

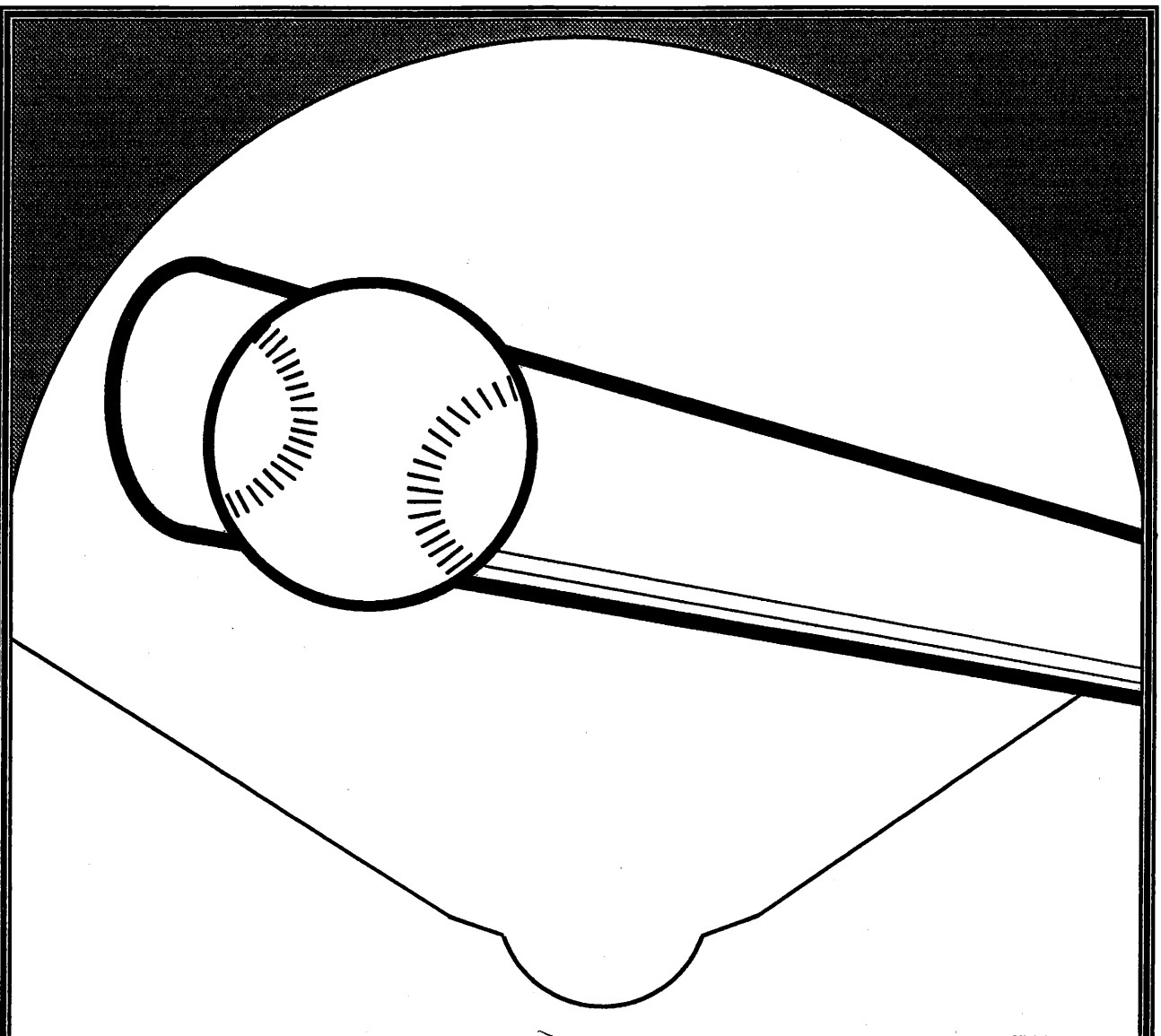


RHODES JORDAN PARK MASTER PLANS

RHODES JORDAN PARK BEGAN AS A MUCH SMALLER CITY OF LAWRENCEVILLE "CITY PARK EAST". THE CITY PARK INCLUDED THE LAKE, THE ZONE BETWEEN THE DAM AND HWY. 29, AND THE ZONE CONTAINING THE PICNIC AND SENIOR CENTER FACILITIES DUE NORTH OF THE LAKE. TO FULFILL THE TERMS OF A LEASE AGREEMENT WITH GWINNETT COUNTY, THE CITY ACQUIRED THE LAND ON WHICH THE BASEBALL SOFTBALL COMPLEX IS CONSTRUCTED. THE ORIGINAL MASTER PLAN, LOSE'S 1993 DOCUMENT, PLANNED THE BASEBALL COMPLEX WHILE NOTING A VARIETY OF SITE DEVELOPMENT, VEHICULAR ACCESS AND PEDESTRIAN CONNECTIVITY ISSUES THAT COULD NOT BE ADDRESSED WITHOUT SIGNIFICANT FURTHER PARK EXPANSION. THE COUNTY CONSTRUCTED THE BASEBALL - SOFTBALL COMPLEX AND SENIOR CENTER IN THE EARLY 1990S.

OVER SUBSEQUENT YEARS, THE COUNTY AND THE CITY WORKED TOGETHER TO ADD THE LAND ON WHICH THE TENNIS COMPLEX, COMMUNITY CENTER AND AQUATICS COMPLEX ARE PLACED. THE FOOTBALL FIELD WAS CONSTRUCTED WITH A SOFTBALL FIELD OVERLAY. THE NEXT PROJECT WAS MDA'S CONSTRUCTION PLANS FOR THE NEW ENTRANCE AND DAYLIGHTING OF THE STREAM BELOW THE DAM. A FINAL ROUND OF JOINT CITY/COUNTY LAND ACQUISITIONS BROUGHT CONTROL OF THE ENTIRE LAKE PERIMETER AND THE OPTION TO SIGNIFICANTLY REVISE THE VEHICULAR DRIVE TO THE NORTH SIDE OF THE PARK.

THE 2008 LOSE PLAN WORKED TO INTEGRATE ALL THE ELEMENTS PREVIOUSLY CONSTRUCTED WITH COMPREHENSIVE PEDESTRIAN CONNECTIVITY AND TO EXPAND THE PARK'S PROGRAMMATIC OFFERINGS. THE SUBSEQUENT CONSTRUCTION PROGRAM ADDED THE LAKE PERIMETER MULTI-PURPOSE TRAIL, THE VEHICULAR ACCESS AWAY FROM THE LAKE SHORE, RE-DESIGNED THE PAVILION-PLAYGROUND ZONE, AND ADDED THE SOCCER COMPLEX, HORSESHOE COMPLEX AND BASKETBALL COURTS.



Rhodes Jordan Park

Cwinnett County Department of Human Services
Parks and Recreation Division

Prepared By
Lose & Associates, Inc

Master Plan Report for
Rhodes Jordan Park

Gwinnett County Department of Human Services
Parks and Recreation Division
March 1993

Prepared By:
Lose & Associates, Inc.

RHODES JORDAN PARK MASTER PLAN REPORT
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INTRODUCTION

In July of 1992 the Gwinnett County Department of Human Services, Parks & Recreation Division commissioned Lose & Associates, Inc. to develop a revised Master Plan for the 86.6 acre Rhodes Jordan Park property in the Lawrenceville community of Gwinnett County. The development of this Master Plan was initiated by the Gwinnett County Department of Human Services, Parks & Recreation Division as the result of increased demand for recreation facilities within their system.

The Master Plan is a tool to guide the development of park facilities in an organized and rational pattern. It relates individual characteristics of the site to the proposed facilities. An analysis of the property's specific characteristics (such as soil types and slopes and non-site characteristics such as desired facilities, access, traffic, and future operation and maintenance needs) are incorporated into the Master Plan.

Just like people and societies change, the basic form of this Master Plan will go through an evolution until it reaches its final form. The Master Plan will interrelate specific park activities and unique site conditions. With proper integration of activities on the site, users will experience a high level of comfort.

The Master Plan is the first step in the process of transforming Rhodes Jordan Park from its current state into a rejuvenated park facility to be used by all ages. A major goal of the Master Plan is to preserve and enhance the natural beauty and ecosystems of the site. To achieve this, the wooded areas around the existing lake will be developed for passive activities and a vegetative buffer will be retained to screen active sports facilities from views across the lake.

REGIONAL CHARACTERISTICS

LOCATION

Rhodes Jordan Park is centrally located within the Gwinnett County Parks System. The property is within District 1 of the community of Lawrenceville. (Rhodes Jordan park is sometimes referred to as Lawrenceville City Park East) Rhodes Jordan Park and Lawrenceville are served by Interstate 85. Several interchanges connect collector roads to the interstate. U.S. Highway 29 and U.S. Highway 20 will be the major routes serving Rhodes Jordan Park.

The nearest public park was Lawrenceville City Park West, which is no longer functional. Two other park facilities (Dacula Park and Tribble Mill Park) are within a six mile radius of Rhodes Jordan Park. Private facilities in the area include the Gwinnett County YMCA, Countryside Tennis Center and the Springbrook County Golf Course.

LAND USE

Land use patterns within Lawrenceville and the Rhodes Jordan Park area are related to the traffic patterns of the region. Commercial and retail districts parallel U.S. Hwy. 29 and U.S. Hwy. 20. The area surrounding Rhodes Jordan Park has diversified uses. Residential development is found to the east and west of the park. The railroad and light industrial developments skirt the north. U.S. Highway 29 and commercial property borders the south. Because of its central location within the City of Lawrenceville, Rhodes Jordan Park can easily serve as a community park.

COMMUNITY PARK PROTOTYPE

The existing facilities at Rhodes Jordan Park occupy approximately 65.8 acres. An adjoining property of 22.8 acres was purchased to provide for expansion of active sports facilities within the park. With the additional acreage, Rhodes Jordan Park will become a true "Community Park", offering diverse recreation opportunities as specified in the County-wide Recreation Master Plan, Gwinnett County, Georgia-July 1996. An outline of the prototypical community park is provided below.

Average Size:	50-100 acres (75 acres target size)
General Physical Concept:	Predominantly natural area that provides active recreation, picnicking and other passive activities. Cultural needs served by general purpose building.
General Purpose:	To serve the full range of community area recreation needs (daylight and evening use).
Program:	Passive enjoyment of natural landscaped areas; lakes and woods; large meetings; sports competitions; exhibitions; day and evening use of facilities; all age groups.

Park Facilities and Group Served:

<u>Qty.</u>	<u>Facility</u>	<u>Age Group</u>
3	Lighted softball fields	6-65+
2	Lighted youth baseball fields	6-14
6	Lighted tennis courts	6-65+
	Football/soccer field	6-65+
4	Basketball/multi-purpose courts	6-65+
4	Horseshoe courts	6-65+
	Picnic area	1-65+
	Children's play area	1-6
	Family Aquatics Center	1-65+
	Community center bldg. with gym	1-65+
	Maintenance storage building	N/A
	Lake	1-65+
	Parking, roads & sanitary facilities	N/A
	Landscaping & fencing	N/A
	Utilities	N/A

EXISTING CONDITIONS

Currently the 65.8 acre developed portion of the park can be divided into three distinct areas. The existing athletic complex and swimming pool, the developed picnic and passive recreation facilities located around the Lake, and the Lake itself. A detailed description of the athletic facilities is provided below. The Lake and passive facilities are discussed in general and specific terms in the Physical Characteristics and Site Analysis sections which follow. The first being the active sports area located below the dam. This portion of the Park contains 4 baseball fields, 5 tennis courts, 1 basketball court, a swimming pool, a bath house facility, restroom/concession building and a maintenance building. All of these facilities are showing signs of age and overuse.

SWIMMING POOL COMPLEX

The swimming pool complex is in fair shape, but is deficient in many areas of ADA compliance. This is discussed in greater detail in the section on ADA compliance. The

swimming pool is in better physical condition than the bath house. The pool deck and sidewalls are in good condition. The pump system has recently been reworked and now meets the minimum health code requirements. The overall condition of the pool, filtration system and support systems (i.e. fencing & 1 parking lot) is fair. However, the condition of the bath house is quite poor. In addition to its ADA shortfalls, the roof leaks, the locker rooms are outdated and in disrepair, lighting is poor and operations are limited due to poor circulation and organization within the structure. The pool complex may have reached the end of its cost effective operations. Within the next year a complete bath house renovation, handicap access to the pool, continued pump system repairs and parking lot improvements will be needed. Therefore, planning for a new pool complex is recommended.

TENNIS COURTS

The tennis courts are located next to the pool complex and share a common parking lot. The tennis courts are in poor condition. There are numerous cracks in the courts, low spots which pond water, the lighting system needs to be replaced and the fencing needs some repairs and repainting. Clay is coming through the cracks which indicates there is poor drainage beneath the courts. It is our recommendation that the courts be rebuilt from the ground up. Repaving the courts will only provide a temporary solution, particularly if the drainage beneath the courts is not improved.

BASEBALL COMPLEX

The baseball complex consists of 4 baseball fields, a concession building, a restroom building, several scoring buildings, a maintenance building and several dispersed parking areas. A fifth ballfield is located on property adjacent to, but not part of, the 65.8 acres. These facilities are all showing signs of heavy usage and inadequate maintenance.

The ballfields are in better condition than some of the support buildings, but are not in acceptable condition. A list of the ballfield deficiencies would include:

- Unsafe fencing
- Unsafe electrical systems
- Improper grades on both
- Outdated bleacher system
- No irrigation
- Poor drainage
- Unsafe relationship between fields & parking
- Poor scorers visibility

The support systems including concession buildings, restrooms and parking lots are in need of major repairs. In addition to being outdated and unsatisfactory, they are poorly located making it difficult to operate and maintain them in an efficient manner. The parking lots are not well defined, therefore parking arrangements are inadequate. Safety is also sacrificed since the parking lots are dispersed and one must cross a city street to reach the restrooms and ballfields.

This ballfield complex has evolved without a definite plan. This complex should be entirely replaced with a new facility which meets the current design criteria of the Gwinnett County Department of Human Services, Parks and Recreation Division.

If the ballfields are needed for games during the construction period, a thorough safety review should be made by the Parks Development Section & Maintenance Section staff to identify all areas needing immediate attention. Once these items are corrected the facility should be suitable for the final year of use. If repairs are cost prohibitive, portable facilities for items such as concessions and restrooms should be considered.

PHYSICAL CHARACTERISTICS

SOILS

(See Illustration #1 - page 6)

The soils of the site fall into two major classes related to the geographic and land use history of the site. One class, (as defined in the United States Department of Agriculture Soil Conservation Service, *An Update for the Soil Survey of Gwinnett County, Georgia*) is the Gwinnett Clay Loam and other upland clays. These clays weather in place from the parent rock and erode naturally. Unnatural influence on the site has contributed to the weathering of the soil. Natural vegetation cover was disturbed, exposing the soil to further erosion. As the material eroded and weathered, it formed the other category of soils on the site, the alluvial soils of the creek bottoms and flood zones.

The upland soils, in the 22.8 acre portion of the site, are suitable to use for construction fill for ballfields, buildings and other park facilities. The creek, which flows south from the northeast corner of the property, has soils which are also appropriate for fill. However, disturbance of this area is to be avoided to preserve the existing trees. Topsoil of 2-6 inch depth was reported in the Geotechnical Evaluation performed by ATEC Associates, Inc.. Topsoil in the construction area should be stripped and stockpiled for reuse when construction of the park begins.

The presence of rock and weathered rock may present some difficulties in the excavation of suitable fill material. Ripping with a crawler tractor or front-end loader will remove most of this material. Some limited blasting may be required in areas of deep cuts, but should not be extensive.

SOIL DESCRIPTION

The booklet titled, *An Update for the Soil Survey of Gwinnett County, Georgia* (USDA Athens, Georgia 1990), lists the property's soil types and development potential as follows:

Cfs - Chewacla soils

Poor recreation: subject to frequent flooding
Good wildlife habitat
Poor building site
Poor roadfill source

DhB2 - Davidson Clay Loam

Fair recreation site
Fair wildlife habitat
Fair building site
Good roadfill source

CyD2 - Cecil Sandy Loam

Good paths and trails only
Good wildlife habitat
Fair building site
Fair roadfill source; low strength

GeB2 - Gwinnett Clay Loam

Fair recreation site
Good wildlife habitat
Fair building site
Fair roadfill source; low strength

GeC2 - Gwinnett Clay Loam

Fair recreation site
Good wildlife habitat
Fair building site
Fair roadfill source; low strength

GeE2 - Gwinnett Clay Loam

Fair paths and trails only
Good wildlife habitat
Poor building site; slope
Fair roadfill source; slope, low strength

GgE2 - Gwinnett Clay Loam
Fair paths and trails only
Good wildlife habitat
Poor building site; slope
Fair roadfill source; slope, low strength

MCD - Musella Cobbly Loam
Fair paths and trails only
Fair wildlife habitat
Poor building site
Poor roadfill source

Cng - Congaree soils
Good picnic and path areas only
Good wildlife habitat
Good roadfill and topsoil source

PgE2 - Pacolet Sandy Loam
Fair paths and trails only
Very poor wildlife habitat
Poor engineering
Fair roadfill source; slope

PfC2 - Pacolet Sandy Loam
Good paths and trails only
Fair recreational uses
Good wildlife habitat
Fair building site
Good roadfill source

The soils found on the site are in the fair range for recreation developments. The limiting factor is the slope, not the physical property. The acceptability of these soils for ballfield construction is further supported by the Geotechnical Evaluation prepared by ATEC Associates. The fertility of the soils on the uplands of this site is in the fair to good range. This is beneficial in establishing and maintaining a healthy stand of turf for playing fields.

SOILS ANALYSIS

GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

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LEGEND

Cfs	Chewacla soils, frequently flooded
Cng	Congaree soils, local alluvium
CyD2	Cecil sandy loam, 10 to 15 percent, eroded
DhB2	Davidson clay loam, 2 to 6 percent slopes, eroded
GeB2	Gwinnett clay loam, 2 to 6 percent slopes, eroded
GeC2	Gwinnett clay loam, 6 to 10 percent slopes, eroded
GeE2	Gwinnett clay loam, 10 to 25 percent slopes, eroded
GgE2	Gwinnett Loam, 10 to 25 percent slopes, eroded
Gul	Gullied land
Mae	Made land
MCD	Musella cobbly loam, 6 to 15 percent slopes
PfC2	Pacolet sandy loam, 6 to 10 percent slopes, eroded
PgE2	Pacolet sandy clay loam, 15 to 25 percent, eroded

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VEGETATION

The natural plant communities of Rhodes Jordan Park are grouped into two major types: Mature Bottomland Hardwoods and Successional Forest typical of the Piedmont.

The Mature Bottomland Hardwoods outline the channels of the streams on the site. These trees provide wildlife (such as squirrels, rabbits, chipmunks, deer, several bird species and a variety of insect species) with habitat and food. The dense root system of the trees protects the stream from siltation. Understory trees, shrubs and herbaceous plants are also present in association with the Bottomland Hardwoods. These Bottomland Hardwoods also provide fall color and a sharp contrast to the evergreen pines.

Successional vegetation covers the remainder of the site. The stages of the succession range from broomsedge fields to semi-mature pine forest 10-40 years old. The pine stand on the west side of the site is in good health despite the compaction of the soil and lack of underbrush caused by using it for a playground area. The pine stand on the northeast corner of the property consists of very dense young pines.

No outstanding tree specimens occur on this site, but the stands of semi-mature pines and Bottomland Hardwoods are worth protecting. They shade, buffer and are valuable to wildlife.

SLOPES

The majority of slopes on this particular site are above 10%. This includes over one-half of the hill to the northeast of the lake and most of the lake banks.

The crest of the hill to the northeast of the lake falls within the 0-5% slope category. A large area to the southeast of the dirt road, above the dam, is also within this range. These areas are better suited to development as ballfields or parking areas than the steeper grades.

Some large areas of 5-10% slope are also present on the crest of the hill. These areas present only a slight difficulty to the development of ballfields. The steepness of this particular site presents a unique challenge to siting a large ballfield complex. Although a moderate slope is preferred, the grade of this site does not present an impossible task. Preparation of a thorough grading plan and modern earth working techniques reduce the difficulty of such a large scale project.

SLOPE ANALYSIS

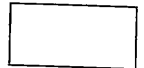
GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

LEGEND

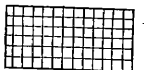
0-5%
Slope



5-10%
Slope



10% + Above
Slope



8

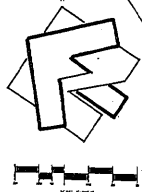


Illustration #2

SITE ANALYSIS

DESCRIPTION

(See Illustration #3 - page 11)

The 86.6 acre Rhodes Jordan Park property is a combination of steep uplands and the drainage ways that separate the uplands. The site exhibits soils typical of the region. A 22-acre lake forms the centerpiece of the park.

The property's high point is located on the hill to the southeast of the lake. It provides potential views of the lake through the surrounding trees. The low point is at the southern extreme of the park at U.S. Highway 29.

Many clearings from old athletic practice fields are contained within the new 22 acre parcel. Some of these clearings are surrounded by dense growths of pines. These growths provide buffering from surrounding land uses and add a strong sense of enclosure. These clearings are generally level; conducive for the development of athletic fields and open playing fields.

A single gravel road bisects the new property, dividing two primary watersheds. Two secondary watersheds serve the portion of the park to the north of the gravel road. One collector ditch empties into the lake via a culvert. The other empties just below the dam via a culvert. The property to the south of the gravel road contains the practice fields. The practice fields drain to a small stream. This small stream carries water under the existing main road and runs parallel to the dam.

Mature hardwoods line the small creek banks. These creeks provide magnificent glimpses of wildlife. The hardwoods serve to buffer the northeastern edge of the property and contrast beautifully with the pines on site.

The railroad and adjoining industrial development bordering the west edge of the property adversely impacts the visual quality of the site. Noise associated with the railroad also negatively impacts the site. Installation of a vegetative buffer will be necessary to preserve the integrity of the site.

An existing earthen dam, although not a feature in itself, holds back the water to form the 22-acre lake. Work is underway to reinforce the dam and change the back slope from 2:1 to 3:1. This work may impact the small stream which flows behind the dam. This lake provides excellent views to the upland areas but is not visible from the existing athletic facilities.

The prevailing winds can affect the use of the site, particularly in the winter when the wind is out of the northwest. These cold winds can shorten the season for open air structures which are improperly sited. Conversely, proper siting of structures takes advantage of summer breezes from the southwest. Passive solar warmth lengthens the season for outdoor activities.

EXISTING USES

Many uses and structures currently occupy the site. In addition to ballfields, tennis courts, and a pool, the picnic and playground area attracts many visitors. The shady picnic area with views of the lake has made this area very popular for picnicking. It also serves as a lunchtime destination for local workers. Heavy use of this area has worn the ground in the picnic area making it look abused.

Currently, the site lacks a definite point of entrance. No less than four separate entrances to the site detracts from the sense of arrival. If existing ball fields are removed, more land will be available in which to create a suitable entry. By using existing park sign standards, this park will become clearly recognizable as a part of the Gwinnett County Park System.

The roads within the park are undersized to handle expansion within the park. Many of the curves are extremely tight. Larger radius turns are needed if they are to be functional. A lack of space for pullover parking, important to the lunchtime crowds, is also a problem. Defined pullover parking spaces with trash receptacles would lessen the abuse of the road shoulders.

EXISTING STRUCTURES

Refer to "Existing Conditions" in ADA Compliance section of this report for description.

UTILITIES

Onsite utility services consist of gas, electricity, water, sanitary sewer and telephone. Currently, electricity runs to the Senior Citizens Center, the existing ballfield complex and along the road at the east side of the lake. Power should be extended into the site as needed to serve the proposed facilities.

Water is available to the site from an 8" main at U.S. Highway 29 and a 12" main at the Water Works Facility. Water service throughout the site is proposed to come from an 8" loop tapped from the 12" main at the Water Works Plant. Adequate sewer service is provided to the site by a sewer main across the north end of the site and at the Senior Citizens Center. Sewer service is also present at the existing ballfields and along the east side of the lake.

The gas line at the existing Senior Citizens Center will be extended to the proposed Senior Citizens Center as required. Telephone service at the existing pool complex or the Senior Center can be extended to the proposed ballfield complex.

