gymnasium roof is unlike any other in the system."

"Signage at the entry and throughout the park is limited, which complicates circulation. The park is poorly designed, with parking often remote from the activity areas it supports."

The Comprehensive Plan made the following recommendations for Best Friend Park:

- Provide landscaping in the planters at the front of the gymnasium to control erosion and stabilize the slope. Repair the cap on the planter wall and the soffit at the entrance to the gym.
- Paint the buildings on a regular basis and renovate the interior spaces.
- Stabilize the stream bank to stop erosion from undermining the tennis courts.
- Add a sidewalk from the playground to the tennis center.
- Pave and define parking at the tennis center to maximize the limited space available.
- Add park signage and a map to aid park users.
- Buffer views of surrounding land uses with plantings, etc.

The Comprehensive Plan also recommended the following long-term capital improvements. Several of the recommendations have been completed or are under construction:

| | |
|---------------------------------|-----------|
| Replace pro shop | \$400,000 |
| Add sidewalks | \$ 30,000 |
| Landscaping | \$ 30,000 |
| Pave tennis center parking..... | \$ 25,000 |
| Signage | \$ 25,000 |
| Renovate gymnasium | \$300,000 |
| Waterslide..... | \$100,000 |
| Total | \$910,000 |

In 1996 Best Friend Park served approximately 90,000 county residents. Yearly participation in specific activities was:

| | |
|---|--------|
| Aquatics..... | 28,648 |
| Tennis | 66,242 |
| Baseball/Softball | 1,382 |
| Basketball | 230 |
| Programs | 9,255 |
| Passive Use (estimate)..... | 28,300 |
| Adult Athletics (basketball, volleyball, softball) | 28,586 |

The Liberty Heights neighborhood is immediately west of Best Friend Park—the *Liberty Heights Community Infrastructure Improvement Plan* was published in September, 1998. Its purpose was to combine public involvement with technical evaluations in order to identify needed infrastructure improvements in Liberty Heights. Parks and recreation were included in the technical issues evaluated by the Improvement Plan. Community priorities identified by the Plan were:

- Street repairs and widening/speeding/speed humps
- Drainage/curbing
- Sidewalks and pedestrian safety
- Street lights
- A safe place for kids to play

According to the Improvement Plan " . . . there are no neighborhood parks in the Liberty Heights neighborhood, [but] Best Friend Park is located adjacent to the study area between Old Rockbridge Road and Best Friend Road. While activities offer many opportunities to Liberty Heights residents, the staff reported that the neighborhood youth did not participate in large numbers. The straight-line distance to the park approaches 1 mile for the westernmost edge of the study area, and exceeds ½ mile walking distance for most Liberty Heights residents. However, park staff reported that neighborhood children are observed frequently passing through the park on foot and on bicycles. There is an informal footpath entrance to the southwestern corner of the park that has been worn through the underbrush near the end of Gwinn Drive approaching the back of the tennis courts." Additionally, the Improvement Plan recorded the following relevant comments from public input meetings:

- Some expressed interest in having a small community park
- Others requested improved access to Best Friend Park—how can people from Pleasantdale neighborhood get to Best Friend Park
- Several people were aware of the existing footpath to Best Friend Park
- Make Best Friend Park safer and more secure
- Parks would need to be lighted and patrolled regularly or they become too attractive to drug dealers. Will police patrol proposed parks?

In addition to public meetings, respondents to a citizens' survey conducted as part of the planning process identified the following priorities:

- Playground designed for children ages 7-12

- Tot lot designed for children ages 3-6
- Picnic shelter, tables and grills
- Outdoor basketball court

"Other facilities mentioned included a baseball field, landscaped sidewalk area, trail and picnic shelters for the disabled and a clubhouse/senior activity center."

Site Analysis

Best Friend Park is an approximate 43-acre facility located near the Norcross area of western Gwinnett County. The primary park access is from Jimmy Carter Boulevard approximately .3 miles south of Buford Highway; secondary access is via Old Rockbridge Road south from Buford Highway. Jimmy Carter Boulevard has a central median and there is no median cut or traffic light at Best Friend Park. Cars moving south on Jimmy Carter are able to make a right-hand turn into the park—those traveling north are not able to turn into the park from Jimmy Carter Boulevard. Cars exiting the park at Jimmy Carter must turn right.

Existing Conditions

Best Friend Park (see figure 2) has developed over time without the benefit of a Master Plan. As a result, vehicular and pedestrian circulation is unsafe, storm water management is ineffective, and the overall use of available resources is inefficient. However, there are individual facilities within the park that are very functional and offer significant recreational opportunities to western Gwinnett County.

The Hudlow Tennis Center at Best Friend Park consists of 16 courts, a new clubhouse and parking. Primary access is from Old Rockbridge Road. The Gunnin Community Building at the Jimmy Carter Boulevard entrance features a gymnasium, a small (50-person maximum capacity) meeting room available for rentals, and administrative space. An aquatic center with an outdoor playscape is located immediately west of the Gunning Community Building. The park also features two outdoor multi-purpose courts, a restroom building near the courts, two baseball/softball fields, a concession and restroom building at the ball fields, picnic facilities including a pavilion and freestanding picnic tables, an amphitheatre, parking and a maintenance compound.

According to the 1998 Liberty Heights Community Infrastructure Improvement Plan, programs offered at Best Friend by the Gwinnett County Parks and Recreation Department include:

- Summer day camps for ages 6-12 years
- Swimming lessons• Tennis classes and camps
- Junior tennis tournaments
- Pre-season football workout for ages 9-10 years
- Adult league softball, volleyball, basketball
- Gym events and open gym

Site Opportunities and Constraints

Site Constraints

Vegetation

Existing vegetation at Best Friend Park can be considered both an opportunity and a constraint. Mature plant material enhances the aesthetic and natural character of the park. However, dense vegetation, particularly in an urban setting, diminishes views and facilitates secluded spots where undesirable behavior can take place. According to representatives of the Police Department and County Parks and Recreation staff, safety and security problems have been reduced within the park over recent years. In spite of this, a public perception persists that the park is not a safe place, particularly for children. Park proponents agree that activity will promote security—users keep the abusers away. Therefore, woodland clearing must be considered in order to respond to local residents' perception that the park is unsafe. Additionally, recreation facilities should be located in sunny, visible areas instead of shaded, hidden regions of the park.

Topography

The majority (72.6%) of the built-up areas of Best Friend Park consists of slopes ranging to less than ten percent. Steeper slopes (over ten percent) occur chiefly at the perimeter of the ball fields, around the tennis complex and adjacent to drainage channels in the western third of the park. (see figure 3)

Overall, there is an approximate 70' change in grade across the site. The highest elevation is at 1050 near the gymnasium and the lowest spot is 980 at the bottom of a drainage swale in the southwest corner of the park. The drainage swales are approximately 20' deep.

Hydrology

Storm water management at Best Friend Park consists of a somewhat ineffective constructed system in the built-up areas of the site—the re-design of existing detention ponds and related systems will be considered in the overall plan. Storm water also drains through swales or channels behind the ball fields and in the wooded western third of the site and exits the property at the southwest corner of the park. In order to create more developable land in the western wooded areas of the site, it may be necessary to import fill material from off-site and contain and control the existing channel drainage in pipes.

Gwinnett County has recently adopted extensive storm water regulations that will have a significant impact on future activities at Best Friend Park. In general terms, the storm water policy dictates that no development should adversely impact another downstream property by discharging more storm water runoff at peak flow or higher storm water velocities than existed prior to development. Therefore, concurrent with the development of construction drawings and specifications recommended by this Master Plan, engineering studies will be required

to determine the specific hydrological impacts of the proposals. Hydrological studies, including a Storm Water Management Report, must be completed by a Professional Engineer registered in the State of Georgia.