SITE ANALYSIS

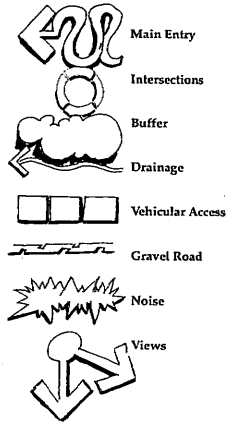
GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

R HODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

11

LEGEND



EXISTING WOODED PARCEL enhances rural quality of park. County should consider purchasing property or securing minimum 50' tree preservation easement on property to provide buffer from future industrial development around the park.

EXISTING ROAD is undersized to handle expansion within the park. Many of the curves are extremely tight and should be redesigned with large radii to improve safety for both vehicles and pedestrians.

RAILROAD R.O.W. and ADJOINING INDUSTRIAL DEVELOPMENT impact visual quality of this area. Vegetation buffer should be considered to reduce impact.

HEAVILY WOODED PARCEL enhances rural quality of park. Should be considered for acquisition to provide buffer from future industrial developments and to provide room for park expansion.

EXISTING DUMPSTER is unsightly and should be relocated.

HEAVY SEDIMENTATION where culvert empties into lake has potential for improved wildlife habitat area and possible boardwalk across lake.

EXISTING PICNIC AREA PAVILIONS need improved access to comply with ADA Standards. Adequate access to expand picnicking and add walking trails to complement senior center. Heavy shade a plus.

EXISTING SENIOR CITIZENS CENTER lacks physical connection to lake. Tremendous opportunity for new facility to have stronger physical and visual connection to lake and park trail system.

EXISTING PICNIC and PLAYGROUND AREA. Heavy shade and lakeside location have made this area very popular, both for group picnicking and as a lunch time destination for local workers. Impact of heavy use is evident and new master plan should include remedial measures to mitigate impact and reduce maintenance.

EXISTING PAVILIONS AND RESTROOMS need renovations to comply with ADA Standards. Both need 1) Improved access; 2) Proper sizing of walks and doors; 3) Total overhaul of restrooms; and 4) Paint and materials update to match other county park standards.

EXISTING SIDEWALK terminates at culvert. Good location to develop footbridge across lake to tie walk to future senior center.

DEVELOPMENT ALONG LAKE should be limited to prevent obscuring views from new senior center to lake. Area suitable for picnicking and open play. Long view across lake.

SINGLE FAMILY RESIDENCE presents less than desirable views from lakeside pavilion and future trails.

WOODED AREA nice buffer between single family home should be retained.

ABANDONED CITY WATER WORKS WELL should be secured to prevent access.

EXISTING EARTHEN DAM to be reinforced with new back slope at 3 to 1. May impact existing drainage swale below dam.

EXISTING PRACTICE BASEBALL FIELDS in disrepair. Excellent location for developing new field because of limited grading and tree removal requirements.

EXISTING DRAINS on upper portion of property may need relocating to allow development.

EXISTING GRAVEL ROAD divides new parcel potential access for new facilities.

MATURE WOODS WITH MIXTURE OF PINES AND HARDWOODS. Will provide excellent buffer between lake and proposed athletic fields. Moderate slopes also make this area less desirable for development.

EXISTING HENSON STREET serves as primary access to manufacturing facility.

EXISTING BALLFIELD not on park property.

HILLSIDE BEING CLEARED. Present condition very unsightly and negatively impacts views out of the park and the present access to the park along water works road.

EXISTING PARK FACILITIES including baseball fields, tennis courts, swimming pool and playground.

MAIN ENTRY to park very narrow, no true sense of entry. Needs expanding or relocating for improved recognition as the park's main entry.

SECONDARY ENTRY serving existing swimming pool and tennis courts. A stop light at this location makes it a possible location for relocating main park entry.

EXISTING EAST PIKE STREET bisects park and presents safety hazard for pedestrians. Should consider closing road since it does not serve as primary or secondary access to park.

VIEWSHED ANALYSIS

A viewshed, as used in this report, is all which can be seen from a prominent place. Viewsheds are divided into three types: *unobstructed view, filtered view and long view.*

Unobstructed view is a clear view uninterrupted by any structure or vegetation. An unobstructed view is important for showing off dominant features of the park. Also, if an undesirable feature exists within that part of the viewshed, (identified as unobstructed view) it must be screened.

Filtered view indicates a feature cannot be clearly seen in the viewshed but is somewhat visible. It is screened by intervening vegetation or structures. A filtered view may be desirable for both attractive and unattractive features. A filtered view of an attractive feature may draw a passersby into the park for a better view. A filtered view of an unattractive feature reduces its impact and makes the unattractive feature less noticeable.

Long view is simply an unobstructed view which, because of the diminishing affects of distance, does not have the effect of a close unobstructed view.

Lake Side Picnic Area Viewshed

(See Illustration #4 - page 13)

The viewshed of the lake side picnic area is important, as picnickers can sit and admire the view. Unobstructed views radiate from the picnic area approximately 270 degrees. Views of and across the lake at this location are uninterrupted by any feature. Vegetation and distance serve to filter the views of the hill to the east of the picnic area. Elevation and the presence of many large pines filter the view to the northwest toward the railroad.

Senior Citizens Center Viewshed

(See Illustration #5 - page 14)

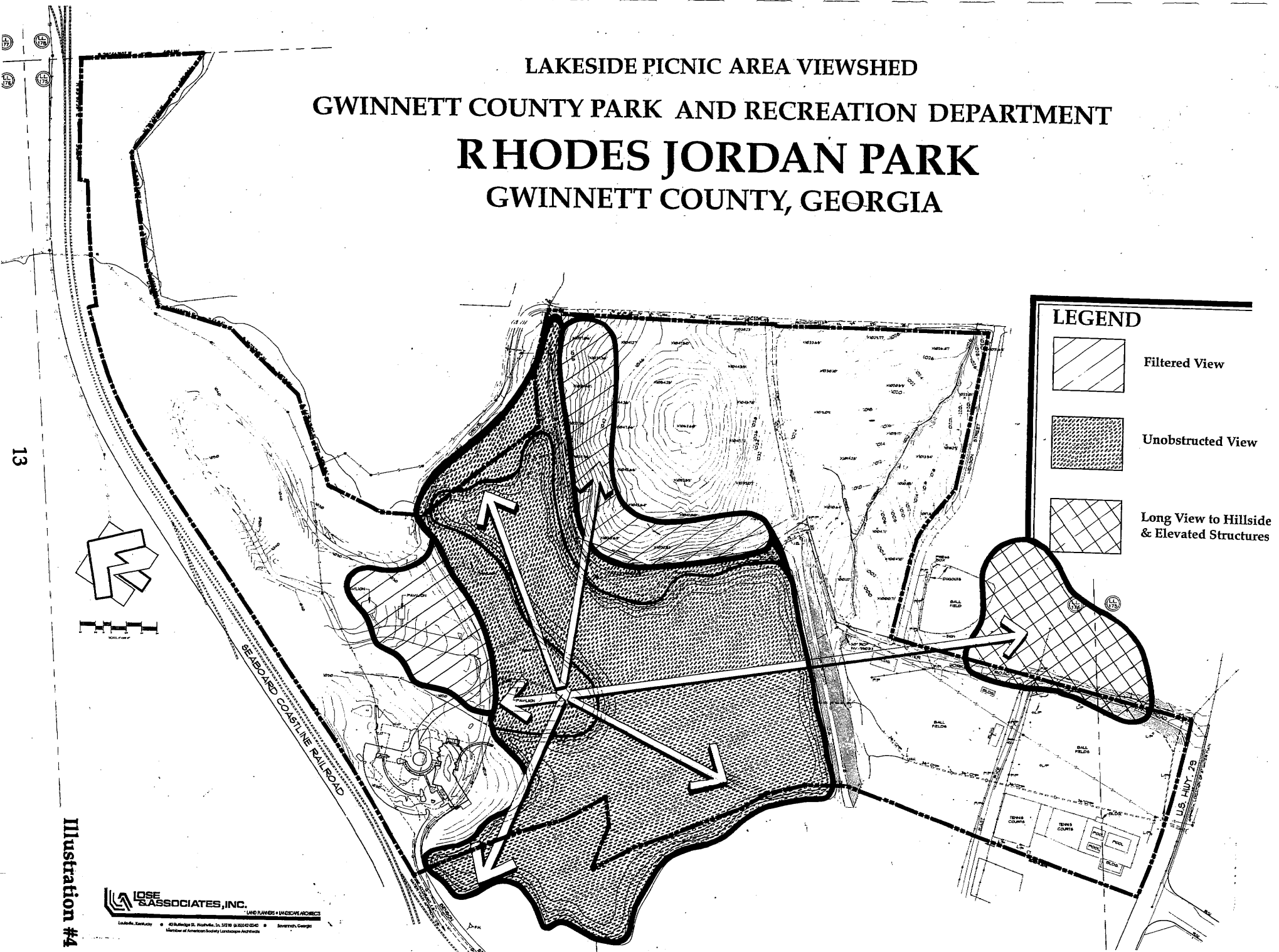
The Senior Citizens Center Viewshed encompasses the lake and dam. The view of the hill to the east of the Senior Citizens Center is filtered by the existing trees. Long views to the southeast of the site are visible from the Senior Citizens Center.

Highway 29 Viewshed

(See Illustration #6 - page 15)

The Highway 29 viewshed analysis addresses those areas within the park which are visible from Highway 29. Unobstructed views extend into the existing little league ballfield, but the speed and direction of travel affects ones viewing distance into the park. Views from Highway 29 are filtered. Existing tennis and pool structures, the lay of the land and the existing vegetation, allow only glimpses of the rest of the park.

LAKESIDE PICNIC AREA VIEWSHED
 GWINNETT COUNTY PARK AND RECREATION DEPARTMENT
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA



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Illustration #4

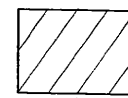
SENIOR CENTER VIEWSHED

GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

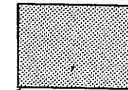
RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

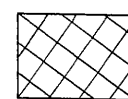
LEGEND



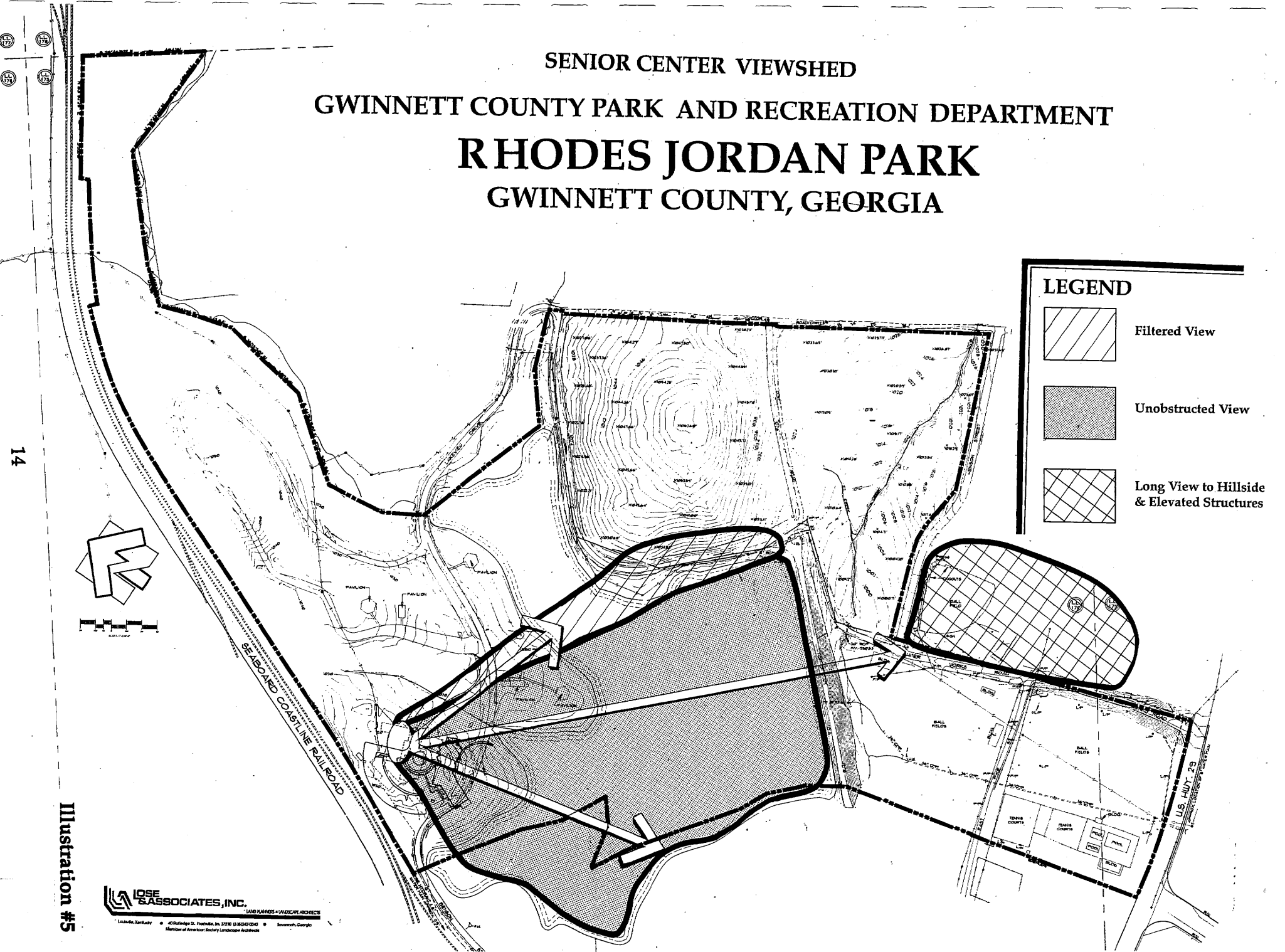
Filtered View



Unobstructed View



Long View to Hillside
& Elevated Structures



14



Illustration #5

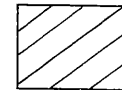
HIGHWAY 29 VIEWSHED

GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

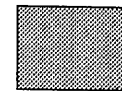
RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

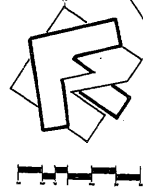
LEGEND



Filtered View



Unobstructed View



SEABOARD COASTLINE RAILROAD

Illustration #6

AMERICANS WITH DISABILITIES ACT OVERVIEW

The Americans With Disabilities Act, commonly referred to as ADA, is civil right legislation passed by the federal government in July of 1990 to extend civil rights protection to persons with disabilities. The ADA makes it illegal to discriminate in employment or in access to goods and services against any individual who is mentally or physically disabled.

The law is divided into five distinct titles that prohibit discrimination against the disabled. Title I addresses discrimination in employment; Title II addresses the delivery of governmental services and access to public transportation; Title III addresses access to goods and services in commercial facilities and public accommodations; Title IV addresses access to telecommunications services; Title V contains miscellaneous provisions regarding the application of the four primary titles. This report will focus on providing accessibility to the existing facilities in Rhodes Jordan Park and City Park East per Title II requirements. The existing facilities include the bath house at Park East swimming pool, as well as the restroom facilities and octagonal picnic shelters located in Rhodes Jordan Park.

For the most part, compliance with Title II requirements was required on January 26, 1992, and as such, any alterations made to facilities in order to bring them into compliance with ADA regulations after this date must be made in accordance with the ADA Accessibility Guidelines (known as ADAAG). These technical requirements were developed by the Architectural and Transportation Barriers Compliance Board using the 1980 ANSI A117.1 Accessibility Standard as a base. The ADAAG technical requirements have formed the basis for the facility accessibility evaluation for the above referenced facilities.

REPORT METHODOLOGY

On September 30, 1992, the City Park East swimming pool bath house, as well as the restroom facilities and octagonal picnic shelters in Rhodes Jordan Park were evaluated for compliance with the ADAAG requirements. The accessibility review comments have been subdivided into the following major categories: circulation (including interior and exterior), communication devices (including public telephones and signage), and restroom facilities and accessories (including toilet compartment and shower stall size).

Photographs of these facilities are provided on pages 19 and 23. The plans are diagrammatic in nature and do not necessarily reflect "as built" conditions of the individual facilities.

LAWRENCEVILLE PARK EAST SWIMMING POOL COMPLEX FACILITY OVERVIEW

The Park East swimming pool bath house is a one-story structure of approximately 1800 square feet located in the southern portion of City Park East. The facility serves as the admission point for access to the Park East swimming pool, and also contains a small concession area along with toilet/changing rooms for both men and women. Also located in the facility is a utility closet (housing a 200 amp electric panel, a hot water heater, and the electrical transformers for the under water lighting system), and a storage closet for pool equipment.

The facility is constructed of concrete masonry walls with brick veneer. Interior partitions are wood framing with plywood sheathing. The roof structure is unknown, as is the roof surface itself. The roof construction includes wood shingles on a mansard roof/fascia forming a continuous overhang around the entire facility. The facility is naturally ventilated, with full length fixed wall corners on two of the restroom walls, two steel awning type windows on the south facade, and two serving counter openings on the north facade.

In general, the exterior of the facility appears to be in good repair with little evidence of mortar bed deterioration or efflorescence. Even though the roof was inaccessible, the roofing surface is in obvious disrepair as evidenced by the ceiling stains in the concession area. The interior finishes are in fair condition, with the ceramic tile in the men's room in need of replacement at the urinal along with one of the water closets. The entry doors to both the men's and women's changing room has been removed, and the toilet stall doors have been removed from the men's rooms water closet compartments.

Interior Circulation

Current interior circulation deficiencies for the Park East Bath House include:

1. Aisle widths at concession area counter: required - 36 inches; existing = 26 inches.
2. Opening size at toilet room vestibules: required - 36 inches; existing = 24 inches.
3. Clear floor space at doorways; required - 42 inches for side approach on push side; existing = 36 inches.
4. Clear floor space at doorways: required - 48 inches for side approach on pull side; existing = 41 inches.
5. Doorway opening width: required - 32 inches clear; existing = 30 inches.
6. General Note: All existing door hardware are not lever type handles, and are therefore non-complying.

Restroom Facilities and Accessories

General evaluation comments regarding restroom facilities and accessories as a whole:

1. None of the toilet stalls meet minimum size requirements of 36 inches wide by 69 inches deep.
2. Of the two existing stalls with doors, neither door meets minimum width requirement of 32 inches.
3. There is a change of level of 1.5 to 2.5 inches at each toilet and/or shower stall. Maximum change of level permitted is .25 inch.
4. There are no grab bars in any of the toilet compartments.
5. The water closet fixtures do not have elongated bowls.
6. The height of the water closet fixture seats does not fall within the acceptable range of 17 to 19 inches.
7. The urinal stall size does not comply with the minimum requirements of 36 inches wide by 48 inches deep.
8. The controls for the urinal are located above the maximum permissible height of 44 inches.

9. The wall mounted lavatories in both men's and women's rooms do not meet the following requirements:
 - Minimum knee clearance; existing - 25 inches, required 27 inches
 - Exposed pipes under lavatory are currently unprotected against contact
 - Lavatory faucet controls are non-complying, knob type
10. The shower stalls in both the men's and women's rooms do not meet the following requirements:
 - Shower stall sizes do not meet minimums for either transfer or roll-in type
 - Shower stalls do not have any grab bars
 - The shower controls in the men's room are located above the maximum permissible height of 48 inches
 - All showers have a curb measuring 2.5 inches high exceeding the maximum permissible height of .5 inch.
11. The bath house currently does not have a drinking fountain.

Swimming Pool

1. No access for individuals into the pool
2. No accessible route from parking lot
3. Parking spaces: existing - 9' wide; required - 8' wide with 5' aisle, van access must be 8' wide with 8' aisle, universal space - 11' wide with 5' aisle.

Communication Devices

General evaluation comments regarding communication devices for the bath house:

1. Elements and spaces of accessible facilities which are required to be identified by the international symbol of accessibility and are currently not identified include:
 - Parking spaces reserved for persons with disabilities
 - Accessible toilet and bathing facilities

Items not covered by ADA regulations, but which need attention, include:

1. The refill pipe for large pool extends from pump unit on top of decking. This limits access and presents a hazard for visually impaired individuals.
2. Hose bib through fence presents a hazard for visually impaired individuals. NOTE: "Employee only" areas are exempt from Title III Barrier Removal.



Bath House at Lawrenceville City Park East Swimming Pool

Illustration #7

RHODES JORDAN PARK FACILITIES OVERVIEW

(See Illustration #8 - page 23)

The facilities and structures located in Rhodes Jordan park that have been included as a part of this evaluation include the existing restroom facilities and two octagonal picnic pavilions located on the northern side of City park East Lake. The picnic pavilions are open-air structures with built-in perimeter seating and a central utility table, while the restrooms include toilet facilities for both men and women.

The octagonal shelters are wood post and beam structures on concrete slabs with asphalt shingle roofs. The restroom building is constructed of concrete masonry walls with brick veneer. The interior has floor mounted toilet compartment walls constructed of concrete masonry walls with brick veneer. The interior has floor mounted toilet compartment walls constructed of wood framing with metal cladding, and quarry tile floor with wainscoting up to 48 inches above the floor.

In general, the three structures appear to be in good repair. The roof surfaces appear to have been replaced recently, and the interior of the restrooms are also in good repair. The restrooms are not mechanically ventilated, and have roof top sky lights for natural lighting.

Accessibility Evaluation Observations

Exterior Circulation for Restrooms & Picnic Pavilions

Current exterior circulation deficiencies include:

1. Van accessible handicap parking spaces provided and designated: none
2. Clear floor space on pull side of entry door; existing - 48 inches wide, centered on door; required - 60 inches wide with 24 inches beyond latch side of door.
3. Door hardware; existing - non-complying knob type.
Current exterior circulation deficiencies for the octagonal picnic pavilions include (refer to site diagram):
4. At pavilion #1, a portion of the access sidewalk exceeds maximum slope allowable for a ramp condition. In addition, when the slope of an accessible route exceeds 1 inch in 12 feet, a handrail is required.
5. Current location of trash cans relative to paved surfaces makes them inaccessible for people in wheel chairs.
6. A tactile warning strip has not been provided at the parking/drop-off area

Interior Circulation for Restrooms & Picnic Pavilions

Current interior circulation deficiencies for the restroom facilities include: none observed. Current interior circulation deficiencies for the octagonal picnic pavilions include: none observed.

Communication Devices

General evaluation comments regarding communication devices for the restroom facilities and picnic pavilions:

1. Elements and spaces of accessible facilities are required to be identified by the international symbol of accessibility. Parking spaces for disabled persons are not identified.



Rhodes Jordan Park Restroom Facilities



Rhodes Jordan Park Octagonal Picnic Shelters

Illustration#8

MASTER PLAN DESIGN STRATEGIES

DESIGN STRATEGIES & FACILITIES

(See Illustration #9 - page 25)

The goal of this Master Plan is to utilize the natural features and existing facilities of the site in such a manner that the development of a community park will be an asset to the neighborhood and to the Gwinnett County Department of Human Services, Parks & Recreation Division. To meet this goal - facilities should be grouped together with similar activity levels in the same area; the lake and creeks should be preserved and enhanced; and low impact and active recreational facilities should be developed to serve the citizens of Gwinnett County. Also ADA deficiencies have been noted and a determination of which facilities can cost effectively be renovated and those which should be removed.

ACTIVITY ZONES

One of the first steps in preparing the Master Plan for Rhodes Jordan Park was to examine the compatibility of individual activities. The determination of compatibility was made based on physical requirements, noise level, use periods, traffic volumes, visual impact, site impact, etc. These activities were then analyzed as a grouped whole to determine how they would affect pedestrian and vehicular circulation patterns.

Once these issues had been examined, the plan started to take form. Some facilities were easily located due to the physical constraints of the property. Other facilities that served adaptable activities were located based on function and aesthetic qualities.

Thus three concept plans evolved into their final forms. Each concept has a primary facility and compatible support facilities with strategic locations. The three concept plans are shown on the following pages.