Access and Circulation-Georgia Power

Georgia Power is the owner of the electric transmission system located in the easement on the southern perimeter of Best Friend Park.

Encroachment agreements are required for all activities in the easement.

Uses that are typically permissible include:

- Grading: must not prevent ingress and egress for operating and maintenance purposes. Grading may not undermine any power structure. If the maximum depth of cut is three feet or less, grading must be kept to a maximum slope of 1:1 and must not occur within 25 feet of any structure, attachment or anchor. If the maximum depth of cut is greater than three feet, grading must be kept to a maximum slope of 3:1 and must not occur within 25 feet of any structure, attachment or anchor. In all cases, the grading design must prevent the undermining of structures or anchors. Guy wires and anchors must be protected, and access must be provided to the right-of-way.

Earth fills are permitted within the easement if they do not reduce the following vertical clearance of conductors to ground:

| | |
|-------------------|---------|
| • 500 KV | 33 feet |
| • 230KV | 27 feet |
| • 46KV, 69KV | 25 feet |
| • Telephone lines | 20 feet |

Where fill is to be placed near structures or attachments, a distance of 25 feet from the toe of the fill to the structure must be maintained-the maximum grade of fill slopes is 3:1.

- Drainage ditches: permitted within the right-of-way if they do not prevent ingress and egress for operation and maintenance purposes.
- Underground utilities: may be permitted, provided operation and maintenance of lines are not hindered. All buried encroachments should, if at all possible, cross the right-of-way at right angles at least 25 feet at ground line from any structure or attachment. Underground construction parallel to the centerline of the easement is limited to the outside five feet of the right-of- way. Manholes should be placed outside the right-of-way limits if at all possible.

- Streets, roads and driveways: may be permitted but must not cross the right-of-way closer than 25 feet from any structure or attachment.

Parallel construction of streets, roads or driveways will require special consideration, and is typically limited to between two and three hundred feet.

- Recreational uses: may be permitted as long as Georgia Power has adequate ingress and egress to its transmission facilities and equipment. All lighting must be kept out of the right-of-way.

- Parking: temporary parking may be allowed on easements if such parking will not impair or interfere with Georgia Power's access to, or use of, the easement.

- Storm water detention: all lakes or ponds require special consideration.

Uses that are generally not allowed by Georgia Power within the easement are:

- Swimming pools
- Permanent structures
- Signboards or light standards over 15' in height
- Septic tanks
- Planting of trees that reach more than 15' at maturity

Georgia Power requires that completed plans be submitted for their review prior to construction. However, the agency has agreed to review the plans as they are developed through conceptual, preliminary and final stages. The agency will comment on the ultimate potential of specific uses in the power easement and will identify any incompatible proposals.

Access and Circulation—Georgia Department of Transportation

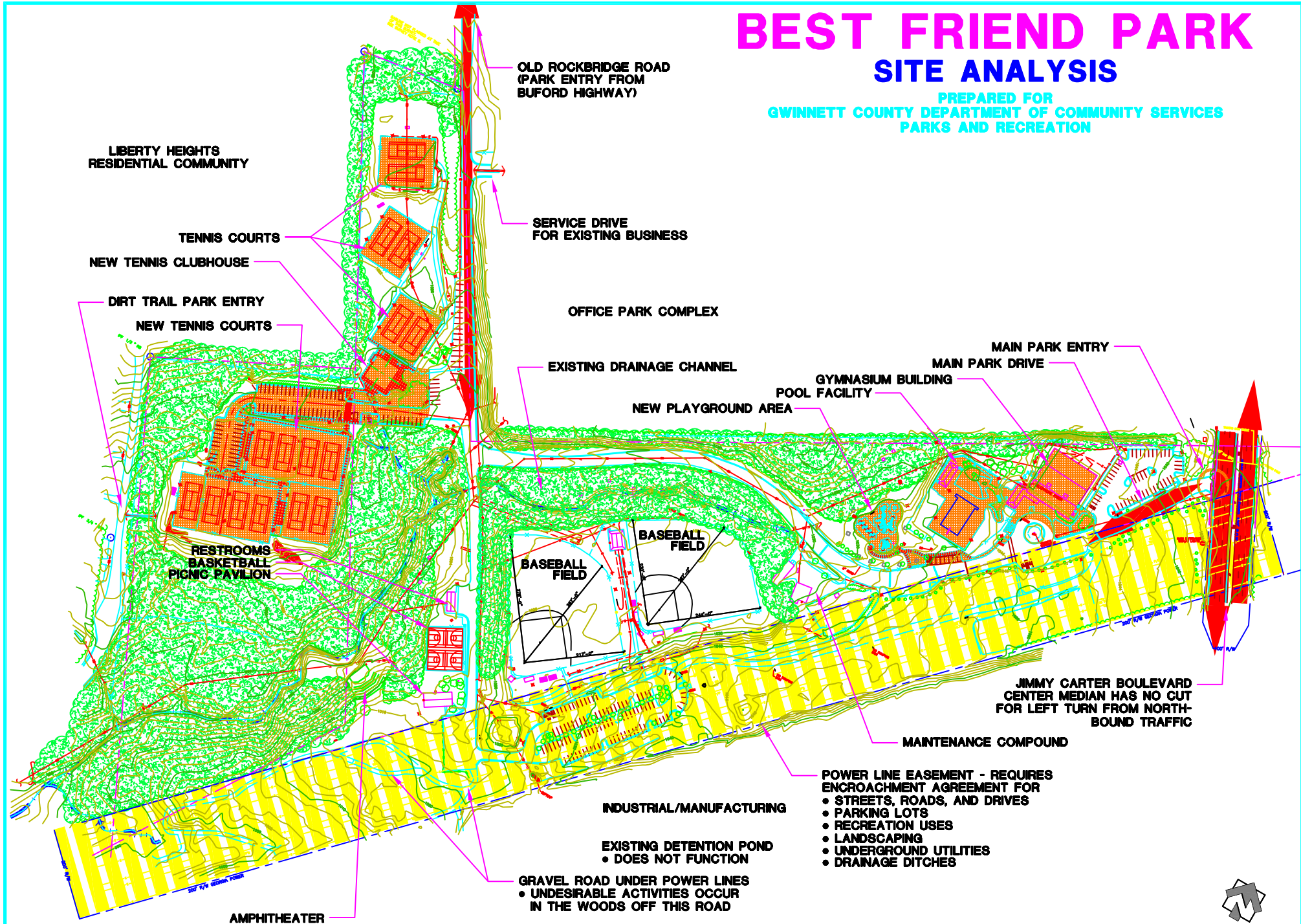
Jimmy Carter Boulevard is a state-regulated thoroughfare, and all decisions related to the park entrance, median cuts and traffic signals are made by the Georgia Department of Transportation. The agency generally requires that finished plans be submitted to them for review. However, it is understood that a median cut may be allowed across from the park entrance if it is not within 660' of an existing cut. It is further understood that the agency will consider allowing the entry drive to be relocated to the power easement. Conceptual, preliminary and final plans will be submitted to the Georgia Department of Transportation for review and comment.

Site Opportunities

As mentioned previously, Best Friend Park's existing vegetation presents both opportunities and constraints. Although areas of the site require selective clearing at a minimum, mature plant material can remain in areas where it serves as a screen or visual barrier to activities such as maintenance.

BEST FRIEND PARK SITE ANALYSIS

PREPARED FOR
GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES
PARKS AND RECREATION



BEST FRIEND PARK

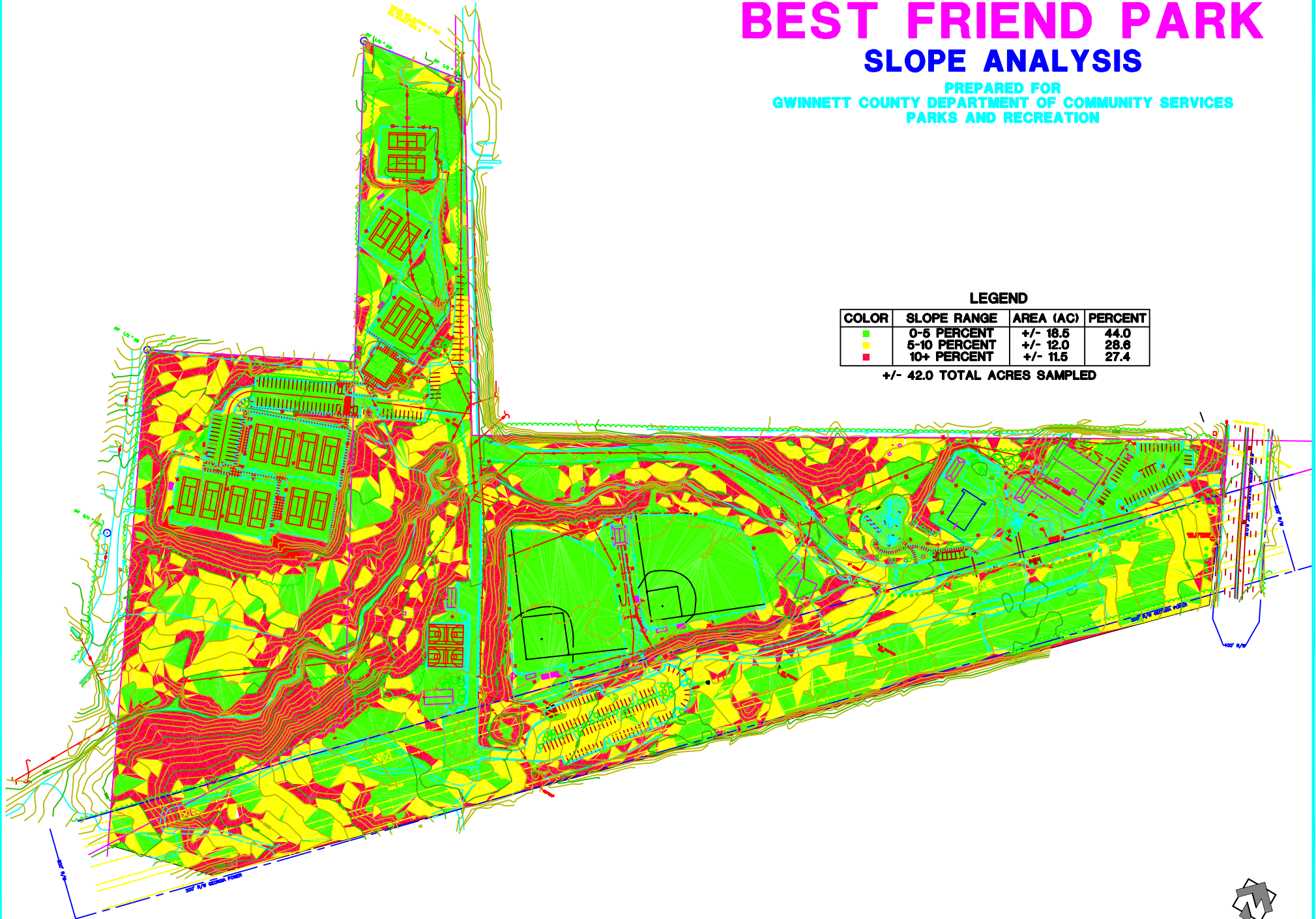
SLOPE ANALYSIS

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LEGEND

| COLOR | SLOPE RANGE | AREA (AC) | PERCENT |
|-------|--------------|-----------|---------|
| ■ | 0-5 PERCENT | +/- 18.5 | 44.0 |
| ■ | 5-10 PERCENT | +/- 12.0 | 28.6 |
| ■ | 10+ PERCENT | +/- 11.5 | 27.4 |

+/- 42.0 TOTAL ACRES SAMPLED



Preliminary Program Development

Specific program elements to be incorporated at Best Friend Park chosen through at via a kick-off meeting and discussion with representatives of the Gwinnett County Department of Community Services and other project proponents. No budget has been established for park improvements—the park design will respond to a program "wish list" versus a known budget.

Of the existing facilities, the following must be retained:

- Tennis
- Leisure pool
- Gymnasium

Other components to be included in the program include:

- Restrooms associated with the new playground
- Two adult softball fields (300' minimum but 315' to 325' preferred). One of the two fields should have a flag football field overlay.
- Half mile interior multi-use loop trail
- Fenced maintenance compound
- Informal play field for soccer and other casual uses—could clear and fill the western woods to accommodate
- Outdoor basketball courts
- Additional tennis improvements including one court, improved parking and court lighting
- Remove the amphitheatre
- Remove the existing restrooms near the existing basketball courts
- Expand parking overall
- Safer access and circulation

Conceptual Planning Program Development

Following the presentation of the site analysis, the design team and County staff returned to development of the program "wish list." The final program to be accommodated in the conceptual plans consists of:

- Existing gymnasium
- New playground with picnic pavilion and restrooms
- Existing tennis plus improvements
- Existing leisure aquatics plus improvements
- Two adult softball fields, one with a flag football overlay
- Informal play field with picnic pavilion and playground
- Clear and fill the western woods as needed to accommodate the informal play field and associated facilities
- Half-mile interior multi-use loop trail-comprehensive pedestrian circulation system
- Improvements to access and circulation—maintain two entries, determine potential to move the Jimmy Carter Boulevard entrance to the power easement, add a median cut and a traffic signal
- Outdoor basketball courts (4)
- Maintenance compound

Alternative Conceptual Master Plans

The design process utilized for Best Friend Park relies on a comprehensive exploration of a variety of ways to solve problems, maximize opportunities and respond to needs identified by Gwinnett County citizens. The first phase of the process—conceptual planning—examines options for the juxtaposition of pedestrian and vehicular circulation, parking, and recreational and maintenance activities. The most successful elements from each of the design studies are then blended into a hybrid concept that represents the most logical and effective use of the site and the existing facilities to be retained.

Concept One

The first concept (see figure 4) assumes that the existing entries from Jimmy Carter Boulevard and Buford Highway (via Old Rockbridge Road) will remain. The plan also assumes that Georgia Power will permit only limited use of the power easement.

The gymnasium and related parking and drop-off remain in their current configuration. The pool area will be renovated and will include additional parking to serve aquatics, the playground and a new picnic pavilion with restrooms. The existing maintenance compound will be replaced with three basketball courts. The new maintenance yard (26,000 square feet) will be located west of the existing ball field parking in the power easement-maintenance structures will be built adjacent to the yard but outside the power easement.

The existing ball fields and related facilities will be removed. Two new 300' fields, one with a flag football overlay, will be constructed. An informal play field and a central picnic pavilion with concessions and restrooms will be built between the two baseball fields. The plan will require significant clearing and grading in the southwestern corner of the park in order to construct the ball field and a retention pond.