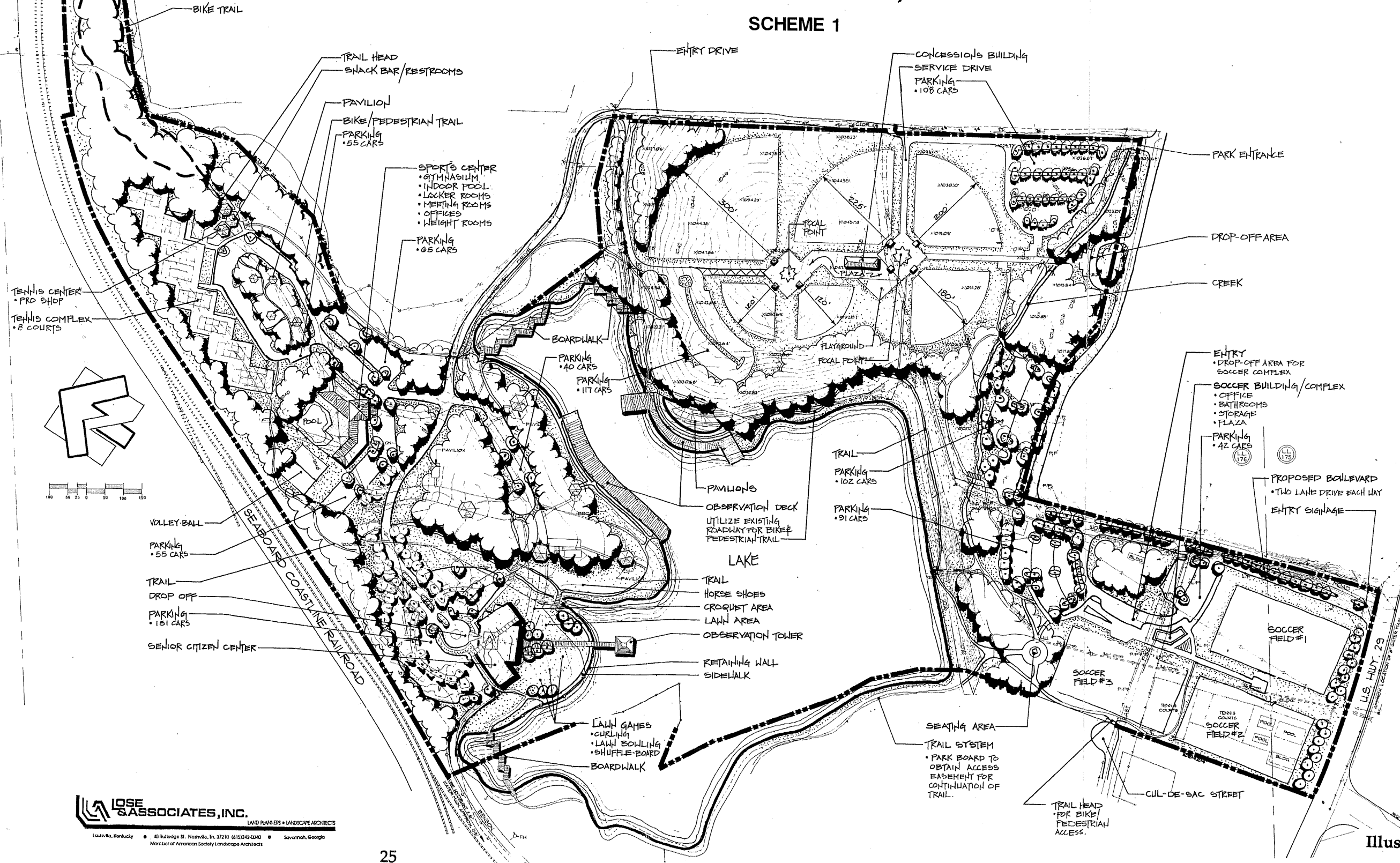
Preliminary Master Plan

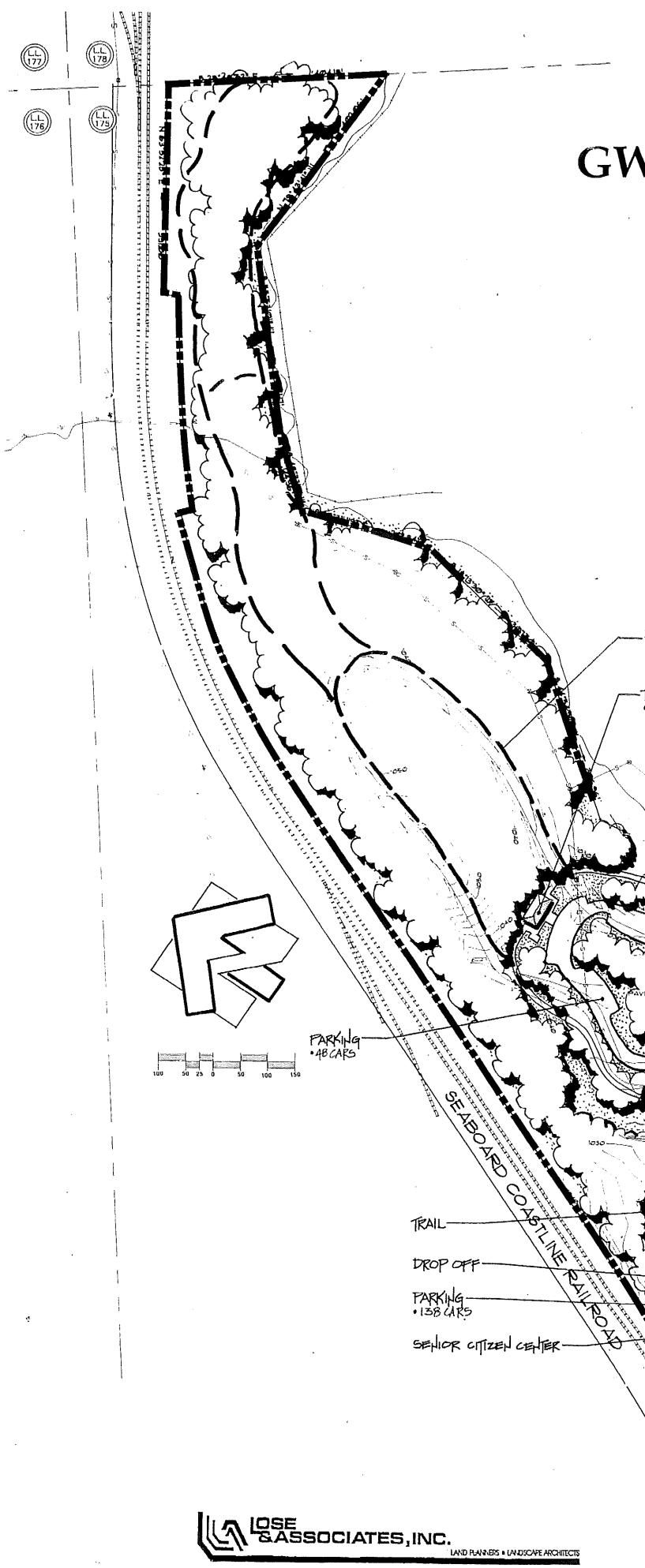
GWINNETT COUNTY PARK AND RECREATION DEPARTMENT

RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

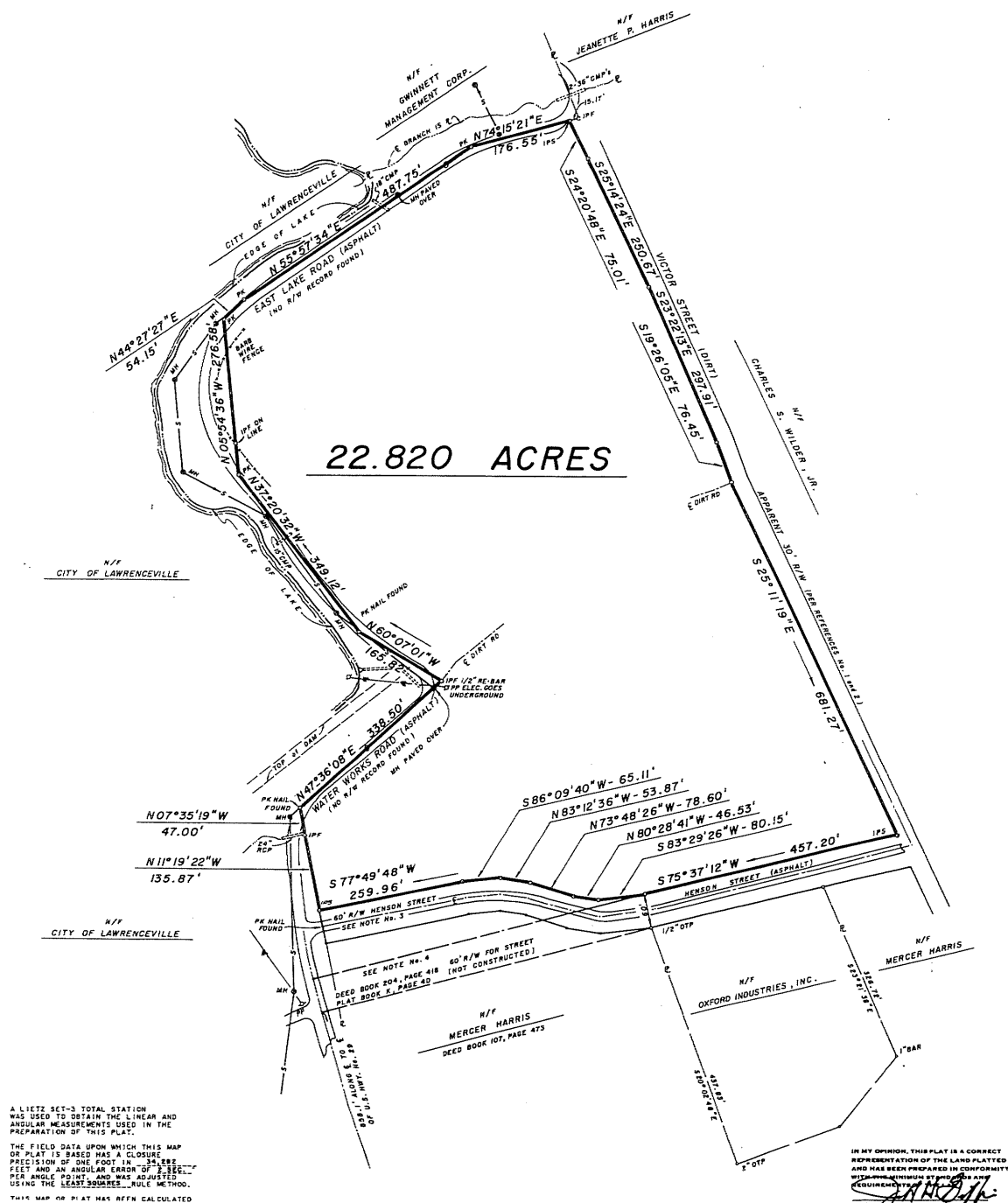
SCHEME 1







Site Boundaries Rhodes Jordan Park Illustration #12



REFERENCES

- 7 SURVEY FOR A CORNER BY G. L. VIAL, DATED JULY 3, 1946; RECORDED JULY 23, 1954
- 8 SURVEY FOR C. W. HENSON BY MURDOGH/HOAG AND JAMES, ASSOC. DATED
9 OCTOBER 17, 1963 AND RECORDED IN PLAT BOOK K, PAGE 48, WINNETT COUNTY
10 RECORDS
11
- 12 SURVEY FOR THE CITY OF LAWRENCEVILLE BY HANSON AND MEERS, SURVEYED DATED
13 AUGUST 4, 1954
- 14 SURVEY FOR THOMAS HARRIS BY JAMES M. PLATT, DATED JUNE 27, 1972
- 15 SURVEY FOR WINNETT COUNTY PARKS AND RECREATION DEPARTMENT BY HAYES,
16 JAMES AND ASSOCIATES, DATED MAY 18, 1986
- 17 WARRANTY DEED TO CITY OF LAWRENCEVILLE FROM L. M. HARRIS, DATED
18 FEBRUARY 22, 1956, AND RECORDED IN DEED BOOK 122, PAGE 373, WINNETT COUNTY
19 RECORDS
- 20 RIGHT-OF-WAY DEED TO THE CITY OF LAWRENCEVILLE BY L.M. HARRIS, DATED
21 OCTOBER 18, 1963, AND RECORDED IN DEED BOOK 204, PAGE 416, WINNETT COUNTY
22 RECORDS

NOTES

1. PRECISION PLANNING INC. FOUND NO RECORD OF RIGHT-OF-WAY FOR WATERWORKS ROAD OR EAST LAKE ROAD IN GWINNETT COUNTY RECORDS
2. VICTOR STREET RIGHT-OF-WAY SHOWN PER REFERENCE NO. 1 WHICH DELINEATES A 30 FOOT STREET AND REFERENCE NO. 2 WHICH DELINEATES A 30 FOOT RIGHT-OF-WAY
3. 60 FOOT RIGHT-OF-WAY OF HENSON STREET IS SHOWN SYMMETRICAL ABOUT THE CENTERLINE PER THE REQUEST OF L. M. HARRIS, CURRENT LAND OWNER
4. NO FOOT RIGHT-OF-WAY FOR STREET IS PER REFERENCE NO. 2 AND IS SUGGESTED THAT IT BE OBTAINED FROM L. M. HARRIS AND THAT THE 60 FOOT RIGHT-OF-WAY OF THAT STREET BECOME THE INGRESS AND EGRESS THROUGH SUBJECT PROPERTY

IN MY OPINION, THIS PLAT IS A CORRECT
REPRESENTATION OF THE LAND PLATTED
AND HAS BEEN PREPARED IN CONFORMITY
WITH THE MINIMUM STANDARDS AND
REQUIREMENTS.



MASTER PLAN DESIGN ELEMENT

CIRCULATION

(See Illustration #9 - page 25)

The selected plan contains two access points into the park. The first will be a minor entrance located at Victor Road which will serve residents of the surrounding neighborhood. Appropriate park signage at this entrance will announce one's arrival at Rhodes Jordan Park.

The second entrance will be at U.S. Highway 29, (southwest corner of the park) and will serve as the main entry into the park. The existing access drive, presently used for the pool/tennis complex, will become a tree lined boulevard which extends into the park. Turn lanes and a traffic light at Highway 29 will provide a safe entry into the park. Park signage will provide a definite sense of arrival into the park and will serve to lead visitors through the park and to the departure area.

Circulation within the park is provided by a two way drive which loops around the lake. In later phases the drive will be rerouted along the perimeter of the baseball complex and rejoin the existing drive at the northeast corner of the lake. Access from Benson Street at the Senior Citizens Center will be limited to deliveries only and will not serve as a park entry. The park drive serves as a collector for the various parking lots found at each facility. This new drive provides safer access by placing the entrance at the existing traffic light. Safety will also be increased by widening the existing park road and decreasing "cut through" traffic. By removing East Pike Street and preventing access from Benson Street, "cut through" traffic will be decreased without sacrificing the flow of traffic within the park. Another benefit of limiting access is increased security and the ease of collecting fees for special events.

The addition of ample signage, which will identify each facility area and provide directions, will serve to coalesce Rhodes Jordan Park. Universal signage for accessibility should be added as addressed in the ADA Compliance section. It is important to identify Rhodes Jordan Park as a distinct entity as well as defining it as part of the Gwinnett County Park system.

FOOTBALL FIELD / OPEN PLAY AREA

The first facility visitors will encounter when they enter Rhodes Jordan Park is the football field/open play space. This area occupies the entire southern end of the park extending from the back of the dam to Highway 29.

The football field, located in the far southeast corner of the park, is buffered from the boulevard by an open play area. An arrival plaza at the football field service building provides access to the entire area. The open play area features large open lawn on each side of the creek, providing an opportunity to view wildlife in the creek corridor. A "tot lot" is located between the football field and the larger of the two parking lots (94 spaces) which serve this area. A trail, which starts at the arrival plaza, meanders through the open play space. Two wooden foot bridges allow the trail to cross the creek at the narrowest spot. This trail can serve both as an access to the football field and as an exercise facility.

A shelter near the smaller parking area (38 spaces) provides a covered place for both lunchtime and weekend picnickers with a view of the creek. The football field service building provides public restrooms, concessions and storage space for park equipment. Also in this area is the proposed City of Lawrenceville water works facility, screened

from the view of the surrounding facilities. By converting this active sports area to a combined active/passive use area, more of the population will be served and it will provide a greater sense of serenity. This area will be enhanced both aesthetically and physically with the restoration of a natural stream corridor from an underground storm drain. To complete the renovation of this area, landscaping should be installed throughout. The use of wildlife food sources are encouraged along the stream and numerous trees should be planted to provide more shade and plant diversity in the park.

BALLFIELD COMPLEX

The centerpiece of Rhodes Jordan Park Renovation is the proposed six field ball complex. The following lighted, youth, baseball fields will be provided:

- 2 - 120' fields
- 1 - 180' fields
- 1 - 200' field
- 1 - 225' field
- 1 - 300' field

The ballfields are organized in two clusters. The first cluster of 4 fields is developed around the service building. It contains 2 - 120' fields, 1 - 180' and 1 - 200' field. These fields which serve the youngest participants, will have the best access to the concession stand, restrooms and equipment storage which are located in the service building. A playground is also provided in the cluster to allow children to play while still in view of their parents who are watching one of the games. The 2nd cluster consists of 1 - 225' and 1 - 300' field. These fields are used by the older children and do not need the same level of access to restrooms and concessions that is needed by the smaller children.

The entire complex is designed to comply with ADA accessibility requirements. All spectator seating areas are served by concrete walks and plazas. These plaza areas should be landscaped and irrigated; have a combination of permanent and movable seating; have some picnic tables or eating areas.

Fencing, backstops, and dugouts will be designed to meet the Parks Development Division guidelines. Each field will be irrigated. Retaining walls will be provided as necessary to construct the fields with the minimum amount of earthwork and rock removal.

The baseball complex has two separate parking areas. One is at the center of the complex accommodating 202 cars; another to the southwest of the complex, across the creek accommodates 140 cars. The larger parking lot is screened from the complex by the intervening trees that line the creek. Special care should be taken during construction to avoid damage to the trees which will remain, and to avoid siltation of the creek.

THE LAKE

The Lake is possibly the most appealing feature of Rhodes Jordan Park. Located in the middle of the site, these 22 acres of water (1/4 of the site) are a distinguished part of the Park and will serve as a focal point for all areas. The Senior Citizens Center will offer a spectacular view of the lake. The picnic pavilions will also take full advantage of the tranquil scenery. A trail should be developed to tie all the lakeside elements together and a boardwalk developed to carry people across the lake. A lakeside pier extends over the lake from below the ballfields and will serve as a stage to an amphitheater and a backdrop for views across the lake.

PICNIC / PLAYGROUND AREA

The picnic and playground area on the north side of the lake will remain, the existing pavilions renovated, and the playground area expanded. Existing play structures need proper base material to reduce compaction of the soil beneath the pines, increase accessibility and improve safety.

New Bar-B-Que grills should be designed and developed into a focal point. Trash receptacles are needed and must be placed along the hard surface walks for ADA compliance. The addition of lights, removal of old play structure foundations, and worn equipment is needed to improve safety.

The parking areas in the picnic/playground area will be condensed to group parking areas. The existing drives should be redesigned to pass through the picnic area with minimum crossings between facilities. This road will start at the intersection near the existing lakeside pavilion and wind through the picnic area and end at the turn-around in front of the Senior Citizens Center. The realignment of this road provides more space adjacent to the lake while also minimizing the impact of automobiles on passive activities around the lake.

THE SENIOR CITIZENS CENTER

The Senior Citizens Center is located on the west corner of the property. Parking for 56 cars is provided at the back of the building. A drop-off circle is located at the main entrance. Situated on a small rise overlooking the lake, the Center takes full advantage of its lake side location. The hard surface trail which winds throughout the park leads to the Center. A boardwalk escorts one to the lake pavilion which offers a full view of the lake. An extensive lawn stretches toward the lake which offers an area for various lawn games such as shuffleboard, lawn bowling or curling. A flat expanse offers an opportunity for croquet. Horse shoe pits are located down the hill from the croquet field. An additional lawn area at the water's edge provides room for quiet relaxation.

FAMILY AQUATIC / COMMUNITY CENTER

The Family Aquatic/Community Center is situated to the north of the picnic area and Senior Citizens Center. This facility provides multifarious recreational opportunities including water activities and indoor athletics.

The central features of this area is the 25 meter pool and a zero depth family play pool featuring a water slide and numerous water play apparatuses. Indoor activities include: weightlifting, exercise and game rooms; an indoor track; basketball, handball and racquetball courts round out the list of activities available. Support facilities such as: park staff offices, locker rooms, showers and restrooms are also located in the Family Aquatic/ Community Center Building.

TENNIS CENTER

The Tennis Center, north of the Family Aquatic/Community Center, contains 12 tennis courts. A central sidewalk allows access to each pair of courts. Bleachers face each court and provide tournament seating and general spectator use. A 139-space parking lot serves the Tennis Center, Family Aquatic/Community Center and the Interpretive Trail Head. The Tennis Shop and Interpretive Trail Head share the same building. Lockers for storing gear, bulletin boards for tournament sign-ups, clinic & lesson sites and an observation deck are within the Tennis Shop building. The interpretive trail stretches to the far north end of the property, makes a loop to return to the trail head, then continues around the site.

GWINNETT COUNTY PARK AND RECREATION DEPARTMENT RHODES JORDAN PARK GWINNETT COUNTY, GEORGIA



PROPOSED PARK FACILITIES

- Lighted Youth Baseball Fields:**
- (2) 120' fields
 - (1) 200' field
 - (1) 225' field
 - (1) 300' field
 - adjacent restroom/athletic storage/concession building
 - adjacent play area (multi-age)
 - parking for 242 cars
- Lighted Tennis Courts:**
- 12 courts
 - central rest room/control structure
 - adjacent parking, 4 cars per court = 48 spaces (can overlap with other programs)
- Lighted Football Field:**
- 1 full-size field
 - adjacent parking, 94 cars (can overlap with other programs)
 - adjacent play area (multi-age) and picnic area
- Family Aquatic / Community Center**
- one court interior basketball (full court)
 - gamerooms
 - racquetball/handball courts
 - indoor track
 - space for restrooms/lockers/showers/storage/office
 - fully conditioned HVAC environment
 - space for various interactive aquatics/play features a 25-meter pool, 0 depth pool
 - adjacent parking for 139 cars
- Passive Area:**
- lake and surrounding open space capable of supporting various unprogrammed activities
 - adjacent parking for 28 cars (can overlap with other programs)
 - shelters: (3)large groups; (2)small groups
 - play areas for multi-age users
 - hard surface walking paths
- Utilities/Infrastructure:**
- gates at all entries, standard signage system
 - paved driveways and pedestrian walkways between activity areas
 - city water and sewer service
 - underground electrical distribution system
 - underground telephone system

PHASING PLAN

Phase I, set at one million dollars, has our recommendation that the development of the new baseball fields be the top priority. The land is available to develop these facilities without disrupting the existing park facilities. The utilities and infrastructure systems are on site and minimal extensions will be required. Parking facilities, ball field lighting and the service building can be built within the budget. Items which may have to be installed at the baseball complex in the future, include: landscaping, additional sidewalks, pavers, flagpoles, site furniture and other support systems.

Phase II should include the aforementioned items, ADA improvements to the picnic/playground facilities around the lake, and the demolition of the existing ball field facilities. Initiate trail installation and construct lakeside piers. Construction of the football field facility.

Phase III will address the realignment of existing roads and the development of the Family Aquatic/Community Center. Complete the water line loop and supporting utility systems.

Phase IV should encompass the development of the Tennis Center, support parking lot, trail system, pavilion renovations and relocations, and completion of the amphitheater. See Appendix #1 for all cost estimates, demolition of the existing swimming pool and tennis complex.

SUMMARY

The final Master Plan reflects a conscientious effort to meet the needs of the immediate community. In addition to meeting the criteria for a community park, the Master Plan seeks to preserve the natural features of Rhodes Jordan Park. To this end, banks of mature hardwoods are left along the small creeks dividing the property. These vegetative bands serve to buffer the park from surrounding land uses. Activity areas are also buffered from each other by the remaining trees.

The principle attraction of the park will continue to be the lake. Youth baseball/softball, tennis, football, walking, and activities in the Family Aquatic/Community Center will constitute the primary uses of the park. These forms of recreation should not have an adverse impact on the surrounding area.

Developing the Family Aquatic/Community Center will be a major addition to the programming options available to the Gwinnett Parks Department. This facility will complement YMCA facilities and relieve overcrowding at other aquatic facilities in the parks system.

The tennis facility will offer fresh, new courts for Gwinnett County's tennis enthusiasts. Providing additional tennis courts and observation areas will add to programming flexibility and the ability to host tournaments.

The picnic facilities and interpretive trail offers an opportunity for education and passive recreation. Combined with the Senior Center and the Football Field/Open Play Space, these passive areas provide a balance with the active recreation opportunities.

This Master Plan will serve as a blueprint for the development of Rhodes Jordan Park. It will change and go through modifications as the phases of the project are developed. The overall direction of this plan should remain constant. If followed, this plan will provide the best possible park facilities for the citizens of Gwinnett County. A facility in which the community can take great pride.