The entry drive from Jimmy Carter Boulevard will continue to provide access north of the ball fields to the tennis complex. A large parking lot to serve tennis, baseball and the open play field will be constructed at the intersection of the entry drive and Old Rockbridge Road. This parking lot will also require extensive clearing of vegetation. Tennis parking along Old Rockbridge will be refined, and additional overflow parking will be constructed west of existing tennis parking. One tennis court will be added at the north end of the complex. The park entry from Buford Highway will be improved, and will include signage and landscaping to clearly establish park boundaries. A developed pedestrian entry to the park will be included on the western boundary.

Concept One features a .75-mile multi-use trail that forms a loop around the central ball field activities. The plan includes a total of 459 parking spaces.

Concept Two

The second concept (see figure 5) assumes that the existing entries from Jimmy Carter Boulevard and Buford Highway will remain. The second concept also assumes that Georgia Power will permit more extensive use of the power easement for parking, circulation and maintenance storage.

The existing parking east of the gymnasium will be reconfigured in order to construct two basketball courts in close proximity to the gym. The maintenance building will also occupy space near the gym but its primary storage yard (11,500 square feet) will be located south of the building within the power easement. The aquatic facilities will be renovated and expanded with additional parking. A picnic pavilion with restrooms will be constructed adjacent to the playground.

The existing ball fields will be replaced with two 300' baseball fields with a flag football field overlaying the outfields. A new concession and restroom building will be included south of the fields next to the power easement and ball field parking. A large picnic pavilion and restrooms will be constructed in the southwest corner of the site and will be accessed via a continuation of the entry drive through the power easement. Parking at the new pavilion will also serve an informal play field that overlooks the detention pond. Like Concept One, this plan would require extensive clearing, grading and drainage structures to facilitate activities in the wooded third of the site.

The entry drive extending from Jimmy Carter Boulevard will no longer provide access to the tennis complex—it will terminate in a turn-around at the new picnic pavilion and playground. The portion of the drive that is closed will be incorporated in the multi-use loop trail system. The new entry drive will weave through the power easement and turn north to the tennis center.

Parking at the tennis complex will be refined and expanded; one additional tennis court will be constructed at the north end of the complex. The park entry from Buford Highway will be improved, and will include signage and landscaping to clearly establish park boundaries. A developed pedestrian entry to the park will be included on the western boundary.

Concept Two features a .75-mile multi-use trail that encircles the ball fields and new picnic facilities in the park's southwest corner. The plan includes a total of 340 parking spaces.

Concept Three

The third concept (see figure 6) assumes that the Georgia Department of Transportation will approve a new entry from Jimmy Carter Boulevard approximately 200' south of its current intersection with the Boulevard. The plan also assumes that Georgia Power will approve the relocation of the entry to the power easement and that the utility will permit greatly expanded use of the easement for circulation, parking and maintenance access.

Parking and drop-off areas at the gymnasium and aquatics facility are significantly changed from their current configuration. Like Concept Two, basketball courts are planned in close proximity to the gymnasium, where staff supervision will be available. This plan also features an expansion of the aquatics facilities and a new picnic pavilion and restrooms west of the playground area. Parking for these facilities will be constructed in the power easement and next to the pavilion and playground.

The existing vehicular connection will remain between the entry drive and the tennis complex on Old Rockbridge Road. The existing ball fields and concession building will be replaced with new facilities—two 300' baseball fields separated by an informal play field. A single building that provides picnic, concessions and restroom facilities will be constructed centrally between the two ball fields. The easternmost field will include a flag football field overlay. Significant clearing, grading and drainage structures will be required in the wooded portions of the site in order to accommodate the proposed activities.

Tennis parking along Old Rockbridge Road will be improved and expanded south of the new clubhouse. Additionally, overflow tennis parking will be constructed in the northwest corner of the complex. One tennis court will be added at the Old Rockbridge entry, and that entry will be improved with signage and landscaping to define the park boundaries. A developed pedestrian entry will be built along the park's western boundary.

Concept Three features a .75-mile multi-use trail that forms a loop around the ball fields. The plan includes a total of 428 parking spaces.

Concept Four

The fourth concept (see figure 7) does not focus on the desired program outlined by County staff. Its purpose is to explore options that allow more of the existing vegetation to remain, while creating less significant grading impacts.

Concept Four assumes the entry from Jimmy Carter Boulevard can be relocated to the power easement. The plan also assumes that Georgia Power will allow greater use of the easement for parking and vehicular circulation.

Existing parking at the gymnasium will be relocated to the power easement in order to construct three basketball courts adjacent to the Gunnin Building. The aquatics facility and playground will be expanded and improved—parking will be provided south of the facilities in the power easement. A picnic pavilion that includes restrooms will be located west of the playground.

The ball fields and existing concessions building will be removed, and the central core of the park will feature a picnic pavilion and restrooms adjacent to an informal open space for multiple casual uses. The existing access drive from Jimmy Carter to Old Rockbridge Road will be removed, and the segment that currently connects from the aquatics area to the tennis complex will be incorporated in the park's trail system.

Parking at the tennis complex will be refined along Old Rockbridge Road and expanded south of the new clubhouse. A new court will be added at the north end of the complex, and a pedestrian entry will be constructed west of the tennis courts. Signage and landscaping will also be added at the Old Rockbridge entry.

Two loop trails, each approximately 1/3-mile long, will be added to the park. One trail will encircle the wooded passive area in the southwest corner of the site. A playground, picnic pavilion and detention pond will also be constructed in this area. Selected clearing of vegetation will occur in order to open views in and out of the woods. The second trail will encompass the informal open space at the park's central core.

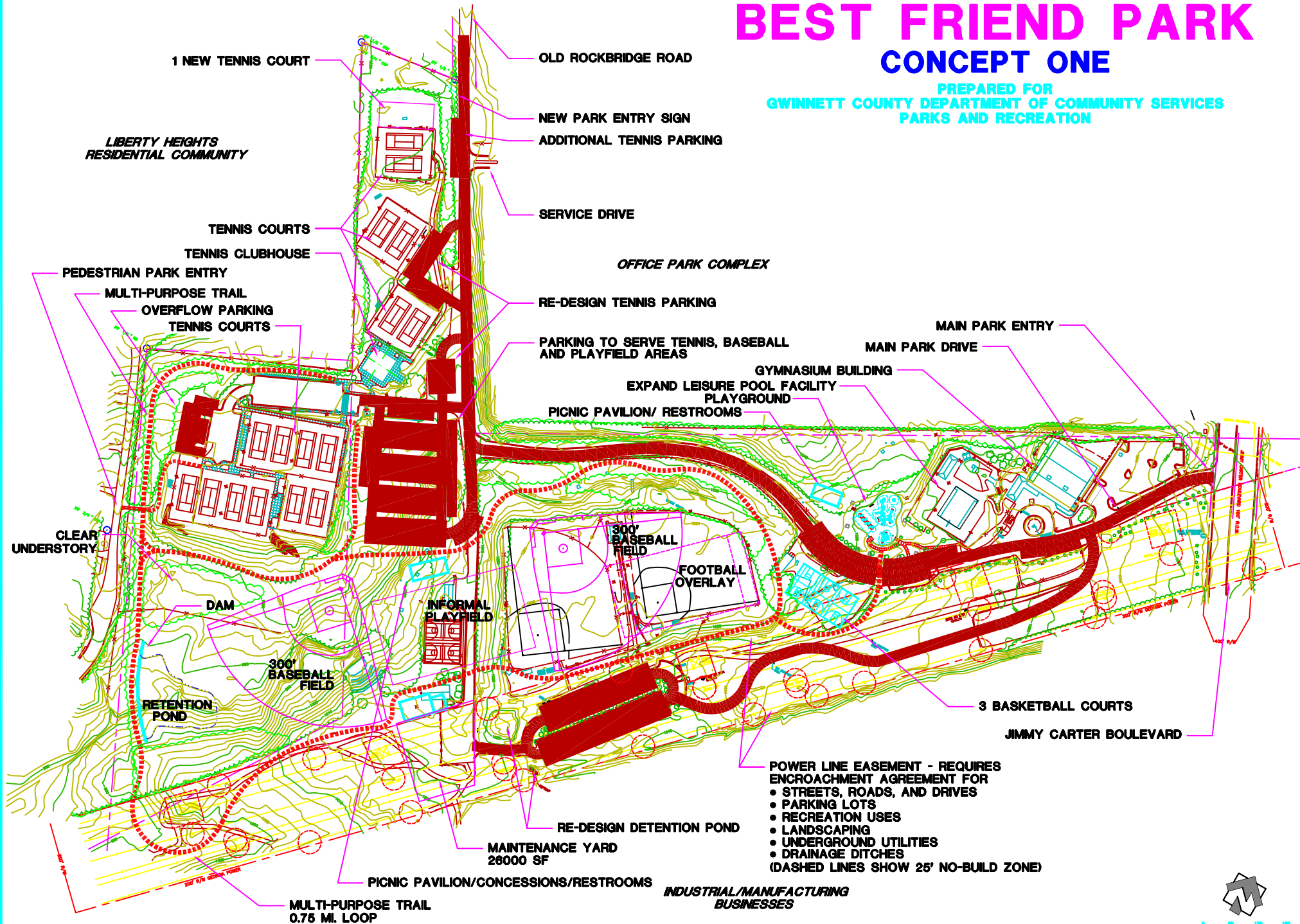
Maintenance buildings will be constructed in the southwest corner of the site, and a 22,000 square foot maintenance yard will overlay the power easement in that area.