APPENDIX #1

Cost Estimate

APPENDIX #2

Sign-up Sheets
Community Meetings

APPENDIX #1

**Cost Estimate
Rhodes Jordan Park
Gwinnett County, GA
February 26, 1993**

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Ball Complex				309,527.35
Field 1				19,472.20
Field 2				22,064.07
Field 3				24,259.66
Field 4				25,026.65
Field 5				29,320.77
Field 6				37,750.07
Paving:				
Parking				98,465.40
Sidewalks				16,427.00
Infrastructure:				
Sewer				7,150.00
Water				40,000.00
Storm Sewer				67,000.00
Electric				260,650.00
Contingency @ 10%				37,480.00
Earthwork				251,542.00
TOTAL				\$1,246,135.17
Alternatives				
Field #2			\$29,678.00	
Field Subdrains			\$4,510.00	
Seatwall at Entry Plaza			<u>\$1,155.00</u>	
				<u>35,343.00</u>
TOTAL DESIGNED				\$1,281,478.17

Fields 1-4

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Concrete Work:				
Concrete Pad	12,676	S.F.	1.75	22,183.00
Concrete Stairs w/Cheekwall	1	L.S.		3,500.00
10' Concrete Entrywalk & Plaza	3,051	S.F.	1.75	5,339.25
10' Reinforce Concrete	115	L.F.	45.00	5,175.00
Drive w/Granite Dust Shoulders				
Handicap Access Walk	2,675	S.F.	1.75	4,681.25
Dugout Walls - 18"	138	L.F.	35.00	4,835.00
Split Face Block Wall	40'	L.F.	35.00	1,400.00
Fire Truck Access Drive				
Paving "Base & Asphalt"	1,795	S.Y.	6.00	10,770.00
Curbing	2,600	L.F.	2.50	6,500.00
Playground Subdrainage:				
4" PVC	175	L.F.	2.50	437.50
Misc:				
Handrail	132	L.F.	30.00	3,960.00
Landscaping	1	L.S.	4,000.00	4,000.00
Playground Walls	190'	L.F.	20.00	3,800.00
Scoring Stations	4	each	5,000.00	20,000.00
Building	3000	S.F.	50.00	<u>150,000.00</u>
Subtotal				<u>\$246,581.00</u>

Fields 5-6**Concrete Work:**

Concrete Pad	3890	S.F.	1.75	6,807.50
Scoring Stations	2	each	5,000.00	<u>10,000.00</u>
Subtotal				<u>\$16,807.50</u>

Total Ball Complex	281,388.50
Contingency @ 10%	<u>28,138.85</u>
TOTAL	<u>\$309,527.35</u>

FIELD 1 120'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7500.00	7,500.00
10' Chainlink	60	L.F.	13.85	831.00
6' Chainlink	335	L.F.	8.60	2,881.00
3'- 4' Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	4,500.00	4,500.00
Sprigging	10,000	S.F.	0.03	300.00
Subtotal				17,702.00
Contingency @ 10%				1,770.20
TOTAL				\$19,472.20

FIELD 2 120'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7500.00	7,500.00
10' Chainlink	345	L.F.	13.85	4,778.25
6' Chainlink	150	L.F.	8.60	1,290.00
3' - 4" Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	4,500.00	4,500.00
Sprigging	10,000	S.F.	0.03	300.00
Subtotal				20,058.25
Contingency @ 10%				2,005.82
TOTAL				\$22,064.07

FIELD 3 180'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7,500.00	7,500.00
10' Chainlink	130	L.F.	13.85	1,800.50
6' Chainlink	510	L.F.	8.60	4,386.00
3' - 4" Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	6,000.00	6,000.00
Sprigging	22,608	S.F.	0.03	<u>678.24</u>
Subtotal				22,054.24
Contingency @ 10%				<u>2,205.42</u>
TOTAL				\$24,259.66

FIELD 4 200'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7,500.00	7,500.00
10' Chainlink	130	L.F.	13.85	1,800.50
6' Chainlink	575	L.F.	8.60	4,945.00
3' - 4" Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	6,000.00	6,000.00
Sprigging	27,200	S.F.	0.03	<u>816.00</u>
Subtotal				22,751.50
Contingency @ 10%				<u>2,275.15</u>
TOTAL				\$25,026.65

FIELD 5 225'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7,500.00	7,500.00
10' Chainlink	225	L.F.	13.85	3,116.25
6' Chainlink	660	L.F.	8.60	5,676.00
3' - 4" Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	7,500.00	7,500.00
Sprigging	39,100	S.F.	0.03	1,173.00
Subtotal				26,655.25
Contingency @ 10%				2,665.52
TOTAL				\$29,320.77

FIELD 6 300'

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Fencing:				
Hollywood Backstop	1	each	7,500.00	7,500.00
10' Chainlink	225	L.F.	13.85	3,116.25
6' Chainlink	920	L.F.	8.60	7,912.00
3' - 4" Gate	2	each	92.00	184.00
5' Gate (10' Ht.)	2	each	94.00	188.00
10' Gate (6' Ht.)	1	each	208.00	208.00
Dugout Benches	2	each	150.00	300.00
Dugout Pad	324	S.F.	2.50	810.00
Irrigation	1	L.S.	12,000.00	12,000.00
Sprigging	70,000	S.F.	0.03	2,100.00
Subtotal				34,318.25
Contingency @ 10%				3,431.82
TOTAL				\$37,750.07

PARKING:

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Base & Asphalt	12,659	S.Y.	6.00	75,954.00
Extruded Curb	5,424	L.F.	2.50	13,560.00
Subtotal				<u>89,514.00</u>
Contingency @ 10%				<u>8,951.40</u>
TOTAL				\$98,465.40

SIDEWALKS:

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
5' Sidewalk	7,650	S.F.	1.56	11,934.00
Bridge	1	L.S.	1,500.00	<u>3,000.00</u>
Subtotal				<u>14,934.00</u>
Contingency @ 10%				<u>1,493.40</u>
TOTAL				\$16,427.00

INFRASTRUCTURE:

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Sewer	1	L.S.	7,150.00	7,150.00
Water	1	L.S.	240,000.00	40,000.00
Drainage Structures	1	L.S.	67,000.00	67,000.00
Electric	1	L.S.	260,650.00	<u>260,650.00</u>
Subtotal				<u>374,800.00</u>
Contingency @ 10%				<u>37,480.00</u>
TOTAL				412,280.00

EARTHWORK:

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Clearing & Grubbing	10	A.C.	3,000.00	30,000.00
Topsoil	40,059	C.Y.	1.75	70,103.25
Dirt	44,184	C.Y.	1.75	77,322.00
Rock	1500	C.Y.	12.50	18,750.00
Off Site Fill	5000	C.Y.	6.50	<u>32,500.00</u>
Subtotal				<u>228,675.25</u>
Contingency @ 10%				<u>22,867.52</u>
TOTAL				\$251,542.77

GWINNETT COUNTY PARKS FUTURE FACILITIES
12/1/92

Football Field and Open Play Area

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Asphalt Paving	4550	S.Y.	6.00	27,300.00
5' Sidewalk	100	L.F.	1.56	156.00
Asphalt Trail	1600	L.F.	30.00	48,000.00
Concrete Plaza	252	S.F.	1.75	441.00
Bridge	1	L.S.	15,000.00	15,000.00
Bridge 2	1	L.S.	10,000.00	10,000.00
Service Building	1000	S.F.	60.00	60,000.00
Pavilion	1	L.S.	30,000.00	30,000.00
Play Structures	1	L.S.	40,000.00	40,000.00
Earthwork and Pavilion	1	L.S.	125,000.00	125,000.00
Landscaping and Irrigation	1	L.S.	75,000.00	75,000.00
Seeding	1	L.S.	20,000.00	20,000.00
Remove Existing Storm Drain	800	L.F.	40.00	32,000.00
PA/Scoreboard	1	L.S.	15,000.00	15,000.00
Ballfield Lighting	1	L.S.	20,000.00	20,000.00
Electrical	1	L.S.	75,000.00	75,000.00
Stormwater	150	L.F.	25.00	3,750.00
Sewer	100	L.F.	25.00	2,500.00
Water	400	L.F.	20.00	8,000.00
Extruded Curbs	1600	L.F.	2.50	<u>4,000.00</u>
				611,147.00

GWINNETT COUNTY PARKS FUTURE FACILITIES
12/1/92

Lakeside Trail and Picnic Area

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Playground Surfacing	1	L.S.	30,000.00	30,000.00
Facilities Renovation	1	L.S.	75,000.00	75,000.00
Basketball Court	1	L.S.	25,000.00	25,000.00
Play Equipment	1	L.S.	40,000.00	40,000.00
Paving Asphalt Trail	1300	L.F.	30.00	39,000.00
Bridge	1	Each	5,000.00	5,000.00
Boardwalk	280	L.F.	25.00	7,000.00
Lighting	1	L.S.	100,000.00	100,000.00
5' Sidewalk	1083	S.F.	1.56	1,690.00
10' Sidewalk	600	S.F.	1.56	936.00
Dock	90	L.F.	25.00	2,250.00
Pavilion	2500	S.F.	50.00	125,000.00
Parking Lot Paving	1956	S.Y.	6 .00	11,736.00
Storm Sewer	120	L.F.	25.00	3,000.00
Extruded Curb	1000	L.F.	2.50	2,500.00
Seeding	1	L.S.	20,000.00	20,000.00
Landscaping	1	L.S.	30,000.00	30,000.00
Irrigation	1	L.S.	15,000.00	<u>15,000.00</u>
				533,112.00

GWINNETT COUNTY PARKS FUTURE FACILITIES
12/1/92

Tennis and Aquatics Complex

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Lighted Tennis Court	12	Each	25,000.00	300,000.00
25 Meter Pool	1	L.S.	500,000.00	500,000.00
Zero Depth Pool	1	L.S.	500,000.00	500,000.00
Arbor Structure	1	L.S.	15,000.00	15,000.00
Asphalt Paving	5733	S.Y.	6.00	34,400.00
5' Sidewalk	3700	S.F.	1.56	5,772.00
10' Sidewalk	2100	S.F.	1.56	3,276.00
Interpretive Trail	2700	L.F.	30.00	81,000.00
Aquatics Building	21200	S.F.	60.00	1,272,000.00
Tennis Center	900	S.F.	60.00	54,000.00
Relocate Sewer	300	L.F.	40.00	12,000.00
Water	100	L.F.	20.00	2,000.00
Storm Sewer	300	L.F.	25.00	7,500.00
Electric	1	L.S.	75,000.00	75,000.00
Earthwork	1	L.S.	75,000.00	75,000.00
Landscaping and Irrigation	1	L.S.	150,000.00	<u>150,000.00</u>
				3,086,948.00

GWINNETT COUNTY PARKS FUTURE FACILITIES
12/1/92

Additional Infrastructure

Item	Quantity	Units	Unit Cost (\$)	Cost (\$)
Roads	16000	S.Y.	6.00	96,000.00
Water	2000	L.F.	20.00	40,000.00
Electric	1	L.S.	150,000.00	150,000.00
Miscellaneous Seeding	1	L.S.	30,000.00	<u>30,000.00</u>
				316,000.00

GRAND TOTAL

\$4,547,207.00

APPENDIX #2

**PUBLIC MEETING
DECEMBER 2, 1992**

<u>In attendance:</u>	<u>Position:</u>
Eric Horn	Maintenance
Donnie Fuller	Recreation Management
Grant Guess	Human Services
Bill Lunceford	Parks Development Manager
Mike Huff	Director of Human Services
Chris Camp	Lose & Associates, Project Manager

Conclusions reached at this meeting:

1. More fields needed
2. Lights needed on football fields

Directions to Master Planners (Lose & Associates)

1. Add a football field within the 300' baseball field
2. Change the 120' field to an 180' field
3. Add a trail from the Senior Center to the Tennis & Aquatic Center
4. Add second walkway to baseball fields from the parking lot
5. Replace facilities lost at West Park
6. Add a trail link below the dam
7. Trail's total length should be 1.5 - 2 miles

Questions Raised

1. Can West Park be retained?

Public Input Meeting
Rhodes Jordan Park

NAME

ADDRESS

PHONE

Susan Ducken	368 Village Run 30245	963-5593
Mabel Everham	107 Village Way 30245	
Danny Huchaly	612 COLLINS HILL RD. 30245	
Bob Baroni	574 Rebecca St 30245	963-0015
Bronnie Mailey	122 Sweetgum TRD. 2nd. 30245	963-5335
Kay Grant	202 Connor St NE Lawrenceville, Ga. 30245	963-5337
Dale Willis	2084 Palmer Ct L'ville	962-0171
Harold Parr	828 Short St L'ville Ga.	963-9053
Rita's Sheila Hoffmeyer	647 Davis Rd. L'ville GA	963-4046
Thermon Pendergast	355 Paula Ct L'ville GA	339-7733
Randy White	567 Coast CR. LAW. GA. 30245	822-5785
Randy Smith	703 Steeple Chase Dr LAW GA 30244	962-1973
Andy Ford	1823 Lamp Post Lane L'ville Ga 30243	963-8565
Duane L Clark	132 Hamit Circle Lawville Ga 30245	963-6847
Bill Roberts	1462 Lawrenceville-Suwanee Rd/Law 30245	963-2446
Lisa Overfelt	1457 Scholer Dr. Lawrenceville 30244	963-8645
Ellen Kamm	377 Karen Ct Lawrenceville 30245	962-9198

Send notice of meetings
Mayor & Council
City of Lawrenceville

SIGN UP SHEET

NAME	ADDRESS	PHONE
Sonya Carlan	175 Rockhouse Rd. Lawrenceville, GA 30245	822-9388
Jim STASUL	634 Mephisto Cir. L'ville GA. 30245	962-4465
Kay Lewis	36 Duke Dr. L'ville, GA. 30245	962-9901
Rene Lindsay	2250 Plantation Rd Lawrenceville, 30244	972-2386
Roger Lindsay	"	"
Nanna Zee	352 Hickory Hill Dr L'ville 30243	963-4375
Edith Green	265 Seaside Hwy L'ville	963-7158
Mary Robinson	268 Jackson St	963-2301
Keth Roberts	63 Millen Place	963-4378
Mari E Brown	311 Davis Mill Rd	962-7207
Jenny Robertson	1462 L'ville - Suwanee Rd.	963-2446
Charles Wilcox		
Phil Norton	2104 Oakland Dr	962-2852

Public Comment Meeting on Proposed Master Plan

NAME	ADDRESS	PHONE
Jewell Corbin	1318 Harris Rd. Law.	963-3432
Jim Staul	634 Mephisto Cir.	962-4465
Ray H. Milledge	737 Nottingham Dr. L'ville	963-5570
Ray Webb	657 124 Cherry St	339-3948
Sue Stephenson	630 Ashton Lane	822-9476
Joan Pugh	125 Stonewall Lane	962-5966
Don Hoffman	647 Davis Rd	963-4046
Duane Clark	132 Harris Circle	963-6847
Sonya Carter	175 Rockhouse Rd.	822-9388
Duff Norton	2104 Oakland Dr	962-2852
Mike Thomas	443 Summit Ridge Dr.	962-4813
Albee Linderow	P.O. Box 1682; L'ville., GA 30246	-0-
MYRON BULLOCK	272 SUMMIT RIDGE DR. L'VILLE 30245	962-7214
Theresa Bullock	272 Summit Ridge Dr. L'ville 30245	962-7214
Cy Harris	169 Lancelot Way	822-6783
Nancy Bullock Holt	590 Baggett St. Lawrenceville Ga. 30245	963-489B
Dale Bullock	1610 BENTRIDGE DRIVE	339-6322
David + Teresa McClellan	303 Downing St 30245	963-0232
Jimmy Pugh	1165 Grayland Hills Trail #30245	339-8271



Landscape Architecture
Architecture
Engineering
Planning

Rhodes Jordan Park Master Plan Update



January 31, 2008

Prepared by
L o s e & A s s o c i a t e s , I n c .

"We are dedicated to bringing visions to reality. We are committed to stewardship of our environment, community and future."

Rhodes Jordan Park

Master Plan Update

January 31, 2008

Gwinnett County Department of Community Services –
Parks and Recreation Division

2007 Gwinnett County Board of Commissioners:

Charles Bannister
Lorraine Green
Bert Natusi
Mike Beaudreau
Kevin Kenerly

Rhodes Jordan Park Master Plan Steering Committee Members:

Phil Hoskins
Grant Guess
Sharon Plunkett
Tina Flemming
John Register
Christie Sims
Brian Kumm
Jim Mackel
Whitney Layton
Daniel Clark
Lamar Warner
Randy Huckabey
Jimmy Binion
Anthony Pane
Jarold White
Rex Schuder-Principal Planner

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Appendix A

Subsurface Exploration Report

Appendix B

Final Opinion of Probable Cost

Final Opinion of Probable Cost– Recommended Phase-One Development

Phasing Summary Memo

Intersection Detail

Appendix C

Meeting Minutes

Introduction

Rhodes Jordan Park is a 165-acre Community Park located in the northeast quadrant of Lawrenceville. The park's property is partly owned by Gwinnett County, and partly by the City of Lawrenceville. Gwinnett County government maintains a long-term lease on the portion of the park owned by the City. The park provides fields for football, baseball and softball utilized primarily by the Lawrenceville Youth Athletic Association. In addition, the park site has: City Lake; Rhodes Jordan Park Community Center & Gym; Rhodes Jordan Outdoor Leisure Pool; Rhodes Jordan Park Tennis Center; Lawrenceville Senior Center (operated by Gwinnett County Health and Human Services Division of the Dept. of Community Services); plus a variety of picnic, playground and trail facilities. The complete array of facilities is served by a variety of parking lots, concession buildings, restrooms and other ancillary buildings, including an on-site maintenance compound. Adjacent to the maintenance building is a fenced City of Lawrenceville compound with drinking water well and water processing facilities that are not a part of the park. The recent addition of approximately 33.1 acres of park expansion acreage since the last master plan was performed on the park (March 1993, by Lose & Associates, Inc.) created the impetus for this master plan update.

Site Analysis

2.1 Summary

Rhodes Jordan Park is located at 100 Crogan St., Lawrenceville, GA 30043. The main park entrance is accessed by a traffic light where Highway 124 intersects Crogan St. (**Figure 1**). The site is bordered by Crogan St. on the South, a CSX rail line on the North, an industrial park on the East and residential properties on the West.



Figure 1

Crogan St. is a four-lane main thoroughfare leading to downtown Lawrenceville which carries a good amount of traffic that easily exceeds the posted 35-mile-per-hour limit. Water and power utilities are available along Crogan St., as well as throughout the park, serving the existing features, as are sanitary sewer lines.

The site's terrain is comprised of varying sloping hillsides, the majority of which drain towards the 20+ acre lake located on the site. Upland soils are suitable for development of all types, whereas soils located in the riparian zones of the site would allow only light development. The site's vegetation cover consists primarily of a pine/hardwood mixture indicative of regular disturbance within the past 50 years. More mature stands of trees occur in the northern portions of the site. Several large oaks have been retained in the newly acquired property on Pike St.

Cultural impacts include the traffic noise generated by Crogan St. and noise created by the train tracks, as well as the noise generated by the neighboring industrial loading docks.

The following sections provide additional information and graphic representations for the categories of site climate, subsurface conditions, soils, topography, hydrology, vegetation and cultural impacts.

2.2 Climate

Gwinnett County has a humid, subtropical climate characterized by long, hot summers (average summer temperature of 77°) and influenced by moist, tropical air from the Gulf of Mexico. Winters are cool and moderate (average winter temperature of 44°), and significant cold spells generally last for only one or two days. Precipitation is heavy throughout the year and results mainly from afternoon thunderstorms. Total annual precipitation is slightly more than 50 inches.

2.3 Subsurface Conditions

The presence of subsurface rock is evident in the far southeastern corner of the soccer area. In order to plan mass grading operations better, a subsurface exploration report was prepared by United Consulting, noting auger refusal between 11' and 22' around in this southeastern corner. The results of this effort can be seen in **Appendix A**.

2.4 Soils

The underlying soils of the site consist of two main categories: The larger category consists of upland loamy soils suitable for development; the second category is made up of lowland loams and silts unsuitable for development due to poor strength or frequent flooding. The following Soils Analysis map (**Figure 2**) was derived from the USDA and Soil Conservation Service soil survey of Gwinnett County. The Chewacla soils (noted as Cfs and colored green) are the only soils on the site that would be poor for heavy development. The suitability for development of other soils shown is determined more by slope than by bearing capacity.

2.5 Topography

The site's highest point, located along the eastern edge of the property bordering the industrial loading docks, rises to an elevation of 1082', while the lowest area occurs at the main park entrance at an elevation of 992', for a difference of 90' across the property. **Figure 3** outlines the relatively flat areas and their relationship to the steeper areas of the site. In general, the inconsistent slopes present design challenges which could be alleviated with the use of retaining walls. Topography will impact site planning throughout the site.

2.6 Hydrology

Drainage across the northern part of the property follows the series of streams leading towards the lake, creating significant channelization on the property. The southern portion of the site -- all areas below the dam -- leads towards a stream that terminates in an existing detention area before leaving the site. Serious erosion is occurring in several locations near the lake, especially where stormwater sheets off of parking lots onto unprotected slopes. Pedestrian traffic in these areas also adds to the erosion. (**Figure 4**).

2.7 Vegetation

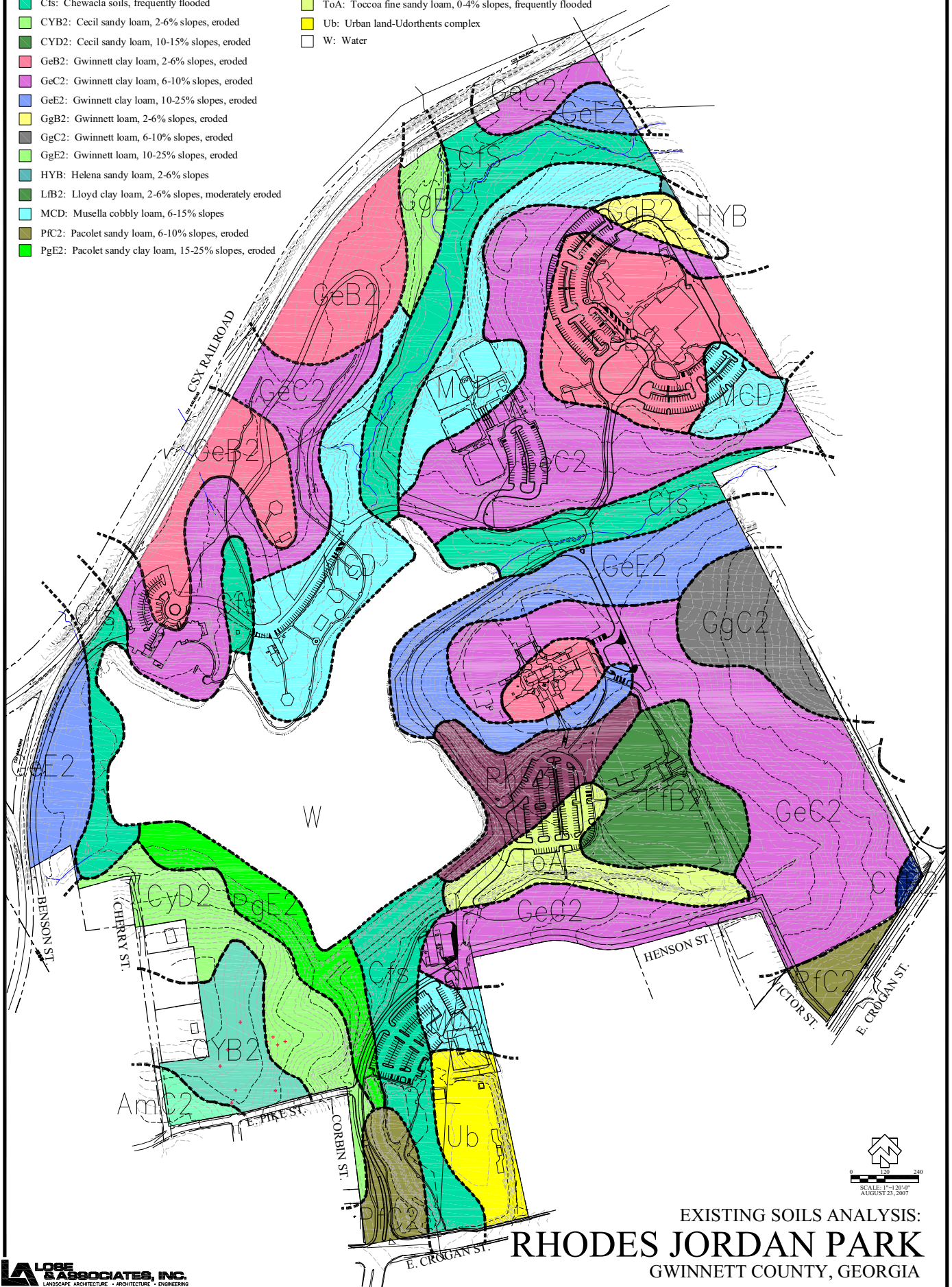
Until the arrival of European settlers three hundred years ago, the Georgia Piedmont was predominately forested with mixed hardwoods. Subsequent agricultural practices have cleared the forested areas so often, allowing younger pine forests to grow back time and time again, that most people associate the pine forest as Georgia's dominant forest cover type. The sequential change in forest cover on Rhodes Jordan Park site is the direct result of human intervention. Aerial photography dating back to the 1950s shows portions of the site cleared (**Figures 5-7**). The following **Figure 8** is a graphic representation of the vegetation composition of the site. The mixed new growth areas are those that were most recently cleared. These areas also contain pockets of invasive exotic plants such as honeysuckle, Chinese privet and kudzu. The predominately hardwood areas are older and contain pockets of kudzu as well. These hardwood areas are in good condition and should be retained, if possible, as the site develops.