Concept Four includes a total of 410 parking spaces.

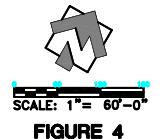
BEST FRIEND PARK

CONCEPT ONE

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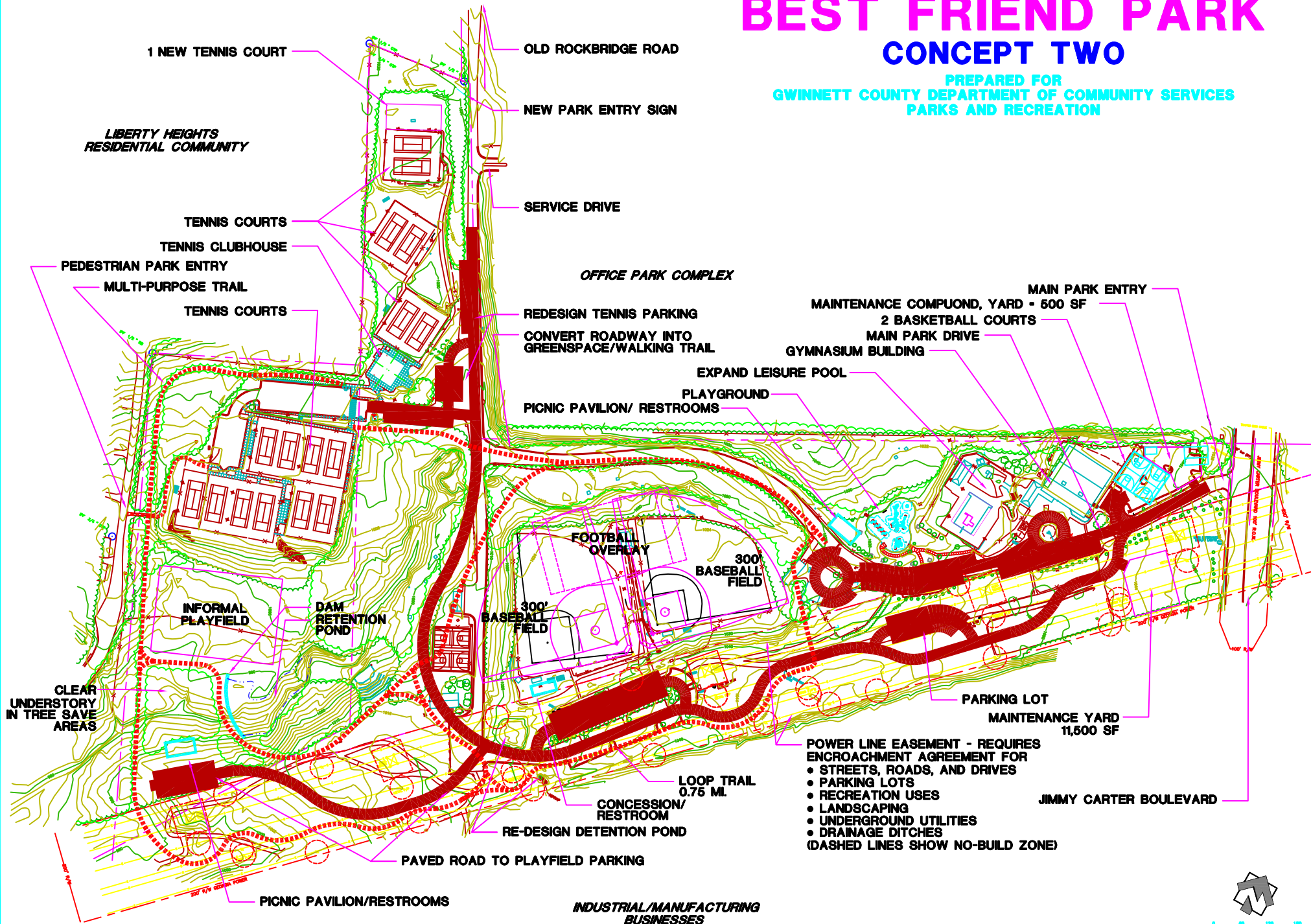
TOTAL PARKING - 459 SPACES



BEST FRIEND PARK

CONCEPT TWO

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PARKS AND RECREATION



TOTAL PARKING - 340 SPACES

BEST FRIEND PARK

CONCEPT THREE

PREPARED FOR
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PARKS AND RECREATION



TOTAL PARKING - 428 SPACES

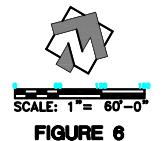


FIGURE 6

BEST FRIEND PARK

CONCEPT FOUR

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TOTAL PARKING - 410 SPACES

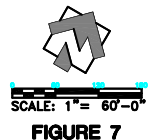


FIGURE 7

Hybrid Conceptual Master Plan

Based on agency and staff review comments related to the first four conceptual plans, it was determined that a fifth, hybrid plan was required prior to proceeding with the Preliminary Master Plan, grading studies and opinions of probable construction cost. The purpose of the hybrid plan is to meld the most successful components from the alternate concepts into one layout that is highly responsive to the program and maximizes the available land resource.

The hybrid concept (see figure 8) assumes that the existing entry from Jimmy Carter Boulevard can be relocated south to the power easement if GDOT's requirements for a deceleration lane are met. The plan also assumes that extensive use of the easement for parking, circulation and maintenance will be allowed.

The primary vehicular circulation route is aligned to the southern perimeter of the power easement to avoid conflicts between parking, pedestrian circulation and cars. Independent parking nodes will serve two basketball courts east of the Gunin Building, and parking for the gym, aquatic facilities, playground and new picnic area will be expanded.

The hybrid concept for Best Friend Park features two developed picnic and playground areas. The first is adjacent to the aquatics facility, and the second will be developed adjacent to the power easement in the western third of the site. Each will have separate picnic pavilions and restroom buildings.