2.8 Cultural Impacts

As noted above, the Northern, Eastern and Southern borders of the property provide opportunities for external noise. With this in mind, any site development should include leaving vegetation buffers around the park's perimeter. Additionally, there are localized areas of erosion at the lake's edge near the existing playground, providing the opportunity for creative design solutions. Furthermore, several locations around the lake's edge provide appealing views across the park, which need to be preserved. The following **Figure 9** is a graphic representation of the cultural impacts on the site.

LEGEND

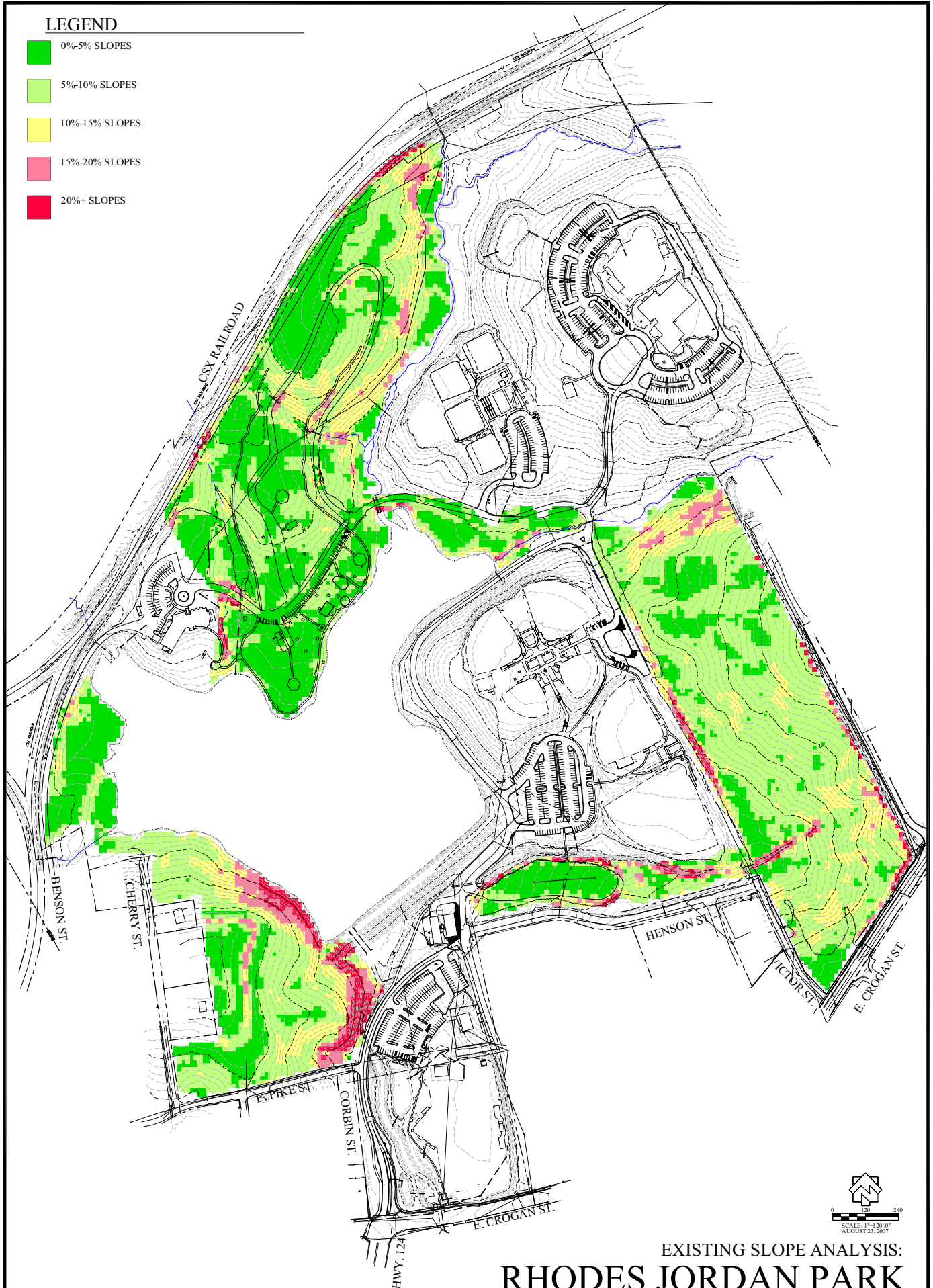
- | | |
|---|--|
| AmC2: Appling sandy loam, 6-10% slopes, eroded | PhE3: Pacolet-gullied land complex, 10-25% slopes, severely eroded |
| Cfs: Chewacla soils, frequently flooded | ToA: Toccoa fine sandy loam, 0-4% slopes, frequently flooded |
| CYB2: Cecil sandy loam, 2-6% slopes, eroded | Ub: Urban land-Udorthents complex |
| CYD2: Cecil sandy loam, 10-15% slopes, eroded | W: Water |
| GeB2: Gwinnett clay loam, 2-6% slopes, eroded | |
| GeC2: Gwinnett clay loam, 6-10% slopes, eroded | |
| GeE2: Gwinnett clay loam, 10-25% slopes, eroded | |
| GgB2: Gwinnett loam, 2-6% slopes, eroded | |
| GgC2: Gwinnett loam, 6-10% slopes, eroded | |
| GgE2: Gwinnett loam, 10-25% slopes, eroded | |
| HYB: Helena sandy loam, 2-6% slopes | |
| LfB2: Lloyd clay loam, 2-6% slopes, moderately eroded | |
| MCD: Musella cobbly loam, 6-15% slopes | |
| PhC2: Pacolet sandy loam, 6-10% slopes, eroded | |
| PgE2: Pacolet sandy clay loam, 15-25% slopes, eroded | |



EXISTING SOILS ANALYSIS:
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA





LEGEND

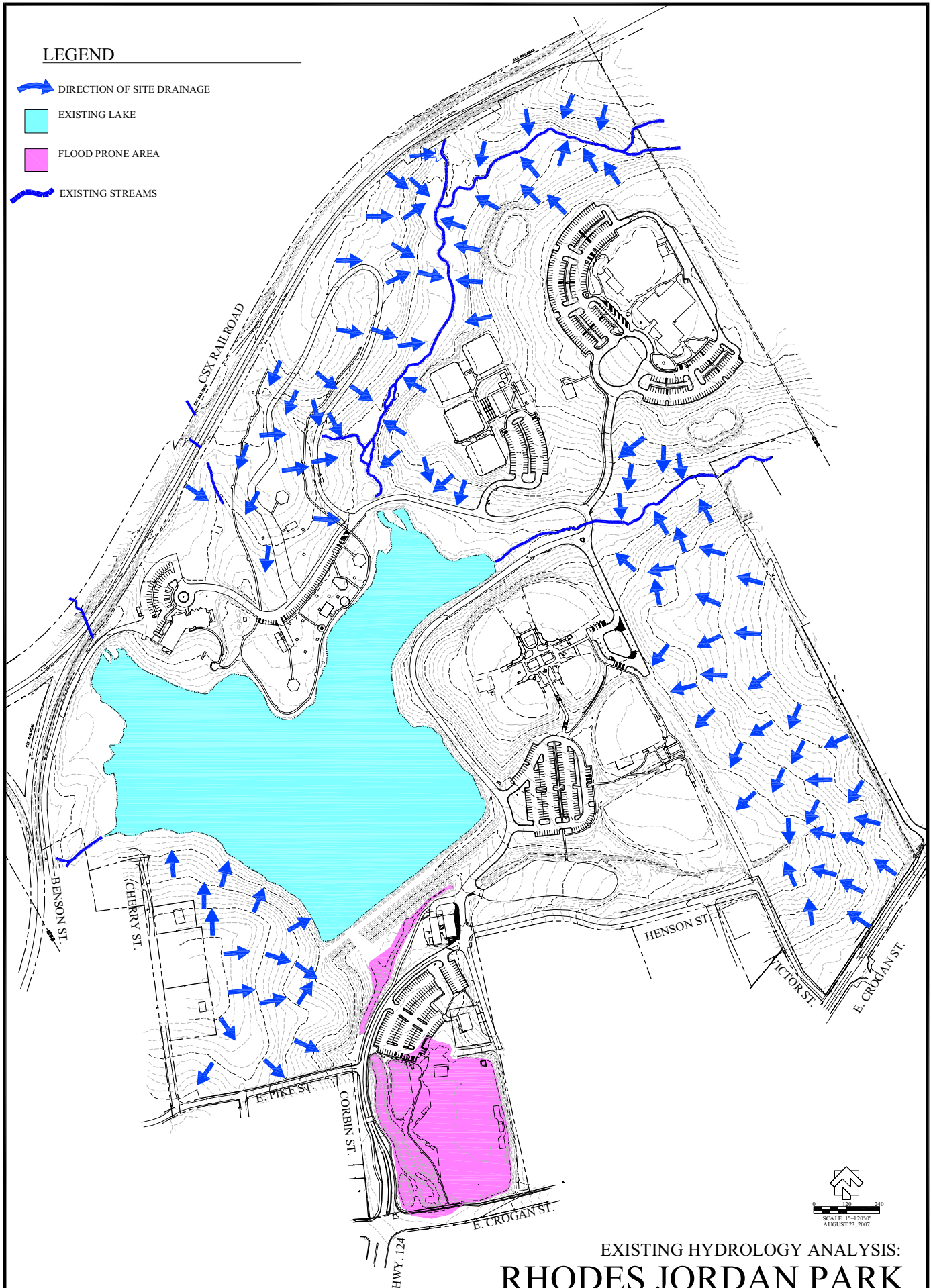
- 0%-5% SLOPES
- 5%-10% SLOPES
- 10%-15% SLOPES
- 15%-20% SLOPES
- 20%+ SLOPES



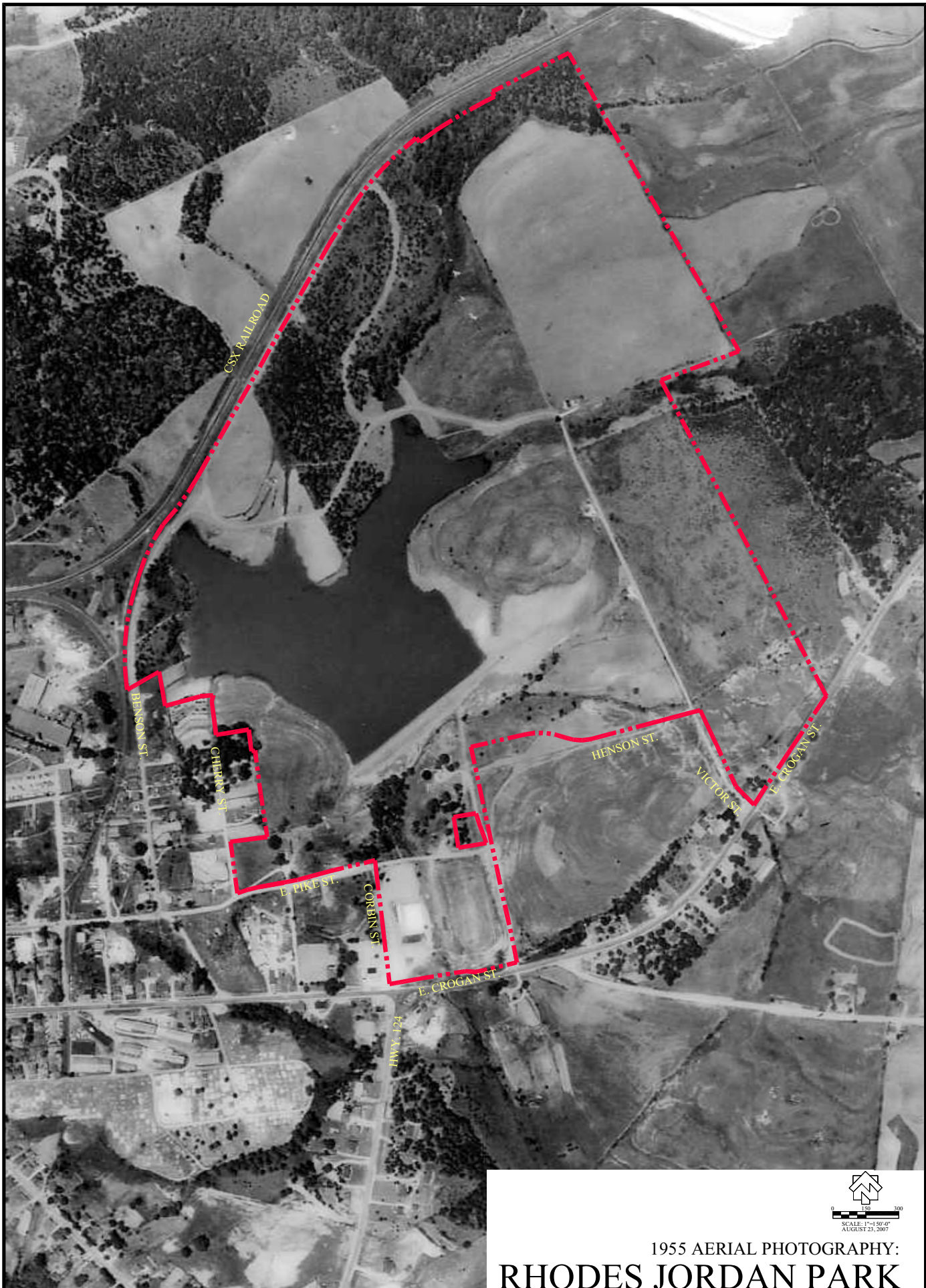
EXISTING SLOPE ANALYSIS: RHODES JORDAN PARK GWINNETT COUNTY, GEORGIA

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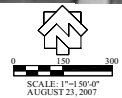
-  DIRECTION OF SITE DRAINAGE
-  EXISTING LAKE
-  FLOOD PRONE AREA
-  EXISTING STREAMS

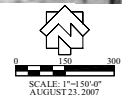


EXISTING HYDROLOGY ANALYSIS:
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA



1955 AERIAL PHOTOGRAPHY:
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA



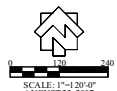
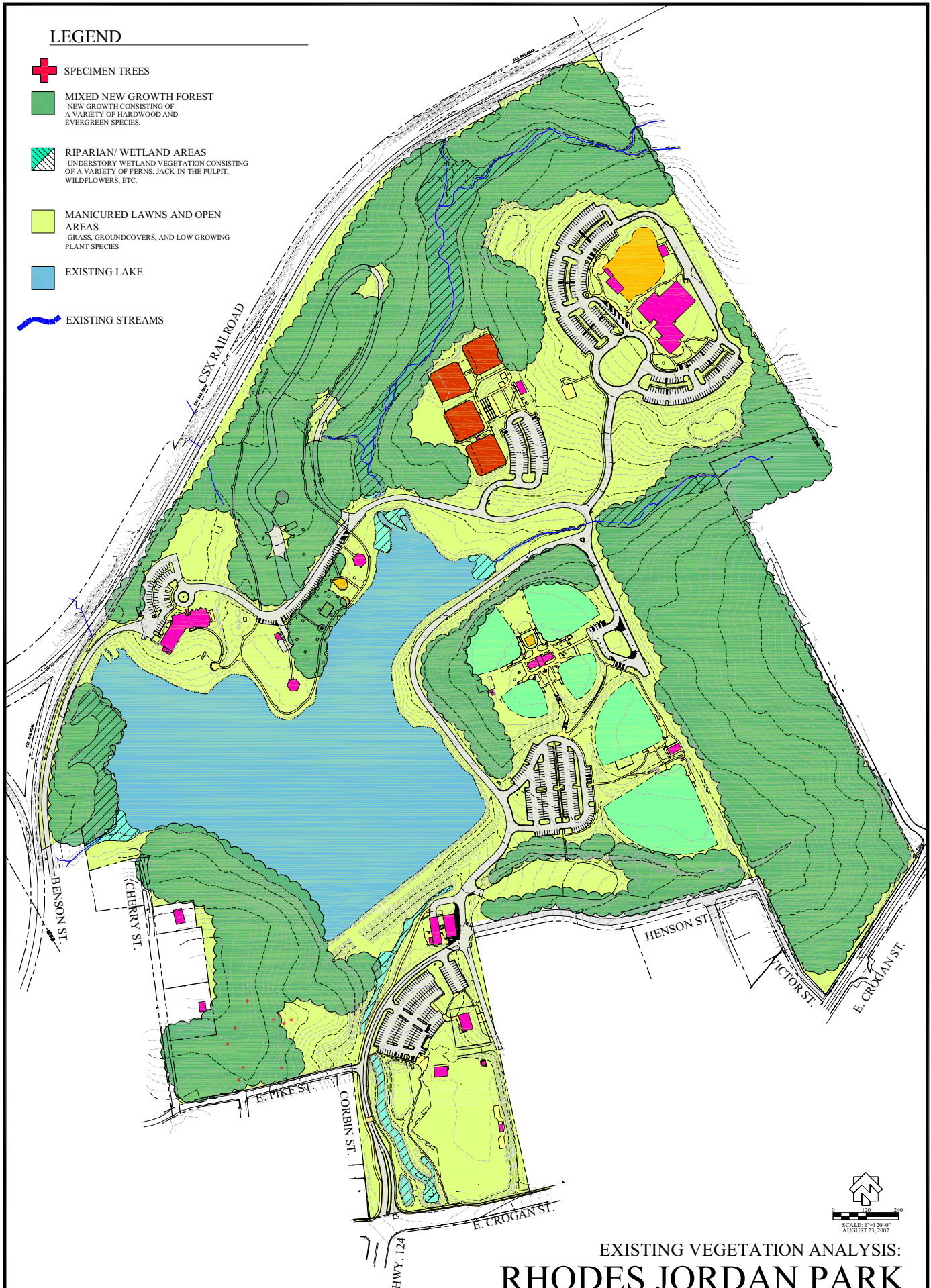


1972 AERIAL PHOTOGRAPHY:
RHODES JORDAN PARK
GWINNETT COUNTY, GEORGIA



LEGEND





-  SPECIMEN TREES
-  MIXED NEW GROWTH FOREST
-NEW GROWTH CONSISTING OF
A VARIETY OF HARDWOOD AND
EVERGREEN SPECIES.
-  RIPARIAN/ WETLAND AREAS
-UNDERSTORY WETLAND VEGETATION CONSISTING
OF A VARIETY OF FERNS, JACK-IN-THE-PULPIT,
WILDFLOWERS, ETC.
-  MANICURED LAWNS AND OPEN
AREAS
-GRASS, GROUNDCOVERS, AND LOW GROWING
PLANT SPECIES
-  EXISTING LAKE
-  EXISTING STREAMS

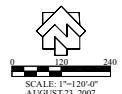
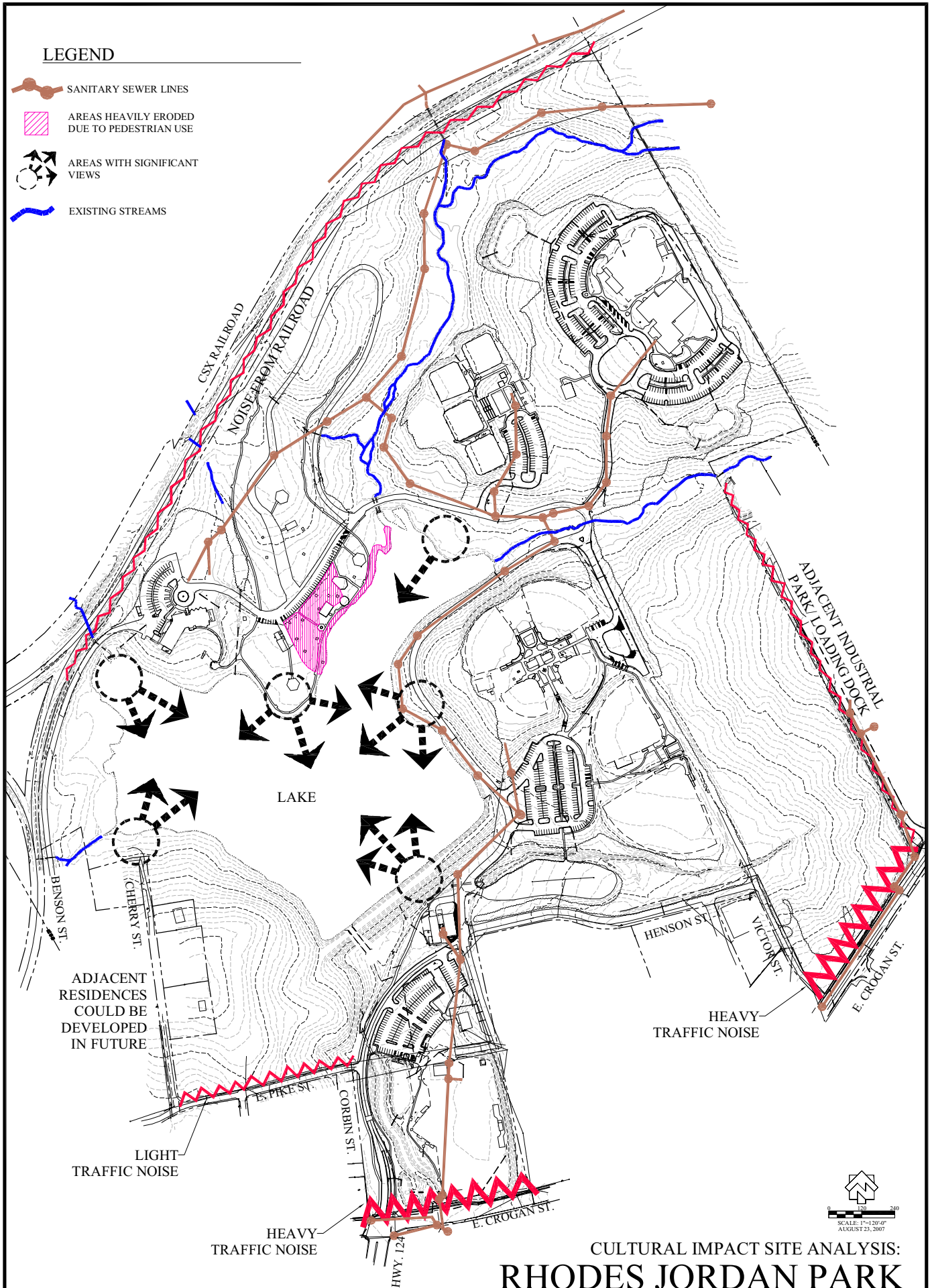


SCALE: 1"=120'-0"
AUGUST 23, 2007

EXISTING VEGETATION ANALYSIS: RHODES JORDAN PARK GWINNETT COUNTY, GEORGIA

LEGEND

-  SANITARY SEWER LINES
-  AREAS HEAVILY ERODED DUE TO PEDESTRIAN USE
-  AREAS WITH SIGNIFICANT VIEWS
-  EXISTING STREAMS



CULTURAL IMPACT SITE ANALYSIS: RHODES JORDAN PARK GWINNETT COUNTY, GEORGIA

Figure 9

Initial Input

3.1 Initial Program Development

This project differed from the typical Gwinnett County Park Master Plan process in that it was programmed with input from parks staff, representative of the City of Lawrenceville and athletic association members, rather than a typical citizen steering committee. To initiate the programming and planning of the park, a meeting was held at the Gwinnett County Parks and Recreation offices with staff to discuss the goals and desires for the park. The group discussed a variety of program elements for consideration with it noted that further staff discussions would occur, and the list to be developed into alternative conceptual plans would be forthcoming.

Alternative Conceptual Master Plans

4.1 Revised Program

Based on the results of the initial feedback meeting, a refined list of program elements emerged that was to be incorporated into the three alternative conceptual master plans. This list included:

- Dog park facility
- Soccer complex
- Multi-purpose trail loops
- Development of horseshoe and shuffleboard courts
- Redevelopment of passive/playground area
- Teen center w/ skate park, basketball, and volleyball

On August 23, 2007, the site analysis effort and three alternative conceptual plans (**Figures 10, 11, 12**) for the park were presented at the Rhodes Jordan Park Community Center to representatives of the City of Lawrenceville, the Lawrenceville Senior Center, the Lawrenceville Youth Athletic Association and Gwinnett County Parks and Recreation staff. The meeting began with the presentation of the aerial photographs to demonstrate the progression of this property over the last 50+ years. The presentation continued with an explanation of the site analysis, specifically the areas which were to be redeveloped, including information related to the site's vegetation, soils, slopes and cultural impacts. The summary of this presentation was that all areas for redevelopment would be acceptable with the understanding that large retaining walls would be necessary to accommodate certain features, such as the area where the soccer fields were intended to be located.

Each concept was discussed in depth amongst the representatives present, and the following decisions were made for each area of interest:

Dog Park: Shade was discussed as being vital to the dog park. The group discussed how if the area was to be primarily open with little tree cover, then shade pavilions would be needed. Ultimately, the group decided that the southwestern corner of the park would be the best location, allowing the area under the specimen trees to be utilized. Because of these trees and their critical root zones, any other programming in this area would be greatly limited due to the amount of space these root zones occupy. Placing fencing around the trunks of these trees would also help to protect the root zones from compaction. It was agreed upon that the entry drive and parking serving this area should be aligned to avoid dividing this area where the large specimen trees are located. Therefore, options should be considered that provide an entrance further east of where the entrance is shown in the concepts, in order to provide access around these trees.

Soccer Area: Of the three concepts presented for this area, the concept with the parking area at one end, with the three fields all next to each other, was initially preferred (**Figure 10**). Although this layout would place one of the fields a long distance away from the concessions/restroom building, the fact that the placement of the parking lot would provide an option for additional

parking for the softball complex was the deciding factor. After further consideration and additional inter-departmental meetings, a layout similar to the concept with the additional parking located next to the main park drive with one of the fields rotated 90 degrees (**Figure 11**) was decided upon. Providing this layout with the smaller parking area directly across from the softball complex would provide the overflow parking for softball if needed. This would require the single field to be on this same side closer to the stream and the two fields that are next to each other to be moved over to the E. Crogan St. side of the complex. In addition to this, the maintenance compound would be better suited and more centrally located if it were in the area between the end of the single field and the stream.

Football Area: Although this area was intended to remain, there was a request to provide some built-in bleachers to provide both home and spectator seating on the same side of the field. Currently, spectator seating is located in the infield mix of the baseball diamond, which detracts from the desirability of this location for community football games. Also discussed were the current parking issues at the existing football parking lot. The lot is undersized, and because there is only one ingress/egress point, it is often difficult to drive on busy days. As a result, it was requested that a simple solution be explored. Additionally, it was requested that the small area of the park across from the existing maintenance facility, which currently acts as gravel overflow parking lot, be paved to provide an overflow parking lot for the football field, which would help to alleviate parking congestion as well.

Horseshoe Pits: Two locations for the horseshoe pits were presented, one being at the tennis complex on the site previously graded for additional tennis courts, and the other in the picnic area. Because rental equipment could possibly be provided for these programs and staffing would be necessary for this, the tennis complex location was preferred.

Teen Facility: The main concern regarding this program element and its location was security. The location of the teen area within the park would be vital in providing a safe place for both the teenagers using this element as well as for other park users. Discussions took place about placing the facility in the southwest corner of the park near the specimen trees. A major drawback of placing the teen facility here, aside from size restrictions due to the specimen trees, was this area is elevated above the rest of the park, creating visibility and policing issues, so it was decided that this was not the best option. Also discussed was placing it up at street level near the soccer complex. This would require an additional park entrance on E. Crogan St., but would provide added security and policing from the busy road. Ultimately, it was decided that the teen area would best be suited behind the picnic area. While this may seem to be the least visible and secure place, the multi-purpose trail would provide more than enough security, as the trail will be the most heavily used element in the park. Not providing lighting in the teen area would also limit the hours of use to daylight. It was requested that the basketball courts not be associated with the teen complex, as the basketball program is in need of additional courts and these proposed courts would be preferred near the existing community center.

Picnic Area: The three different concepts for this area were accompanied by three different options for a promenade along the lake edge. One providing the multi-purpose trail lowered to lake level with large staircases leading up to the playground area, one providing the multipurpose trail at the same level as the playground and a railing along the new wall along the edge of the

lake and one providing a boardwalk over a revegetated strip at the edge of the lake (**Figure 13**). These promenade options each have their advantages, so providing a small section of each would be ideal. Several options for rearranging parking and the pavilions were presented: One moved the playground back away from the water; another left the playground and road where they currently are and providing the parking area to the north of the road; another moved the playground away from the water and all through traffic would be required to drive through parking lot. A layout which incorporated different features of two different layouts was decided upon as being the preferred option. This layout would leave the existing playground where it is and would provide a parking area, which is separated from the road, between it and the park drive, providing pedestrian access directly to the playground area from the parking lot without having to cross the road. Pedestrian traffic is directed into the picnic/playground area around the bioretention zones in an effort to reduce erosion on the slopes. A concessionaire was presented at the southwestern corner of the parking lot with a large plaza area for dining. The octagon pavilion on the “point” was relocated back away from the water to provide an open lawn area which would be desirable for picnicking and recreational activities. To the eastern side of the parking lot, at the lakes edge, a small boat rental building is located with a boat ramp for water access. To the north of the main park drive, the desired option included additional parking, leaving the existing pavilion, and adding a new pavilion and separate restroom to create a picnic experience in the woods, in comparison to the lakeside picnic area.

Architectural Elements: The spillway structure, overlook structure and boardwalk structures all would add to the overall draw of the park, especially the spillway structure which would attract passerby who normally would not realize there was more to the park behind the dam (**Figure 14**). This structure would provide a covered area with benches to rest along the multi-purpose trail lake loop. The location of this structure provides magnificent views across the lake to the picnic area as well as to the senior center, which was originally intended to be a showcase structure within the park. Of the three layouts for the overlook structure, the layout with the large plaza area and small lawn was preferred. This area provides a large location for gathering away from the playground area. The plaza is located on the lake side of the shade structure, providing great views across the lake in all directions. There are two areas of the park where boardwalk structures have been proposed. One location is along the eastern bank of the lake, providing a detour from the multi-purpose trail. The boardwalk in this location is wide enough to accommodate walkers/runners taking a rest as well as those who are fishing off the boardwalk. The location of the other boardwalk is at the northern side of the lake. This area is intended to act as a dramatic entry point to the park if the City develops a trail along the railway, leading back to downtown. The covered structure will extend out into the lake and intersect the multi-purpose trail boardwalk out in the lake. This structure will provide seating to look over the lake and enjoy the view.

Trails: Multiple walking trail loops were provided in all concepts presented. These trails connect all park features. The main section of the trail, which will wrap around the lake, is similar in all of the concepts, as this section is to be planned as a Phase I design element. It was requested that the entry road be redirected around the existing baseball fields and that the old road that runs along the lake edge be converted into a section of the multi-purpose trail. It was determined that boardwalk structures will be required in certain low lying areas of the park along this main lake loop.

Overall Detention: Because the majority of the site drains to the lake, quantity detention will be achieved in the lake itself. Approximately 3” of additional storage would be required, and slight modifications to the existing spillway could achieve this. Quality detention however, will need to be achieved elsewhere on the site, as it cannot be provided in state waters. For this reason, the quality detention is proposed in each different section of the park where different programming elements occur. Quality detention ponds would be smaller in each area, and could be supplemented with bioretention facilities within the parking lots themselves.

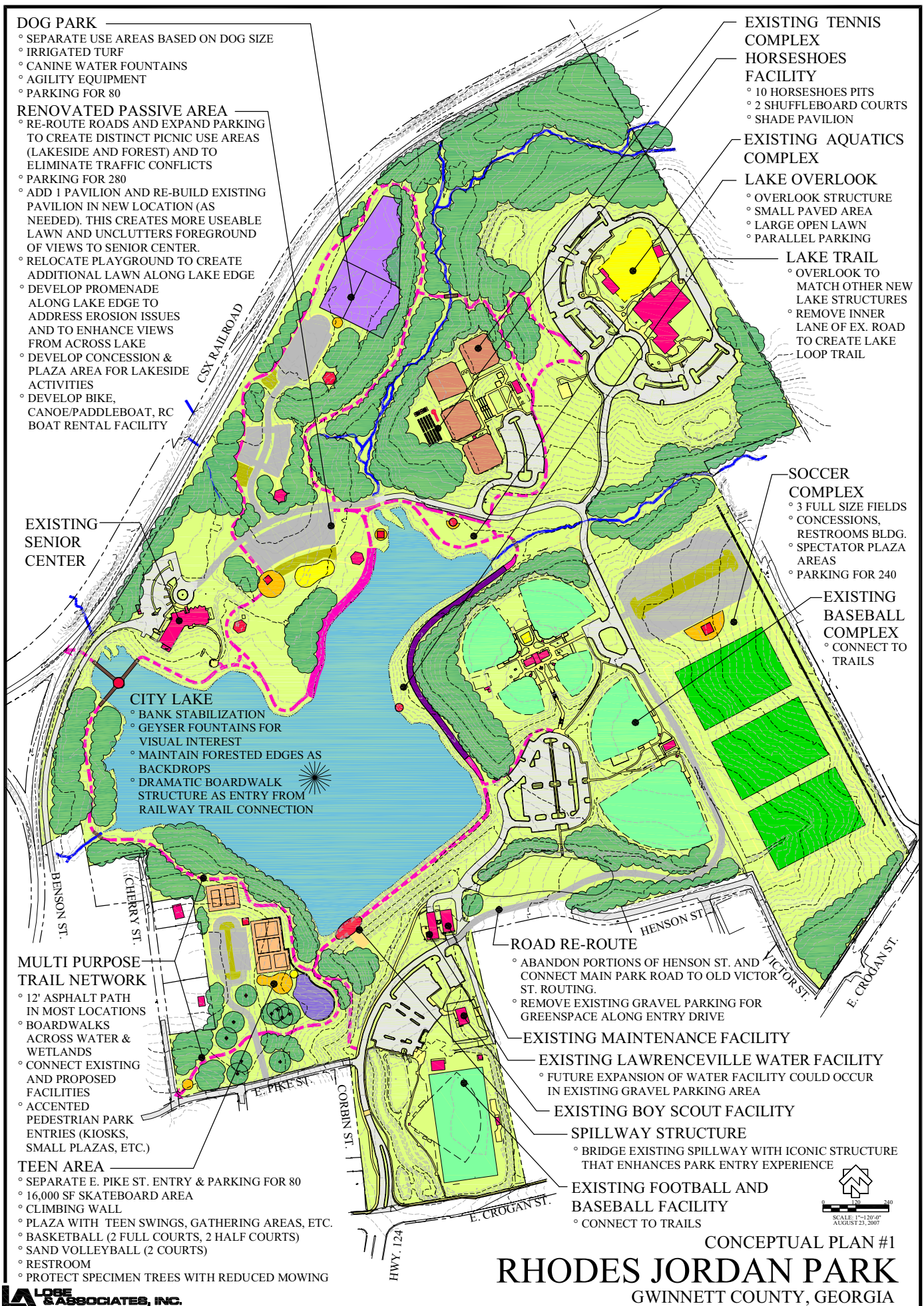


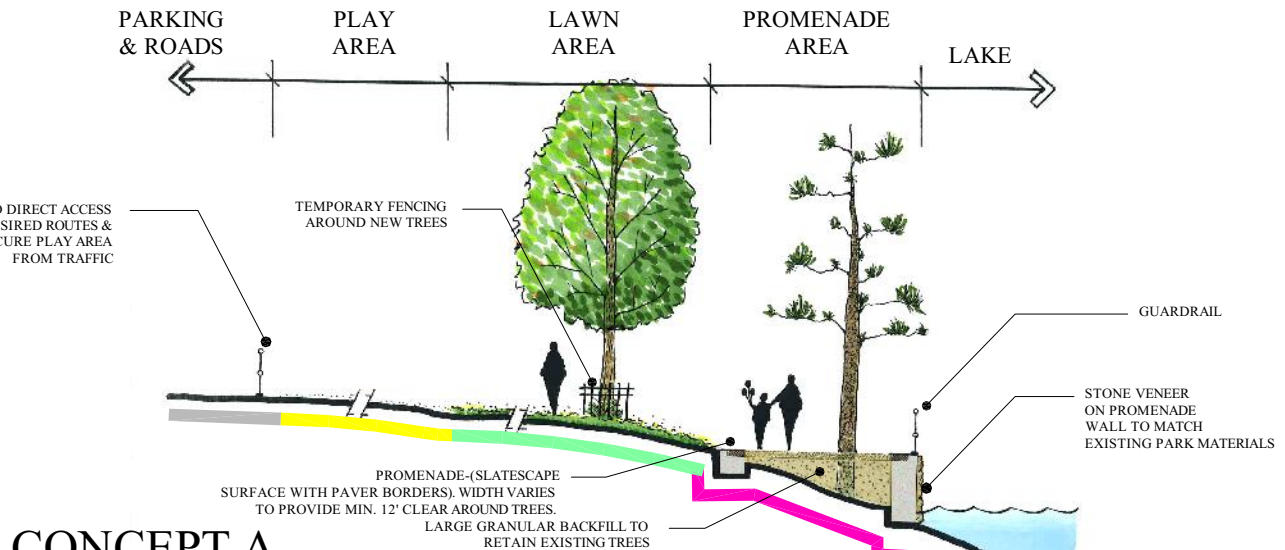
Figure 10



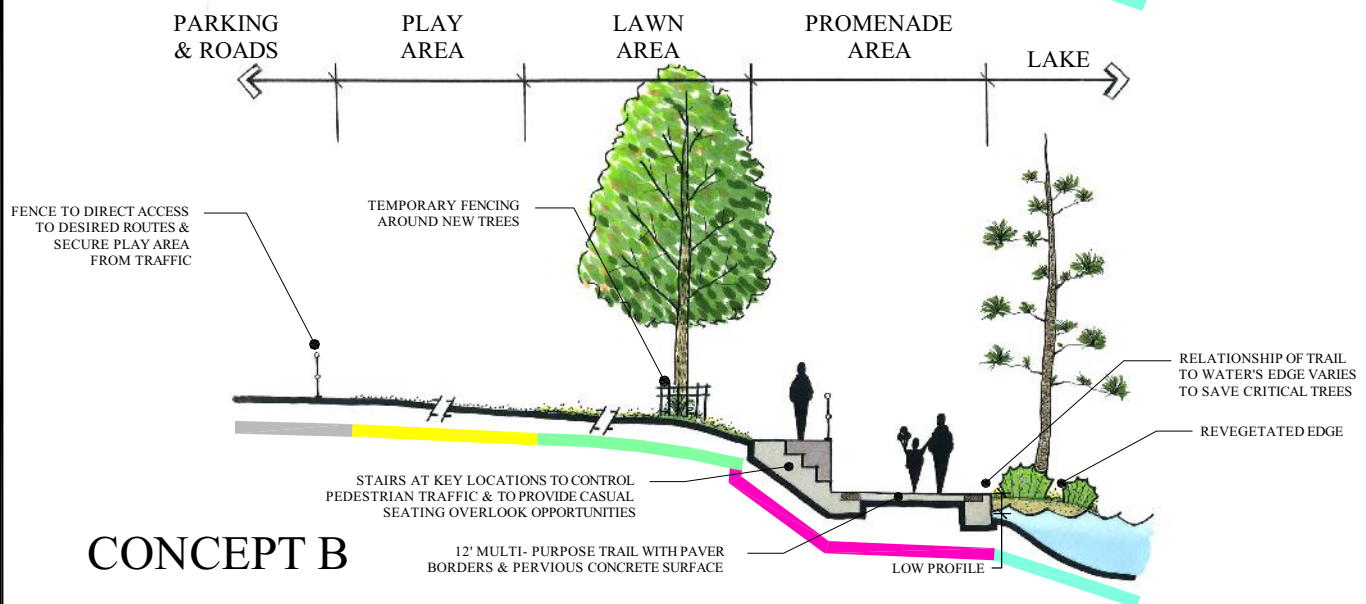
Figure 11



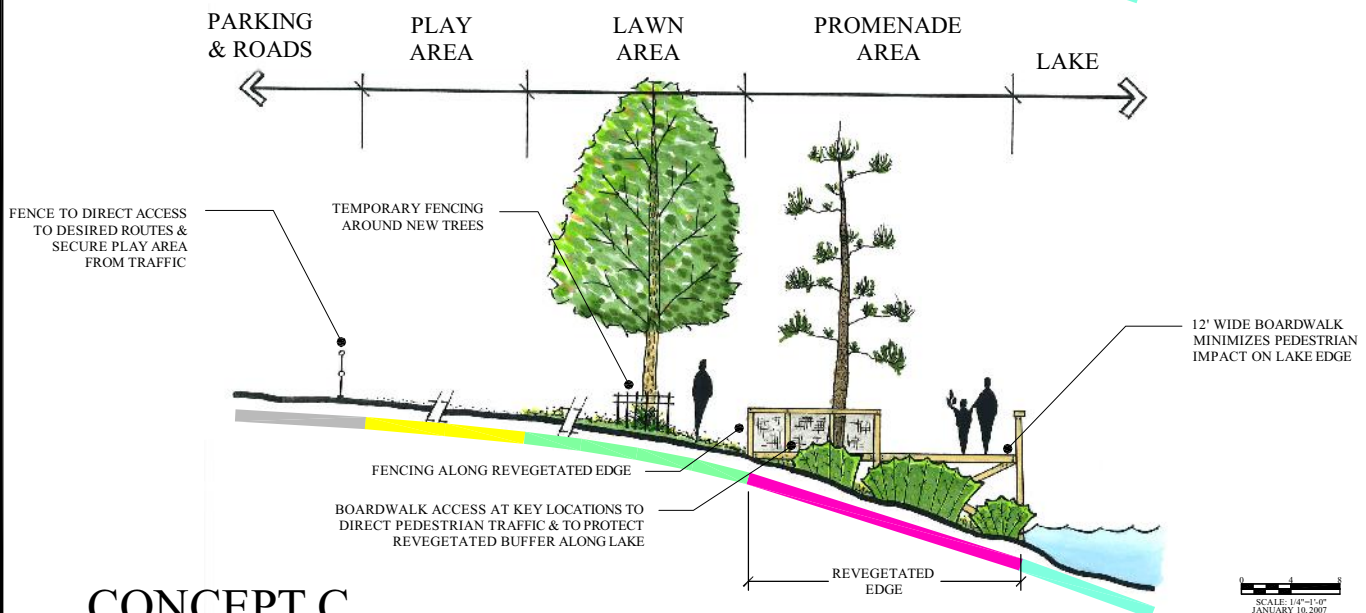
Figure 12



CONCEPT A

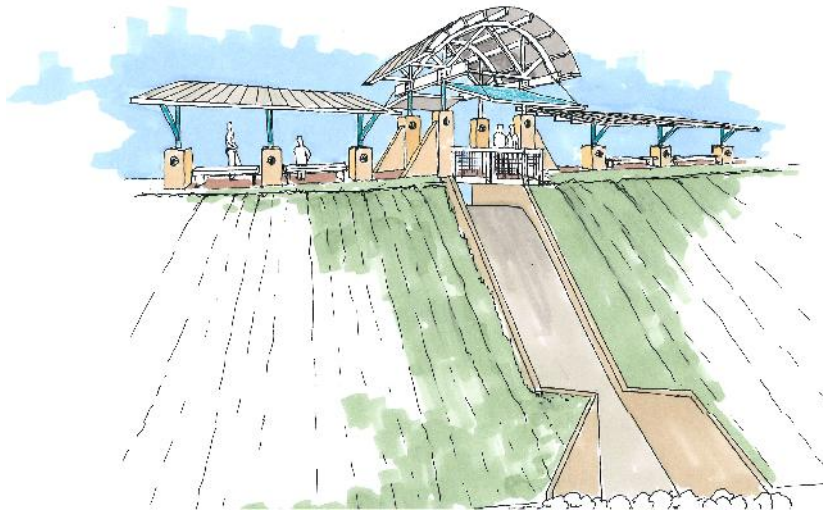


CONCEPT B



CONCEPT C

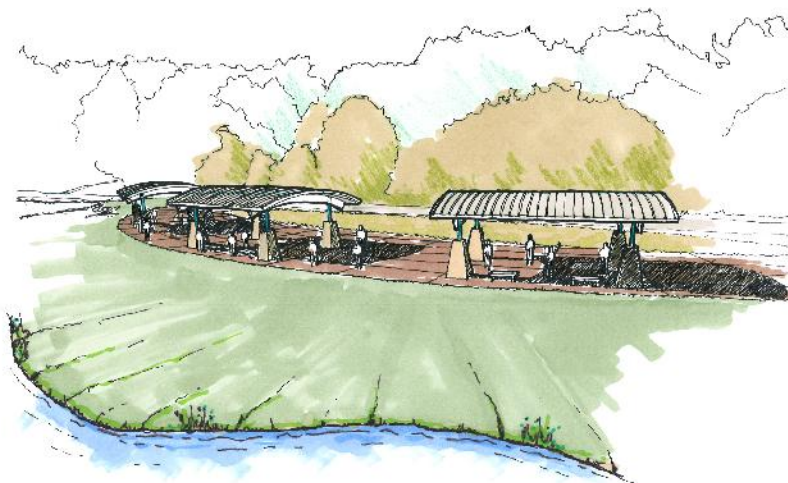
MASTER PLAN RHODES JORDAN PARK GWINNETT COUNTY, GEORGIA



SPILLWAY BRIDGE STRUCTURE



LAKE BOARDWALK STRUCTURE



LAKE OVERLOOK STRUCTURE

MASTER PLAN
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA

Preliminary Master Plan

Using the comments gathered in the previous meetings, Lose & Associates prepared a preliminary master plan and presented it on September 20, 2007.

5.1 Preliminary Master Plan Description

The meeting began with a quick review of what issues were discussed in the first meeting and how the group decided upon the layout of the preliminary master plan.

Next, the overall park design was presented (**Figure 15**). As in the first meeting, each element of the park was presented, noting all the changes that had been made.

Dog Park: The group expressed some concern that the parking area, which contained 29 spaces, was not large enough. Some discussion took place as to how to best maximize this area because the size of the detention pond, which had not yet been determined, would affect how much the parking lot could be expanded. It was decided that different options should be explored, to maximize the parking lot in the space already provided without compromising the size of the dog park. A restroom building was to be provided in this area as well.

Soccer Area: It was explained that since the last meeting, staff requests in this area re-arranged the fields and parking and added a maintenance facility in this area. It was also explained that in order to grade the soccer fields as the group requested, large retaining walls were needed both behind the fields, along the eastern property line, as well as along the front side of the fields, running along the entry road. To make this possible, the ingress/egress point directly across from the baseball restroom building had to be eliminated, resulting in one access point across from the softball complex, which serves both the entire parking area and the proposed maintenance facility. The access point that had been eliminated was replaced with a large staircase for pedestrian access. The group requested that because the two fields next to each other were to be graded on a single level, that the slope on the fields, which were graded with a cross slope of 1.25%, be increased to 2% to provide better drainage. A restroom/concession building was provided at the corner of the larger parking area with a plaza area. This larger parking area contains 240 spaces while the smaller parking area contains 152 spaces.

Baseball/Softball Area: The group discussed what to do with the existing handicapped parking area. It was agreed that the area should be redesigned to provide a more attractive entrance/drop off to this area. Everyone agreed that providing a facility sign with a flagpole and landscaping would provide a nice accent to the existing softball facility. Also presented was a small plaza area with two shade structures and some seat walls, located in the area of the existing batting cages. This location would provide a view through the trees out to the lake. The batting cages were moved to the next “spoke” of the wagon wheel, behind the existing playground. Sidewalk connections were added to access these areas.