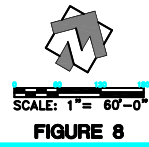
Best Friend's central core will continue to serve baseball and softball. One field is designed for softball (300'); the second field is planned for baseball, and will include a flag football field overlay. A new central concession and restroom building will serve the two fields. Extensive clearing of vegetation north of the fields will be required to accommodate the larger baseball/flag football field. The existing road that extends behind the ball fields to Old Rockbridge Road will be eliminated and replaced with a segment of multi-use trail. Dedicated parking for the ball fields will remain in its current location within the power easement.

The wooded southwestern corner of the park will undergo selective clearing to remove invasive exotic plants and open up views in and out of the woods. Primary built features consist of an informal play field, playground, picnic pavilion and restroom building. An entry for pedestrians will connect to an overall .75-mile multi-use trail system that encircles the woods and ball field complex. The southwestern corner of Best Friend Park will accommodate a maintenance building and a 20,000 square foot maintenance yard.

Two new courts will be added to the northern edge of the tennis complex, and the Old Rockbridge Road entry will be improved with signage and landscaping. Tennis parking on Old Rockbridge will be refined, and additional tennis parking will be added south of the new clubhouse and west of the courts.

The hybrid plan includes a total of 482 parking spaces.

**PREPARED FOR
GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES
PARKS AND RECREATION**



Preliminary Master Plan and Preliminary Opinion of Probable Cost

Based on agency and staff review comments and suggestions related to the Hybrid Conceptual Master Plan, minor modifications were made to the overall layout. Preliminary grading, drainage and construction cost studies were then developed to the schematic level of the Preliminary Master Plan (see figure 9).

Discussions and review of the conceptual plans with the Georgia Department of Transportation and Georgia Power indicate that the agencies will permit the primary site entry from Jimmy Carter Boulevard to be located in the power easement approximately 200-feet south of its current location. A 150-foot deceleration lane will be added to the entrance along Jimmy Carter Boulevard. According to GDOT, an acceleration lane for exiting the park will not be required.

The primary vehicular circulation route will be aligned to the southern perimeter of the power easement. This alignment will eliminate the current conflicts between pedestrians and motor vehicles. The eastern third of the power easement will provide roughly 200 parking spaces for two new basketball courts and the gymnasium, expanded aquatic facilities and an independent complex featuring a playground, restrooms and a picnic pavilion.

The central third of the park will continue to be devoted to ball fields. The west field will be designed as a 300' softball field. The east field will be a 350' baseball field and will include a flag football field overlay in the outfield. The baseball field will require 6' retaining walls to accommodate the change in elevation between adjacent trails and parking. Both fields will have 8' fences and netting on the outfields. A new central concession and restroom building will be constructed between the two fields. Ball field parking (approximately 120 spaces) will be located immediately south of the fields in the power easement.

Several improvements are suggested for the Hudlow Tennis Center at Best Friend Park. The primary tennis entry will continue to be via Old Rockbridge Road—this entry will be improved with signage and landscaping to define the park entrance and boundary. Two new tennis courts will be added to the northern end of the facility, bringing the total number of courts to eighteen. Preliminary discussions with the Department of Planning and Development indicate that the addition of these courts will be permitted in spite of their close proximity to the property line. The existing courts have established the recreational relationship with adjoining properties, so the Planning Department anticipates that the proposed expansion will be approved. Approximately 140 parking spaces will be developed east and south of the new tennis clubhouse. Parking will also be expanded on the west side of the facility, for a total of 62 spaces more than are currently available at the tennis complex.

The southwestern corner of the park will be devoted primarily to informal play spaces and picnicking. Restrooms will be constructed south of the play field and parking (34 spaces) will be developed within the power easement. The new maintenance compound will be constructed in the extreme southwest corner of the site, and will include a 20,000 square foot storage yard, a maintenance building with a roof extension over concrete storage bins, fencing and parking for six vehicles.

All pedestrian circulation within the park is designed to be accessible, and is graded at less than five percent. Sidewalk connections are provided between parking areas and all facilities and activities. A .75-mile multi-purpose trail encircles the ball fields and informal play areas. A pedestrian entry on the western boundary of the site provides direct access to the multi-purpose trail. The trail crosses vehicular circulation at grade in three places, and a pedestrian bridge is required to cross a drainage channel in the wooded western portion of the park.

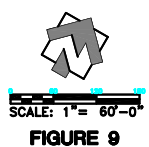
Preliminary grading studies and calculations indicate that approximately 52,000 cubic yards of earthwork will be required. Of that total, 17,500 cubic yards of fill material must be imported. It should be noted that grading volume calculations are unadjusted raw numbers—no allowances have been made for compaction or swelling, as no soil data is available. The process of developing construction drawings and specifications will require soil borings and further analyses in order to determine more exact grading quantities.

Storm water management will be achieved primarily through a detention pond located on the southeast side of the new tennis center parking. The preponderance of storm water will be channeled to that pond via pipes. Drainage will also require two level spreaders—one beneath the proposed basketball courts, and the second west of the large tennis court cluster.

Summary costs for the recommendations are:

| | |
|--------------------------|--------------------|
| Demolition..... | \$ 254,000 |
| Grading..... | \$ 367,050 |
| Site work | \$1,377,275 |
| Ball fields | \$ 88,300 |
| Site amenities | \$ 89,700 |
| Landscaping | \$ 231,000 |
| Sod and irrigation | \$ 179,750 |
| Utilities | \$ 344,500 |
| Buildings | \$1,383,600 |
| Sub-total | \$4,315,175 |
| Mobilization, | |
| fees and bonds | \$ 431,517 |
| 15% Contingency | \$ 712,003 |
| Total..... | \$5,458,695 |

**PREPARED FOR
GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES
PARKS AND RECREATION**



Final Master Plan and Final Opinion of Probable Cost

The final Master Plan (see figure 10) incorporates a number of suggestions generated in the staff review of the Preliminary Plan.

The Jimmy Carter Boulevard entrance will be relocated to the southeast corner of the Georgia Power easement. A 150' deceleration lane will be added along the Boulevard north of the entrance. The primary vehicular circulation route is aligned in the southern edge of the easement, and features traffic calming devices to slow the rate of through traffic. This alignment separates pedestrians and vehicular traffic, resulting in a safer and more efficient space for both people and cars.

The eastern third of the park accommodates basketball, the gymnasium, an expanded leisure pool facility, a playground and a combination picnic shelter and restrooms. These activities are arranged in a linear fashion adjacent to parking. A total of 215 parking spaces are provided for this cluster of facilities. The majority of the parking is located in the power easement. However, each facility has an adequate number of ADA-compliant parking spaces in close proximity to the building entry or activity space. Additionally, an ADA-compliant pedestrian walk (graded at less than five percent) provides a continuous connection between the five major activity nodes and the parking lots.

The central third of Best Friend Park is devoted to ball fields. One of the fields will serve softball (300') and the other is designed for baseball (320'). A flag football field overlays the outfield of the baseball diamond. A central concession building with restrooms and storage space will be constructed between the two fields. Ball field parking (113 spaces) is arranged in the power easement south of the entrance to the ball complex.

The western third of the park will be devoted to informal play spaces and the Hudlow Tennis Center. Entry to the tennis complex is via Old Rockbridge Road. The entry will be improved with signage and landscaping to define the park entrance and boundary. Two new tennis courts will be added to the north end of the facility, and a tournament caliber championship court will replace two existing courts north of the new clubhouse. Bleacher seating for 100 spectators will be provided at the championship court, and a system of accessible pedestrian walks will connect the courts and parking. Approximately 140 parking spaces will be developed east and south of the new clubhouse, and parking will be expanded on the west side of the complex. Parking improvements will result in 62 more spaces than are currently available for tennis enthusiasts.

Informal play spaces, swings and picnic areas will be developed south of the tennis complex. Restrooms will be built near the open play field and dedicated parking in the power easement. The new maintenance compound will be constructed adjacent to the power easement in the southwest corner of the park, along with a maintenance yard. The access

drive to the maintenance compound will be routed to preserve as much space as possible for an open play area within the easement.

Pedestrian circulation consists of accessible sidewalks and a .75-mile multipurpose trail that encircles the ball fields and informal play areas. A pedestrian entry on the western boundary of the park connects to the trail and provides easy access for visitors from adjacent residential areas.

Final grading studies indicate that over 17,000 cubic yards of fill will be required to achieve the program goals. Again, it must be noted that master plan level calculations are unadjusted raw numbers, and no allowances have been made for compaction or swelling. Soil borings and further analyses will be required in the next phase of the project prior to confirming final grading quantities.

As described in the preliminary plan, storm water management will be achieved primarily through a detention pond located on the southeast side of the new tennis center parking. The preponderance of storm water will be channeled to that pond via pipes. Drainage will also require a level spreader to slow and dissipate runoff velocity and prevent erosion. The level spreader outlet device will be installed in an undisturbed area west of the large tennis court cluster. Existing detention basins will also be redesigned to improve effectiveness in relation to proposed facilities.

The final opinion of probable construction cost is included in Appendix B Summary costs for the recommendations are:

| | |
|-----------------------------------|--------------------|
| Demolition..... | \$ 254,000 |
| Grading..... | \$ 367,050 |
| Site Work..... | \$1,377,275 |
| Ball Fields | \$ 92,300 |
| Site Amenities | \$ 103,800 |
| Landscaping | \$ 231,000 |
| Sod and Irrigation..... | \$ 179,750 |
| Utilities | \$ 334,500 |
| Buildings | \$1,407,500 |
| Sub-total | \$4,347,475 |
| Mobilization, fees and bonds..... | \$ 434,747 |
| 15% contingency | \$ 717,333 |
| Total..... | \$5,499,555 |

Sources Consulted

Lose & Associates, Inc. *Gwinnett County Parks and Recreation Master Plan*. January, 1996

Jordan Jones & Goulding in association with EDAW. *Liberty Heights Community Infrastructure Improvement Plan*. September, 1998

Gwinnett County, Georgia Department of Transportation. *Traffic Count Report*. March, 1999

Gwinnett County, Georgia Storm Water Advisory Team. *Storm Water Design Manual*. April, 1999

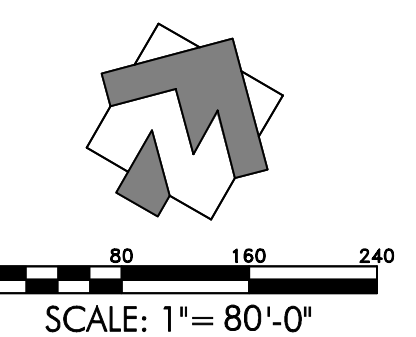
BEST FRIEND PARK

FINAL MASTER PLAN

PREPARED FOR
GWINNETT COUNTY DEPARTMENT OF COMMUNITY SERVICES
PARKS AND RECREATION



TOTAL PARKING - 482 SPACES



Best Friend Park

Final Opinion of Probable Cost- 3.14.00

| Item | Qty. | Unit | Cost | Total Cost |
|--|--------|------|-----------------|------------------------|
| Demolition | | | | |
| Heavy vegetation clear & grub | 80000 | sf | \$ 0.10 | \$ 8,000.00 |
| Concrete and asphalt grub | 167500 | sf | \$ 1.20 | \$ 201,000.00 |
| Remove above ground structures (buildings, fencing, light poles, etc.) | 1 | ls | \$ 35,000.00 | \$ 35,000.00 |
| Contingency for unknown items | 1 | ls | \$ 10,000.00 | \$ 10,000.00 |
| | | | subtotal | \$ 254,000.00 |
| Grading | | | | |
| Grading (approximate volume) | 52000 | cy | \$ 3.00 | \$ 156,000.00 |
| Off-site fill material | 17500 | cy | \$ 10.00 | \$ 175,000.00 |
| Tree protection & erosion control (fence & bales) | 1 | ls | \$ 30,000.00 | \$ 30,000.00 |
| Erosion control mat | 6500 | sy | \$ 0.50 | \$ 3,250.00 |
| Rock contingency | 200 | cy | \$ 14.00 | \$ 2,800.00 |
| | | | subtotal | \$ 367,050.00 |
| Site Work | | | | |
| Construction sign | 1 | ls | \$ 850.00 | \$ 850.00 |
| Rip-rap (outflows, bridge abutments, etc.) | 315 | sy | \$ 10.00 | \$ 3,150.00 |
| 15" ADS pipe | 1350 | lf | \$ 30.00 | \$ 40,500.00 |
| 18" ADS pipe | 1400 | lf | \$ 35.00 | \$ 49,000.00 |
| 24" ADS pipe | 800 | lf | \$ 45.00 | \$ 36,000.00 |
| 36" ADS pipe | 800 | lf | \$ 75.00 | \$ 60,000.00 |
| 42" ADS pipe | 160 | lf | \$ 85.00 | \$ 13,600.00 |
| 78" BCCMP pipe | 400 | lf | \$ 220.00 | \$ 88,000.00 |
| Area drain | 4 | ea | \$ 1,000.00 | \$ 4,000.00 |
| Curb inlet | 46 | ea | \$ 1,500.00 | \$ 69,000.00 |
| ADS headwall | 9 | ea | \$ 550.00 | \$ 4,950.00 |
| Outlet structure | 1 | ea | \$ 5,000.00 | \$ 5,000.00 |
| Concrete paving-4" thick (includes courses & 6" aggr.) | 30000 | sf | \$ 2.50 | \$ 75,000.00 |
| Asphalt paving (includes courses, & 6" aggr.) | 237000 | sf | \$ 2.00 | \$ 474,000.00 |
| Asphalt paving for 12' wide trail (inc. courses, 6" aggr.) | 3833 | lf | \$ 20.00 | \$ 76,660.00 |
| Boardwalk for 12' wide trail | 75 | lf | \$ 45.00 | \$ 3,375.00 |
| Concrete curb & gutter (includes courses, & 6" aggr.) | 14300 | lf | \$ 13.00 | \$ 185,900.00 |
| Parking lot striping (per space) | 482 | ea | \$ 7.00 | \$ 3,374.00 |
| Concrete wheel stops (w/ rebar to attach) | 184 | ea | \$ 45.00 | \$ 8,280.00 |
| Basketball courts (2) w/ fencing and lights | 1 | ls | \$ 40,000.00 | \$ 40,000.00 |
| Tennis courts (2) w/ fencing and lights | 1 | ls | \$ 50,000.00 | \$ 50,000.00 |
| Tennis courts - championship style (restripe/surface/lights) | 1 | ls | \$ 22,000.00 | \$ 22,000.00 |
| Wood bollard | 12 | ea | \$ 250.00 | \$ 3,000.00 |
| 42" rail for retaining walls | 420 | lf | \$ 30.00 | \$ 12,600.00 |
| Mortared granite retaining walls - concrete cap | 420 | rf | \$ 170.00 | \$ 71,400.00 |
| | | | subtotal | \$ 1,399,639.00 |