Football Area: The group discussed the layout of the football bleachers. Because the existing press box is in good condition, they decided that replacing it with built in bleachers and a new press box would not be a viable option. Placing aluminum bleachers on both sides of the existing press box would be the best way to seat both home and visiting spectators on this side of the field. The existing football parking area was connected to the smaller existing parking lot adjacent to the Boy Scout building. This not only provided an additional ingress/egress point, but also provided a few more parking spaces. The group also decided that placing a shade pavilion at the paved overflow parking area was not necessary. The football field is accessed from this parking area with 5' sidewalks. A sidewalk connection was made from the existing main football parking area over to the existing bleacher pad as well.

Horseshoe Area: It was noted that there were ten horseshoe pits and two shuffleboard courts located at the tennis complex, in the area that had previously been graded for additional tennis courts. A 5' sidewalk connection was proposed, leading to a small shade pavilion. The group agreed that this was the best location for the horseshoe pits, but agreed that the two shuffleboard courts were not necessary. They agreed that replacing these shuffleboard courts with two more horseshoe pits would better accommodate horseshoe tournaments. Everyone also agreed that this area should be lit.

Teen facility: After much discussion, the group decided that the location for the teen facility would be best suited in the northern most section of the picnic area. The multipurpose trail loops around this area, making it visible to the trail users throughout the day. This area consisted of a plaza/drop off area leading into a 7500 square foot skate park. Branching off of the plaza area, which contains a small shade pavilion and some teen play equipment, is a half-court basketball court and one sand volleyball court. In addition to the teen area, a large octagon pavilion was provided in this area. The entire area is served by an 88 space parking lot.

Basketball Courts: The basketball courts were located away from the teen facility to provide the basketball program more convenient access between the outdoor courts and the one existing court inside the community center. Two different locations for the courts were presented. The group requested that the one court directly next to the community center be removed, as this area is used on a regular basis as an open lawn area. It was requested that this area be left grass, and to install sleeves for posts for badminton courts. The two full size courts across the parking lot from the community center was the preferred layout. The group requested that a small shade pavilion in a plaza area be located between the two courts.

Picnic Area: The existing playground was left in place. A large concessions building with a surrounding plaza area was located towards one end of the large parking lot. A series of 5' sidewalks and the multipurpose trail connect these two areas as well as two existing octagon pavilions, a relocated octagon pavilion, and a small lakeside rental pavilion. The pavilion that was relocated was done so to open up the point it was located on, which not only provided a large multi-purpose lawn area, but also provided a clear view to the senior center from the other side of the lake. This is important since the architecture of the senior center, though not a standard Gwinnett County design, is to be mimicked throughout this park. Two large 80' wide staircases were shown with four risers leading up to the playground area from the multipurpose trail, which was at lake level. It was noted that this area could be arranged to accommodate all

three promenade designs if desired (**Figure 13**). There was some concern expressed over the geese population taking over the playground area. It was suggested that buffer plantings be located along the edge of the lake in this area to deter geese as much as possible. The group also requested a dumpster pad in this area.

Multi-Purpose Trail: The trail provides three different loops of different lengths. One loop circles the picnic area (.9 miles), one circles the lake (1.1 miles), and one circles both the picnic and lake areas (1.8 miles). The group agreed that offering different options would best suit this program.

Additional Topics: The group requested a 5' sidewalk across the street from the overlook area, connecting the picnic area to the tennis center. Retaining walls were also requested in any area that had a 2:1 slope for maintenance reasons. This mainly affected the skate park and the octagon pavilion in this same area.

PROPOSED PARKING SUMMARY

PARK AREA	# OF SPACES
TEEN AREA	88
PASSIVE AREA	241
DOG PARK	29
LAKE OVERLOOK	20
SOCCER AREA	392
OVERFLOW	81
MAINTENANCE	81
TOTAL	854 SPACES

EXISTING PARKING SPACES: 799

TRAIL LENGTHS

LOOP	LENGTH (MILES)
LAKE	1.1
PICNIC	0.9
OUTER	1.8

PARK ACREAGE SUMMARY: 166.28 ACRES

- TEEN AREA**
- ° PARKING FOR 88
 - ° 7,500 SF SKATEBOARD AREA
 - ° PLAZA WITH TEEN SWINGS, GATHERING AREAS, ETC.
 - ° BASKETBALL (1/2 COURT)
 - ° SAND VOLLEYBALL (1 COURT)
 - ° RESTROOM
 - ° PICNIC PAVILION

- RENOVATED PASSIVE AREA**
- ° RE-ROUTE ROADS AND EXPAND PARKING TO CREATE DISTINCT PICNIC USE AREAS (LAKESIDE AND FOREST) AND TO ELIMINATE TRAFFIC CONFLICTS
 - ° PARKING FOR 241
 - ° RE-BUILD EXISTING PAVILION IN NEW LOCATION (AS NEEDED). THIS CREATES MORE USEABLE LAWN AND UNCLUTTERS FOREGROUND OF VIEWS TO SENIOR CENTER.
 - ° DEVELOP PROMENADE ALONG LAKE EDGE TO ADDRESS EROSION ISSUES AND TO ENHANCE VIEWS FROM ACROSS LAKE
 - ° DEVELOP CONCESSION & PLAZA AREA FOR LAKESIDE ACTIVITIES
 - ° DEVELOP BIKE, CANOE/PADDLEBOAT, RC BOAT RENTAL FACILITY

- EXISTING SENIOR CENTER**

- CITY LAKE**
- ° BANK STABILIZATION
 - ° GEYSER FOUNTAINS FOR VISUAL INTEREST
 - ° MAINTAIN FORESTED EDGES AS BACKDROPS
 - ° DRAMATIC BOARDWALK STRUCTURE AS ENTRY FROM RAILWAY TRAIL CONNECTION

- MULTI PURPOSE TRAIL NETWORK**
- ° 12' ASPHALT PATH IN MOST LOCATIONS
 - ° BOARDWALKS ACROSS WATER & WETLANDS
 - ° CONNECT EXISTING AND PROPOSED FACILITIES
 - ° ACCENTED PEDESTRIAN PARK ENTRIES (KIOSKS, SMALL PLAZAS, ETC.)

- DOG PARK**
- ° SEPARATE USE AREAS BASED ON DOG SIZE
 - ° IRRIGATED TURF IN OPEN AREAS
 - ° CANINE WATER FOUNTAINS
 - ° AGILITY EQUIPMENT
 - ° PROTECT SPECIMEN TREES WITH FENCING
 - ° SEPARATE E. PIKE ST. ENTRY AND PARKING FOR 29

- EXISTING TENNIS COMPLEX**
- HORSESHOES FACILITY**
- ° 10 HORSESHOES PITS
 - ° 2 SHUFFLEBOARD COURTS
 - ° SHADE PAVILION
- EXISTING AQUATICS COMPLEX AND COMMUNITY CENTER**
- ° ADD THREE FULL SIZE OUTDOOR BASKETBALL COURTS
- LAKE OVERLOOK**
- ° OVERLOOK STRUCTURE
 - ° LARGE PLAZA AREA
 - ° OPEN LAWN
 - ° PARALLEL PARKING FOR 20

- LAKE TRAIL**
- ° BOARDWALK TO MATCH OTHER NEW LAKE STRUCTURES
 - ° REMOVE INNER LANE OF EX. ROAD TO CREATE LAKE LOOP TRAIL

- MAINTENANCE FACILITY**

- EXISTING SOFTBALL COMPLEX**
- ° REDESIGNED DROP-OFF/HANDICAPPED PARKING AREA
 - ° RELOCATE BATTING CAGES AND STORAGE SHEDS
 - ° ADD PLAZA AREA WITH TWO SMALL PAVILIONS

- SOCCER COMPLEX**
- ° 3 FULL SIZE FIELDS
 - ° CONCESSIONS, RESTROOMS BLDG.
 - ° SPECTATOR PLAZA AREAS
 - ° PARKING FOR 392

- EXISTING BASEBALL COMPLEX**
- ° CONNECT TO TRAILS

- ENTRY ROAD**
- ° FOLLOW EXISTING HENSON ST. LAYOUT
 - ° REPLACE EXISTING GRAVEL PARKING AREA W/ PAVED OVERFLOW PARKING FOR 81

- EXISTING LAWRENCEVILLE WATER FACILITY**
- ° FUTURE EXPANSION OF WATER FACILITY COULD OCCUR

- EXISTING BOY SCOUT FACILITY**

- SPILLWAY STRUCTURE**
- ° BRIDGE EXISTING SPILLWAY WITH ICONIC STRUCTURE THAT ENHANCES PARK ENTRY EXPERIENCE

- EXISTING FOOTBALL AND BASEBALL FACILITY**
- ° CONNECT TO TRAILS
 - ° CONNECT EXISTING PARKING LOTS
 - ° ADD CONCRETE BLEACHERS AND PRESS BOX BUILT IN TO HILL SIDE



PRELIMINARY MASTER PLAN
RHODES JORDAN PARK
 GWINNETT COUNTY, GEORGIA

Final Master Plan and Opinion of Probable Cost

After the preliminary master plan was presented (**Figure 16**), the requested modifications were made to the plan and the opinion of probable cost was developed. The final master plan was presented on October 29, 2007.

6.1 Master Plan Description

Entrance Drive

As requested by the City of Lawrenceville, the entry drive will continue straight past the existing water treatment facility, following the existing Henson St. layout. The drive will continue around the 300' baseball field and follow the old Victor St. road bed, meeting up with the existing park road at the intersection of the community center drive.

Dog Park

The 2.36 acre dog park is accessed from E. Pike St. The entry drive meanders in to a parking area with 42 spaces. A small restroom building is located on the eastern side of the parking lot. Retaining walls are used in this area in order to maximize the size of the dog park while still providing enough room for the multi-purpose trail to be located between the parking lot and lake with a vegetative buffer at the lake's edge. There are numerous specimen trees in this area, which are enclosed in fencing within the dog park for root zone protection. A large section of the dog park is shaded under these trees with the additional areas primarily open. An "air lock" area will be the entrance to the dog park and will open to one area for small dogs and an area for large dogs, both of which will access an area for dogs of all sizes. Each gate will be located on a concrete pad to prevent erosion and wear.

Football Area

The football parking lot and the Boy Scout parking lot are combined to relieve the congestion caused by the single ingress/egress point of the existing football parking lot. Additionally, the existing gravel overflow parking lot that primarily serves the football area is replaced with a paved parking lot providing an additional 91 spaces. This parking lot is connected to the football area with a 5' concrete sidewalk.

Soccer Complex

Three regulation soccer fields are located in the southeastern corner of the property. Because of the steep grade in this area, the fields have been graded with retaining walls on the uphill and downhill sides. The parking provides 384 spaces for the three fields. Because of the close proximity and pedestrian access over to the softball area via raised crosswalks, these parking lots

can act as overflow parking for the softball/baseball complex. A concession/restroom building constructed in the standard Gwinnett design is located in the southeastern corner of the parking lot. A plaza area surrounds the structure and contains picnic tables for resting and gathering. Also located in this area is the maintenance yard situated straight back as you enter the soccer area. This maintenance area includes a large building and a large “yard” with storage bins, all enclosed in barbed wire fencing.

Baseball/Softball Area

The existing four field wagon wheel of various sized fields is located on the opposite side of the entry road from the soccer area. A lower plateau contains 2 larger fields. The existing handicapped parking area is removed and laid out in a way to better serve as a drop off area. Handicapped parking spaces are provided in this area. A small plaza area inside the drop off circle is provided to accent a softball/baseball facility sign, as well as a flagpole. Inside the softball area, the batting cages have been relocated to the northern “spoke” of the wagon wheel. A small plaza area with seat walls and two small pavilions is located in the area where the old batting cages were, providing views through the trees to the lake. This area is intended to be a gathering space for teams.

Community Center/ Tennis Area

In the community center area of the park, two full-sized basketball courts are located on the western side of the parking lot. A plaza with a seat wall enclosing the area on one end and a shade pavilion is provided between the two courts. Sleeves for badminton nets are located in the grassed area on the back side of the building. On the back side of the tennis area, in the area previously graded for additional tennis courts, 12 horseshoe pits and a shade pavilion are located. This area is accessible by 5’ sidewalks that wrap around each side of the adjacent pair of courts. This area is set up to accommodate horseshoe tournaments. The trailer that served as the tennis pro shop has been replaced with a restroom/pro shop building.

Picnic Area

The park road has been relocated in this area, moving it back away from the playground, which is to remain in its current location. A parking lot has been provided between the road and the playground to provide safer access to the playground and contains 234 spaces. A concessionaire facility is located just off one corner of the parking lot with a plaza area containing picnic tables and seat walls. This facility could be leased to a private group to serve the park. The two octagon pavilions in this area are to be replaced with new structures. The structure out on the “point” is to be moved back toward the concessionaire, providing a clear view of the senior center building from across the lake and providing an open lawn for general use. The other pavilion in this area will be reconstructed in its current location. A small rental facility is located on the lake at the eastern side of this picnic area with a boat ramp and courtesy dock for canoes and paddle boats. The promenade section of the multi-purpose trail will be provided along the lakes edge in this area. A large staircase leads up to the playground and pavilion which is to be separated from the trail with this staircase and a small retaining wall. To the north of this area is another smaller

parking lot serving another octagon pavilion which is to be reconstructed in its original location, as well as a restroom building which will serve this pavilion, a new pavilion and the teen area.

Teen Area

The teen area is located in the northern area of the park, beyond the smaller picnic area parking lot. The parking lot contains 86 parking spaces. The teen area consists of a large plaza area with a small shade pavilion as well as a hang out area with teen structures. This area leads into the 7500 square foot street themed skate park. A sidewalk leading off the plaza area connects to one half court basketball court and a sand volleyball court beyond that.

Overlook Area

A large plaza area with three small overlook pavilions is located just off the main park entry road across from the tennis drive. This area is accessed by about 20 parallel parking spaces and provides unabated views across the lake. While a large plaza area is provided, the area still contains large open lawn areas for picnicking and recreational activities.

Multi-Purpose Trail

In the Southwest corner of the park, near the dogpark, a pedestrian park entry plaza with seatwalls, signage, etc. would serve as a grand entrance and connection point, should the City extend its streetscape program down Pike St. A connecting trail winds through the specimen trees and around the dog park area to join to the park's main trail network. A spur winds down to the main park entry road to access the football area with the help of retaining walls. The main trail continues around the lake with a series of boardwalks in low lying areas and an iconic spillway structure. This structure is intended to draw people in from E. Crogan St., presenting the idea that there may be more to the park beyond what is directly visible from the street. The lake boardwalk structure at the north end of the lake provides a connection to the future rail trail. This structure provides a dramatic entrance from this neighboring trail. The section of the trail along the eastern edge of the lake will run along the old park road layout. The lakeside lane of the road will be removed and a 12' trail will be repaved along the remaining lane. A boardwalk is provided in this area for fishing access. An 8' spur providing access to the softball/baseball area branches off just beyond the end of the dam in this area as well. Another loop of the trail connects to this loop and wraps around the picnic and teen areas providing a longer trail experience. A third loop connects to this picnic area loop at its northern most point and continues through the woods, crosses the stream with a boardwalk bridge and connects to the tennis area. A 5' wide spur connects this loop to the community center area. Another 8' wide spur breaks off the loop in the overlook area and continues along the northern side of the entry road, connecting to the soccer area and continuing up beyond the soccer fields to E. Crogan St. Raised trail crossings are provided in most areas where the 12' multi-purpose trail crosses the main park road. This trail is to be a major attraction of the park; therefore, providing safe routes from any area of the park was a major design goal.

Lake Improvements

In order to accommodate the additional stormwater runoff, the existing spillway will need to be modified to accommodate approximately 3” of storage. It is also suggested that dredging occur in a few places where streams empty into the lake. A large aeration fountain, which serves as a dramatic focal point from many vantage points around the lake, is also shown.

PROPOSED PARKING SUMMARY	
PARK AREA	# OF SPACES
TEEN AREA	86
PASSIVE AREA	234
DOG PARK	42
LAKE OVERLOOK	70
SOCCER AREA	384
OVERFLOW	81
MAINTENANCE	3
SENIOR CENTER	76 (6 BUS)
COMMUNITY CENTER	297
TENNIS COMPLEX	81
FOOTBALL AREA	163
SOFTBALL AREA	193
	1660 SPACES

EXISTING PARKING SUMMARY	
PARK AREA	# OF SPACES
BOY SCOUT AREA	24
FOOTBALL AREA	133
SOFTBALL AREA	191
COMMUNITY CENTER	297
TENNIS AREA	81
PICNIC AREA	48
SENIOR CENTER	76 (6 BUS)
	850 SPACES

TRAIL LENGTHS	
LOOP	LENGTH (MILES)
LAKE	1.1
PICNIC	0.9
OUTER	1.8

PARK ACREAGE SUMMARY: 166.28 ACRES

- TEEN AREA**
- ° PARKING FOR 86
 - ° 7,500 SF SKATEBOARD AREA
 - ° PLAZA WITH TEEN SWINGS, GATHERING AREAS, ETC.
 - ° BASKETBALL (1/2 COURT)
 - ° SAND VOLLEYBALL (1 COURT)
 - ° RESTROOM
 - ° PICNIC PAVILION

- RENOVATED PASSIVE AREA**
- ° RE-ROUTE ROADS AND EXPAND PARKING TO CREATE DISTINCT PICNIC USE AREAS (LAKESIDE AND FOREST) AND TO ELIMINATE TRAFFIC CONFLICTS
 - ° PARKING FOR 234
 - ° RE-BUILD EXISTING PAVILION IN NEW LOCATION (AS NEEDED). THIS CREATES MORE USEABLE LAWN AND UNCLUTTERS FOREGROUND OF VIEWS TO SENIOR CENTER.
 - ° DEVELOP PROMENADE ALONG LAKE EDGE TO ADDRESS EROSION ISSUES AND TO ENHANCE VIEWS FROM ACROSS LAKE
 - ° DEVELOP CONCESSION & PLAZA AREA FOR LAKESIDE ACTIVITIES
 - ° DEVELOP BIKE, CANOE/PADDLE BOAT, RC BOAT RENTAL FACILITY

EXISTING SENIOR CENTER

- CITY LAKE**
- ° BANK STABILIZATION
 - ° GEYSER FOUNTAINS FOR VISUAL INTEREST
 - ° MAINTAIN FORESTED EDGES AS BACKDROPS
 - ° DRAMATIC BOARDWALK STRUCTURE AS ENTRY FROM RAILWAY TRAIL CONNECTION

- MULTI PURPOSE TRAIL NETWORK**
- ° 12" ASPHALT PATH IN MOST LOCATIONS
 - ° BOARDWALKS ACROSS WATER & WETLANDS
 - ° CONNECT EXISTING AND PROPOSED FACILITIES
 - ° ACCENTED PEDESTRIAN PARK ENTRIES (KIOSKS, SMALL PLAZAS, ETC.)

- DOG PARK**
- ° SEPARATE USE AREAS BASED ON DOG SIZE
 - ° IRRIGATED TURF IN OPEN AREAS
 - ° CANINE WATER FOUNTAINS
 - ° AGILITY EQUIPMENT
 - ° PROTECT SPECIMEN TREES WITH FENCING
 - ° SEPARATE E. PIKE ST. ENTRY AND PARKING FOR 42

- EXISTING TENNIS COMPLEX**
- ° NEW RESTROOM BUILDING W/ OFFICE SPACE
- HORSESHOES FACILITY**
- ° 12 HORSESHOE PITS
 - ° SHADE PAVILION
- EXISTING AQUATICS COMPLEX AND COMMUNITY CENTER**
- ° ADD TWO FULL SIZE OUTDOOR BASKETBALL COURTS
 - ° ADD TWO BADMINTON COURTS
- LAKE OVERLOOK**
- ° OVERLOOK STRUCTURE
 - ° LARGE PLAZA AREA
 - ° OPEN LAWN
 - ° PARALLEL PARKING FOR 20
- LAKE TRAIL**
- ° BOARDWALK TO MATCH OTHER NEW LAKE STRUCTURES
 - ° REMOVE INNER LANE OF EX. ROAD TO CREATE LAKE LOOP TRAIL
- MAINTENANCE FACILITY**

- EXISTING SOFTBALL COMPLEX**
- ° REDESIGNED DROP-OFF/HANDICAPPED PARKING AREA
 - ° RELOCATE BATTING CAGES AND STORAGE SHEDS
 - ° ADD PLAZA AREA WITH TWO SMALL PAVILIONS
- SOCCER COMPLEX**
- ° 3 FULL SIZE FIELDS
 - ° CONCESSIONS, RESTROOMS BLDG.
 - ° SPECTATOR PLAZA AREAS
 - ° PARKING FOR 384

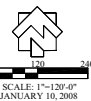
- EXISTING BASEBALL COMPLEX**
- ° CONNECT TO TRAILS
- ENTRY ROAD**
- ° FOLLOW EXISTING HENSON ST. LAYOUT

- EXISTING LAWRENCEVILLE WATER FACILITY**
- ° FUTURE EXPANSION OF WATER FACILITY COULD OCCUR

EXISTING BOY SCOUT FACILITY

- SPILLWAY STRUCTURE**
- ° BRIDGE EXISTING SPILLWAY WITH ICONIC STRUCTURE THAT ENHANCES PARK ENTRY EXPERIENCE
 - ° WEIR TO BE ADJUSTED TO ALLOW FOR REVISED DETENTION VOLUME

- EXISTING FOOTBALL AND BASEBALL FACILITY**
- ° CONNECT TO TRAILS
 - ° CONNECT EXISTING PARKING LOTS
 - ° REPLACE EXISTING GRAVEL PARKING AREA W/ PAVED OVERFLOW PARKING FOR 81



MASTER PLAN

RHODES JORDAN PARK

GWINNETT COUNTY, GEORGIA

Gwinnett County Recreation Authority Presentation

On January 10th, 2008, the final master plan (**Figure 16**), lake area structures (**Figure 14**) and lake edge treatment options (**Figure 13**) were presented, along with a summary of costs associated with the recommended phasing schedule (**Appendix C**). Following the presentation, the Authority voted to approve the plan.

Cited Resources

8.1 Resource Mapping

GIS and Aerial Photography. Digital format. Provided by Gwinnett County Department of Community Services, Planning Development and Special Operations.

United States Department of Agriculture Soil Conservation Service. An Update for the Soil Survey of Gwinnett County, Georgia. 1988.

United States Department of the Interior. “United States Geological Survey 7.5 Minute Series Topographic Mapping.”

Appendix A

Subsurface Exploration Report

REPORT OF

**PRELIMINARY GEOTECHNICAL EXPLORATION
ON
RHODES JORDAN PARK EXPANSION
EAST CROGAN STREET & VICTOR STREET
LAWRENCEVILLE, GWINNETT COUNTY, GEORGIA**

FOR

**MR. REX SCHUDER, ASLA
PARKS AND RECREATION PROJECT ADMINISTRATOR
FACILITIES PLANNING DEPARTMENT
75 LANGLEY DRIVE
LAWRENCEVILLE, GEORGIA 30045**

PROJECT NO. 2007.1187.01



UNITED CONSULTING



We're here for you

UNITED CONSULTING

March 29, 2007

Mr. Rex Schuder, ASLA
Parks and Recreation Project Administrator
Facilities Planning Department
75 Langley Drive
Lawrenceville, Georgia 30045

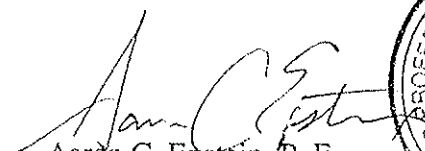
Re: Preliminary Geotechnical Exploration
Rhodes Jordan Park Expansion
E. Crogan Street @ Victor Street
Lawrenceville, Gwinnett County, Georgia
Project No. **2007.1187.01**

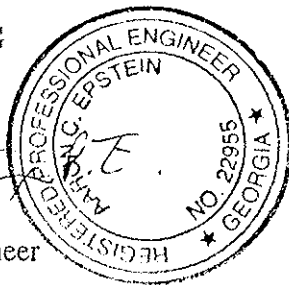
Dear Mr. Schuder:


United Consulting has completed a preliminary geotechnical exploration at the proposed Rhodes Jordan Park expansion in Gwinnett County, Georgia. We appreciate the opportunity to assist you with this project. Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

UNITED CONSULTING


Aaron C. Epstein, P. E.
Senior Geotechnical Engineer




Chris L. Roberds, P.G.
Senior Executive Vice President

ACE/CLR/RD/zc

h:\geoenvir\reports\2007\2007.1187.01

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UNITED CONSULTING	8

FIGURES

Figure 1 Boring Location Plan

APPENDIX

General Notes/Narrative of Drilling Operations
Boring Logs (21)
Test Pit Logs (2)
Exploration Procedures



UNITED CONSULTING

EXECUTIVE SUMMARY

A Preliminary Geotechnical Exploration has been completed on the proposed **Rhodes Jordan Park expansion site in Lawrenceville, Gwinnett County, Georgia**. The results of our findings are briefly summarized below. The text of this report should be reviewed for discussion of these items.