| | | | | |
|--|--------|----|-----------------|----------------------|
| | | | | |
| Ballfield Fencing (includes poles, fasteners, etc.) | | | | |
| | | | | |
| Backstops - arch style - w/10' extension | 2 | ea | \$ 14,500.00 | \$ 29,000.00 |
| 10' fencing | 100 | lf | \$ 18.00 | \$ 1,800.00 |
| 6' fencing (includes field fencing & gates) | 1125 | lf | \$ 12.00 | \$ 13,500.00 |
| 8' fencing for outfield | 1200 | lf | \$ 12.00 | \$ 14,400.00 |
| Dugout (includes roof, bench, back & side fence) | 4 | ea | \$ 4,500.00 | \$ 18,000.00 |
| Outfield and foul line netting (per field) | 2 | ea | \$ 6,000.00 | \$ 12,000.00 |
| 12' single gate | 2 | ea | \$ 800.00 | \$ 1,600.00 |
| Foul pole | 4 | ea | \$ 500.00 | \$ 2,000.00 |
| | | | subtotal | \$ 92,300.00 |
| | | | | |
| Site Amenities | | | | |
| | | | | |
| Scorer's stand (repaint, move & update) | 2 | ea | \$ 800.00 | \$ 1,600.00 |
| 5 row bleacher 21' - Dant Corp. | 4 | ea | \$ 2,500.00 | \$ 10,000.00 |
| 10 row bleacher 21' - Dant Corp. | 1 | ea | \$ 6,000.00 | \$ 6,000.00 |
| Waste receptacle = pilot rock | 8 | ea | \$ 300.00 | \$ 2,400.00 |
| Playground swings - 4 swings each set | 3 | ea | \$ 3,500.00 | \$ 10,500.00 |
| Park informational sign | 2 | ea | \$ 4,000.00 | \$ 8,000.00 |
| Park directional signs | 4 | ea | \$ 1,500.00 | \$ 6,000.00 |
| Facility ID sign | 4 | ea | \$ 5,000.00 | \$ 20,000.00 |
| Park rules signage | 4 | ea | \$ 1,500.00 | \$ 6,000.00 |
| Traffic-parking signage | 12 | ea | \$ 250.00 | \$ 3,000.00 |
| Picnic tables - Pilot Rock PQT/G-3PW | 12 | ea | \$ 750.00 | \$ 9,000.00 |
| Seat wall | 120 | lf | \$ 40.00 | \$ 4,800.00 |
| Relocate existing entry sign | 1 | ls | \$ 1,000.00 | \$ 1,000.00 |
| New entry sign at Rockbridge Road (smaller than main entry sign) | 1 | ls | \$ 1,500.00 | \$ 1,500.00 |
| PTP wood retainingag walls - 3-6' in height | 500 | lf | \$ 40.00 | \$ 20,000.00 |
| | | | subtotal | \$ 109,800.00 |
| | | | | |
| Landscape | | | | |
| | | | | |
| Landscape (shrubs, groundcovers, mulch) | 1 | ls | \$ 100,000.00 | \$ 100,000.00 |
| Trees | 235 | ea | \$ 350.00 | \$ 82,250.00 |
| Hand clear understory in wooded areas, clean trash | 145000 | sf | \$ 0.25 | \$ 36,250.00 |
| Seeding for erosion control mat & disturbed areas | 250000 | sf | \$ 0.05 | \$ 12,500.00 |
| | | | subtotal | \$ 231,000.00 |
| | | | | |
| Sod & Irrigation | | | | |
| | | | | |
| Sod - (300' field) | 80000 | sf | \$ 0.37 | \$ 29,600.00 |
| Sod - (350' field) | 120000 | sf | \$ 0.37 | \$ 44,400.00 |
| Sod - informal playfield | 45000 | sf | \$ 0.37 | \$ 16,650.00 |
| Irrigation system - 2 ball fields | 1 | ls | \$ 65,000.00 | \$ 65,000.00 |
| Irrigation system - informal playfield | 1 | ls | \$ 10,000.00 | \$ 10,000.00 |
| 3" irrigation meter | 1 | ea | \$ 6,100.00 | \$ 6,100.00 |
| Irrigation pump | 1 | ea | \$ 5,000.00 | \$ 5,000.00 |
| 3" backflow preventor w/hot box | 1 | ea | \$ 3,000.00 | \$ 3,000.00 |
| | | | subtotal | \$ 179,750.00 |
| | | | | |
| Electrical | | | | |
| | | | | |
| Site electrical | 1 | ls | \$ 40,000.00 | \$ 40,000.00 |
| Ballfield lighting (30/20) & electrical work | 1 | ls | \$ 200,000.00 | \$ 200,000.00 |
| Tennis lighting & electrical work | 1 | ls | \$ 30,000.00 | \$ 30,000.00 |
| Playground lighting & electrical work | 1 | ls | \$ 10,000.00 | \$ 10,000.00 |
| | | | subtotal | \$ 280,000.00 |
| | | | | |

| | | | | |
|--|-----|----|---------------------------|------------------------|
| Site Utilities | | | | |
| Tapping valve and sleeve - water | 3 | ea | \$ 1,800.00 | \$ 5,400.00 |
| 2" water line | 720 | lf | \$ 15.00 | \$ 10,800.00 |
| 8" water line | 500 | lf | \$ 30.00 | \$ 15,000.00 |
| 2" backflow preventor w/hot box | 1 | ea | \$ 2,000.00 | \$ 2,000.00 |
| 2" water meter | 1 | ea | \$ 4,600.00 | \$ 4,600.00 |
| 3/4" water meter | 1 | ea | \$ 900.00 | \$ 900.00 |
| 3/4" backflow preventor w/hot box | 2 | ea | \$ 400.00 | \$ 800.00 |
| 4" sewer line | 270 | lf | \$ 25.00 | \$ 6,750.00 |
| Fire hydrant | 2 | ea | \$ 1,500.00 | \$ 3,000.00 |
| Field connected wye connection to sewer | 3 | ea | \$ 400.00 | \$ 1,200.00 |
| Gate valve | 4 | ea | \$ 700.00 | \$ 2,800.00 |
| Cleanout | 5 | ea | \$ 250.00 | \$ 1,250.00 |
| | | | subtotal | \$ 54,500.00 |
| Buildings | | | | |
| Expansion of leisure pool area, add a fitness lap pool | 1 | ls | \$ 910,000.00 | \$ 910,000.00 |
| Building w/concession and restroom | 1 | ls | \$ 150,000.00 | \$ 150,000.00 |
| Group Pavilion | 1 | ls | \$ 100,000.00 | \$ 100,000.00 |
| Restroom structure | 1 | ls | \$ 77,000.00 | \$ 77,000.00 |
| Sheltered picnic tables w/pads | 6 | ea | \$ 3,000.00 | \$ 18,000.00 |
| Maintenance building | 1 | ls | \$ 120,000.00 | \$ 120,000.00 |
| Maintenance pole barn (36'X28') | 1 | ls | \$ 20,000.00 | \$ 20,000.00 |
| 10' fencing at storage yard | 600 | lf | \$ 18.00 | \$ 10,800.00 |
| Concrete storage bins at storage yard | 1 | ls | \$ 2,000.00 | \$ 2,000.00 |
| | | | subtotal | \$ 1,407,800.00 |
| | | | GRAND SUBTOTAL | \$ 4,375,839.00 |
| Mobilization, fees, bonds, etc. (10% total) | 1 | ls | \$ 437,583.90 | \$ 437,583.90 |
| | | | TOTAL | \$ 4,813,422.90 |
| | | | w/ 15% contingency | \$ 5,535,436.34 |