1. Below the initial topsoil layer and possibly some localized disturbed soils within the upper 2 feet or so, the borings and test pit TP-2 encountered undisturbed residual soils. Test pit TP-1, which was excavated within the kudzu covered area in the southern central area of the site encountered fill containing broken concrete blocks and concrete debris to a depth of about 4.5 feet. United Consulting recommends excavating additional test pits to further evaluate the extent and condition of the fill.
2. Shallow partially weathered rock (PWR) and rock (auger refusal) was encountered in several of the borings, primarily in the northeastern area of the site, at depths ranging from about 6 to 22 feet. The extent of difficult excavation (ripping and blasting) will depend on the final grading plan and utility locations and depths. However, difficult excavation conditions should be anticipated for excavations greater than about 6 to 10 feet in the northeastern area of the site.
3. No groundwater was encountered in the borings and test pits. Therefore, shallow groundwater is not generally expected to be problematic for this project.
4. The residual soils encountered at the Project Site should be generally suitable for re-use as engineered fill. Organic topsoil and existing fill containing debris or other deleterious materials would not be considered suitable for reuse as engineered fill. However, depending on the final development plans, it might be possible to waste some of these unsuitable materials with deep fills in non-structural areas.
5. Since the development plans have not been finalized, our recommendations must be considered preliminary. Once the development plans are further along and this information becomes available, United Consulting should be consulted to provide a final geotechnical exploration, specific to the proposed development. Additional subsurface exploration and engineering analyses will be required to finalize our preliminary recommendations.



PROJECT INFORMATION

The project site consisted of a roughly 1,600 feet long by 500 feet wide, roughly rectangular tract located on the northwestern edge of the existing Rhodes Jordan Park. Most of the site was heavily wooded with small to medium size trees and localized areas of thick underbrush or kudzu. In particular, a significant kudzu covered area was noted in the south-central area of the site. During site clearing operations to provide access for the drill rig, some construction debris, possibly remnants of a former structure, was noted within the kudzu covered area. Additionally, a drainage gulley was observed extending from the kudzu area and draining toward the southwestern property boundary. A small creek meanders to the west along the northern edge of the site. Topography at the site generally slopes down to the northwest, west and southwest from a knoll located near the center of the northeastern property boundary. Total relief across the site appears to be roughly 40 feet.

Plans for the project site are in the preliminary stage; however, we understand that the site is being considered for grading and developing the site into a useable recreation area within the park. Based on our visual observations and the aerial photographs with preliminary aerial topographic information, which was provided by the client, we envision that cuts and fills ranging up to about 20 feet might be required to mass grade the site.

PURPOSE

The purpose of this preliminary exploration was to determine the general type and condition of the subsurface materials at the Project Site, and to provide preliminary recommendations and general information regarding soil types, fill availability and suitability, depth to groundwater and rock, and other geotechnical considerations that may impact site development plans.

SCOPE

The scope of our geotechnical exploration has included the following items:

1. Drilling twenty-one Standard Penetration Test (SPT) borings and excavating two test pits to assess the general nature and condition of the subsurface soils;
2. An examination of soil samples obtained during our field exploration;
3. Evaluating the existing soil conditions with respect to the proposed construction; and
4. Preparing this report to document the results of our field-testing program, engineering analysis and preliminary recommendations.



Subsurface Conditions

Below an initial layer of topsoil and/or 1 to 2 feet of fill or cultivated soils, each of the borings, except B-21 encountered residual soils typical of the Piedmont Physiographic Province. Boring B-21 in the southern corner of the site encountered about 2 feet of disturbed soils or possible fill soils prior to encountering residual soils.

The residual soils were generally classified as sand with varying amounts of silt, clay and traces of mica; or silt with varying amounts of sand and clay. The Standard Penetration Test N-values in the residual soils ranged from 2 to 40 blows per foot (bpf). Low consistency soils with N-values of 5 bpf or less were occasionally encountered within the upper 2 feet or so. Below the upper few feet, the N-values were 6 bpf or greater.

Partially weathered rock (PWR) was encountered in borings B-14 and B-16 at a depth of about 6 feet. Auger refusal, likely due to rock, occurred in borings B-1, B-2, B-3, B-13, B-14, and B-16. The depth to auger refusal ranged from 9 feet to 13 feet in each of these borings, except B-3, in which auger refusal occurred at a depth of 22 feet.

Test pits TP-1 and TP-2 were excavated within the kudzu covered area where some scattered construction debris was noted during site clearing to provide access for the drill rig. Test pit TP-1 encountered about 4.5 feet of fill containing significant amounts of broken concrete blocks and concrete debris. TP-2 encountered residual soils below the kudzu and topsoil layer. Each of the test pits were terminated in residual soils at depths of 8 feet and 5 feet, respectively.

No groundwater was encountered in the borings or test pits at the time of drilling and excavation. Additionally, borings B-5 through B-12 and B-19 through B-21 were left open for at least 24 hours and no groundwater was noted.

Groundwater levels should be anticipated to fluctuate with the change of seasons, during periods of very low or high precipitation, or due to changes in the floodplain or watershed upstream from the area. Stabilized groundwater levels are typically a few feet higher than the groundwater levels encountered at the time of excavation. For a more detailed description of the conditions encountered in the test pits, please refer to the attached test pit logs and subsurface profiles.

DISCUSSION AND PRELIMINARY RECOMMENDATIONS

The following preliminary recommendations are based on our understanding of the proposed construction, the data obtained from our soil test borings and our experience with soils and subsurface conditions similar to those encountered at this site.

Since development plans have not been finalized the following discussions and recommendations must be considered preliminary. Once the design drawings are finalized,



additional subsurface exploration and engineering analyses should be performed, particularly if buildings, structures, pavements, or underground utilities are planned.

Existing Fill Evaluation

Below the initial topsoil layer and possibly some localized disturbed soils within the upper 2 feet or so, the borings and test pit TP-2 encountered undisturbed residual soils. Test pit TP-1, which was excavated within the kudzu covered area in the southern central area of the site encountered fill containing broken concrete blocks and concrete debris to a depth of about 4.5 feet.

For construction over an undocumented fill and/or previously developed site, the owner must assume the risk of greater than normal settlement due to possible presence of burial pits, soft soils, or unsuitable materials within the fill. For this site, the extent of the existing fill generally appears to be localized to the vicinity of the open kudzu covered area in the south central area of the site. However areas of deeper fill and/or remnants of prior construction could be present between or away from the areas explored. SPT borings alone are not well suited to evaluate existing fill. The only true way to determine the condition of an existing fill is to completely remove and replace the fill as engineered fill.

United Consulting recommends that the final geotechnical exploration include excavating additional test pits to further evaluate the condition and extent of the fill at the project site. United Consulting also recommends that the project budget include contingency funds in the event that soft soils, buried trash, or other unsuitable materials requiring removal are encountered during construction.

Difficult Excavation

Partially weathered rock (PWR) was encountered in borings B-14 and B-16 at a depth of about 6 feet. Auger refusal, likely due to rock, occurred in borings B-1, B-2, B-3, B-13, B-14, and B-16. The depth to auger refusal ranged from 9 feet to 13 feet in each of these borings, except B-3, in which auger refusal occurred at a depth of 22 feet. In general, the shallow PWR and rock appear to be present below the northeastern corner of the site.

Conventional scrapers and loaders can generally excavate soils. PWR typically requires loosening by ripping with large dozers pulling single tooth rippers in mass excavation or blasting in confined (trench) excavation. Relatively sound, massive, rock typically requires blasting for removal in mass or trench excavation. The extent of difficult excavation conditions at this site will depend on the final grading plan and utility locations and depths.

Difficult excavation conditions associated with PWR and/or rock should be anticipated in localized areas for excavations greater than about 6 to 10 feet or so, particularly northeastern area of the site. However, excavation techniques will vary based on the weathering of the materials, fracturing and jointing in the rock, and the overall stratigraphy of the feature. Actual field conditions usually display a gradual weathering progression with poorly defined and uneven boundaries between layers of different materials.



We note that subsurface conditions in the Piedmont Physiographic Province can vary considerably over relatively short horizontal distances and that pinnacles or boulders of PWR or rock may be encountered between or away from our boring locations at shallower depths than indicated by the borings.

Groundwater Considerations

No groundwater was encountered in the borings and test pits. Shallow groundwater is not expected to be significantly problematic at this site. Depending on the weather conditions at the time of construction, shallow water might be present in the low areas of the site, particularly in and around the existing creek and drainage features.

Earthwork

The residual soils encountered at the Project Site should be generally suitable for re-use as engineered fill. Often, excavated soils do not have moisture content values within the moisture content range required for proper compaction. In general, soils similar to those encountered at the site generally do not present difficulties in compaction, but are susceptible to saturation from rainfall. We, therefore, recommend that the contractor be equipped to control moisture by both wetting and drying soils.

Depending on the planned development and grading plan, some ripped PWR and/or blasted rock fragments can be re-used and mixed into engineered fill provided that they are suitably pulverized and mixed with soil in order to fill voids between the rock pieces. A heavy compactor (Caterpillar 815 or larger) may be required to pulverized excavated blocks of dense soil or PWR. If blast rock is to be used as engineered fill on the site, we suggest the spacing of the blasting holes be decreased in order to minimize the size of blast rock material. Particle size and placement will be a function of the character of the excavated material and its intended usage. We would be happy to consult regarding this when the intended usage has been decided upon.

Organic topsoil and existing fill containing debris or other deleterious materials would not be considered suitable for reuse as engineered fill. However, depending on the final development plans, it might be possible to waste some of these unsuitable materials with deep fills in non-structural areas.

LIMITATIONS

This report is for the exclusive use of Gwinnett County, and the designers of the project described herein, and may only be applied to this specific project. Our conclusions and recommendations have been prepared using generally accepted standards of Geotechnical Engineering practice in the State of Georgia. No other warranty is expressed or implied. Our firm is not responsible for conclusions, opinions or recommendations of others.



The right to rely upon this report and the data within may not be assigned without UNITED CONSULTING'S written permission.

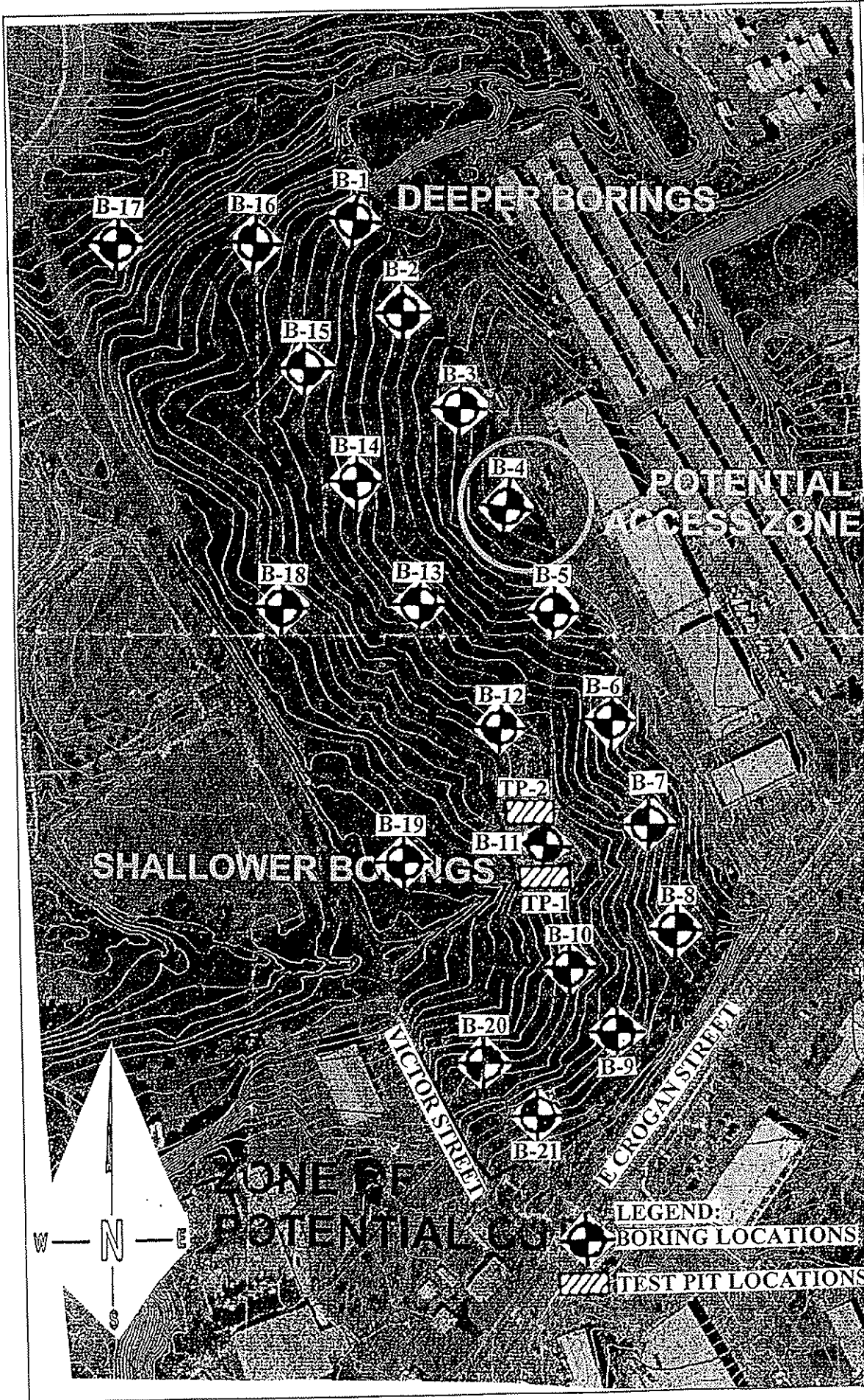
The scope of this evaluation was limited to an evaluation of the load-carrying capabilities and stability of the subsoils. Oil, hazardous waste, radioactivity, irritants, pollutants, molds, or other dangerous substance and conditions were not the subject of this study. Their presence and/or absence is not implied or suggested by this report, and should not be inferred.


Our conclusions and recommendations are based upon design information furnished us, data obtained from the previously described exploration and testing program and our experience. They do not reflect variations in subsurface conditions that may exist intermediate of our borings and in unexplored areas of the site. Should such variations become apparent during construction, it will be necessary to re-evaluate our conclusions and recommendations based upon "on-site" observations of the conditions.

If the design or location of the project is changed, the recommendations contained herein must be considered invalid, unless our firm reviews the changes and our recommendations are either verified or modified in writing. When design is complete, we should be given the opportunity to review the grading plan, and applicable portions of the specifications to see if they are consistent with the intent of our recommendations.

UNITED CONSULTING





SCALE: NTS		DATE: 02/28/2007	PROJECT NO: 2007.1187.01	TITLE: BORING AND TEST PIT LOCATION PLAN RHODES JORDAN PARK—GWINNETT COUNTY, GA	 UNITED CONSULTING 625 Holcomb Bridge Road, Norcross, GA 30071 Tel. 770-209-0029 FAX 770-582-5900 www.unitedconsulting.com	FIG. 1
PREPARED: LR		CHECKED:	REVISIONS:			
CLIENT: GWINNETT COUNTY DEPARTMENT OF ADMINISTRATIVE						

GENERAL NOTES

The soil classifications noted on the Boring Logs are visual classifications unless otherwise noted. Minor constituents of a soil sample are termed as follows:

Trace	0 - 10%
Some	11 - 35%
Suffix "y" or "ey"	36 - 49%

LEGEND



Split Spoon Sample obtained during Standard Penetration Testing



Relatively Undisturbed Shelby Tube Sample



Groundwater Level at Time of Boring Completion



Groundwater Level at 24 hours (or as noted) after Termination of Boring

w Natural Moisture Content

LL Liquid Limit

PL Plastic Limit Atterberg Limits

PI Plasticity Index

PF Percent Fines (Percent Passing #200 Sieve)

γ_d Dry Unit Weight (Pounds per Cubic Foot or PCF)

γ_m Moist or In-Situ Unit Weight (PCF)

γ_{sat} Saturated Unit Weight (PCF)

BORING LOG DATA AND NARRATIVE OF DRILLING OPERATIONS

The test borings were made by mechanically advancing helical hollow stem augers into the ground. Samples were covered at regular intervals in each of the borings following established procedures for performing the Standard Penetration Test in accordance with ASTM Specification D-1586. Soil samples were obtained with a standard 1.4" I.D. x 2.0" O.D. split barrel sampler. The sampler is first seated 6" to penetrate any loose cuttings and then driven an additional foot with the blows of a 140 pound hammer freely falling a distance of 30." The number of blows required to drive the sampler each six inches is recorded on the Boring Logs. The total number of blows required to drive the sampler the final foot is designated the "standard penetration resistance." This driving resistance, known as the "N" value, is a measure of the relative density of granular soils and is an indication of the consistency of cohesive deposits.

The following table describes soil consistencies and relative densities based on standard-penetration resistance values (N) determined by the Standard Penetration Test.

	"N"	Consistency
Clay and Silt	0-2	Very Soft
	3-4	Soft
	5-8	Firm
	9-15	Stiff
	16-30	Very Stiff
	Over 31	Hard
	"N"	Relative Density
Sand	0-4	Very Loose
	5-10	Loose
	10-19	Firm
	20-29	Medium Dense
	30-49	Dense
	50+	Very Dense



UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

Sheet 1 of 1

BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-2

PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/26/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: L.R.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES				NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	
	7" - TOPSOIL	0					No groundwater encountered at time of boring
	Sand-silty, some clay, trace mica, root hair and rock fragments; loose; brown- tan-red (Residual)		1		1-3-5	10	
	Silt-sandy, trace mica, clay, root hair and rock fragments; stiff; red-brown-gray	5	2		5-6-8	10	
	-no root hair; dense; tan-gray		3		9-19-13	14	
	-some silt; firm; brown-gray	10	4		8-7-11	6	
	AUGER REFUSAL AT 12'						
		15					
		20					
		25					
		30					
		35					
		40					

BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-4

PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/26/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: L.R.

[illegible]

BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-6

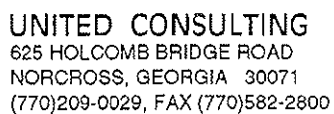
PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/23/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: G.I.O.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES					NOTES	
			NO.	TYPE	BLOWS/6"	RECOV.	W%		
	5" - TOPSOIL	0						No groundwater encountered at time of boring or after 24 hours	
	Silt-some sand, trace mica; firm; red- brown (Residual) -stiff		1		2-3-4	12			
			5	2		4-6-8	18		
				3		4-5-6	16		
			10	4		3-5-6	13		
	Sand-trace silt and weathered rock fragments; medium dense; orangish brown								
		15	5		9-12-15	18			
	Silt-trace sand and mica; stiff; grayish orange-brown -moist								
		20	6		5-5-8	18			
		25	7		2-4-6	18			
	BORING TERMINATED AT 25'								
		30							
		35							
		40							

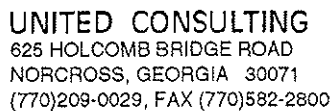


BORING NO.: B-8

DATE: 02/23/07

LOGGED BY: G.I.O.






No groundwater encountered
at time of boring or after 24
hours



BORING NO.: B-10

DATE: 02/23/07

LOGGED BY: G.I.O.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES					NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	W%	
	3" - TOPSOIL	0						
	Silt-sandy, some clay, trace mica; stiff; red-brown (Residual)		1		2-5-7	15		
	-trace quartz and weathered rock fragments; very stiff							
		5	2		8-10-12	16		
			3		6-12-13	15		
	-some sand							
		10	4		5-7-9	18		
	-firm							
		15	5		2-3-5	18		
	BORING TERMINATED AT 15'							
		20						
		25						
		30						
		35						
		40						

No groundwater encountered
at time of boring or after 24
hours



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Sheet 1 of 1

BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-11

PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/26/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: G.I.O.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES				NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	
	4" - TOPSOIL	0					No groundwater encountered at time of boring or after 24 hours
	Silt-some sand, trace clay and mica; firm; reddish brown (Residual)		1		2-2-6	10	
	-stiff		2		3-7-8	15	
		5					
	-very stiff		3		4-5-11	16	
	-sandy, trace weathered rock fragments; orange-brown		4		10-10-12	18	
		10					
	Sand-some silt, trace weathered rock fragments; firm; orange-brown		5		3-7-4	16	
		15					
	BORING TERMINATED AT 15'						
		20					
		25					
		30					
		35					
		40					



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BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-13

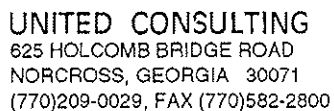
PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/26/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: L.R.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES				NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	
	7" - TOPSOIL	0					No groundwater encountered at time of boring
	Silt-clayey, trace sand, mica, root hair and rock fragments; loose; red-brown (Residual)		1		2-3-5	10	
	-some clay, trace sand, no rock fragments; stiff; red-brown	5	2		6-8-5	15	
	-trace clay; orange-brown-black		3		2-7-4	18	
	Sand-silty, trace mica, clay and rock fragments; firm; tan-red-brown	10	4		3-7-9	18	
	AUGER REFUSAL AT 13'						
		15					
		20					
		25					
		30					
		35					
		40					



BORING NO.: B-14

DATE: 02/26/07

LOGGED BY: L.R.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES					NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	W%	
	8" - TOPSOIL	0						-Grinding from 5' to 6'
	Silt-clayey, trace sand, mica, roots (1/4" diameter), root hair and rock fragments; firm; red-brown (Residual)		1		2-3-3	12		
	Sand-silty, trace mica, clay, root hair and rock fragments; firm; tan-gray		2		4-6-11	14		
		5						
	Partially Weathered Rock sampled as Sand-some rock fragments, trace silt, mica and clay; gray		3		50/3	3		
	-some silt; gray-brown-orange							
			4		25-50/2	5		
		10						
	AUGER REFUSAL AT 10'							
								No groundwater encountered at time of boring
		15						
		20						
		25						
		30						
		35						
		40						

BORING LOG

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT ADMINISTRATION

BORING NO.: B-18

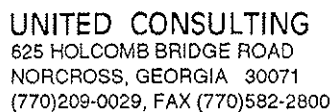
PROJECT NAME: RHODES JORDAN PARK EXTENSION

DATE: 02/26/07

JOB NO.: 2007.1187-01 DRILLER: MARK/BRANDON RIG: CME-550

LOGGED BY: L.R.

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES					NOTES
			NO.	TYPE	BLOWS/6"	RECOV.	W%	
	6" - TOPSOIL	0						No groundwater encountered at time of boring
	Silt-clayey, trace sand, mica and root hairs; stiff; red-brown (Residual)		1		3-4-6	14		
	Sand-silty, some clay, trace mica and rock fragments; firm; orange-tan		2		8-5-9	18		
		5						
	Silt-sandy, trace mica and clay; very stiff; red-tan-brown		3		4-8-9	14		
	-stiff		4		4-6-7	8		
		10						
	BORING TERMINATED AT 10'							
		15						
		20						
		25						
		30						
		35						
		40						



LOGGED BY: G.I.O.

[illegible]



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Sheet 1 of 1

LOG OF TEST PIT

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT OF ADMINISTRATION TEST PIT NO.: TP - 1
PROJECT NAME: RHODES JORDAN PARK EXTENSION JOB NO.: 2007.1187-01 DATE: 02/23/07

ELEV.	DESCRIPTION	DEPTH in FEET	NOTES
	4" - TOPSOIL	0	Test Pit was excavated at the edge of a drainage gully in the center of the Kudzu covered area.
	Silt-some clay and sand; reddish brown (Fill)		
	Silt-clayey, significant broken blocks and concrete debris dark brown		
		2	
		4	
	Silt-some sand and clay; orange-brown (Residual)		
		6	
	-sandy, trace quartz fragments; yellowish tan		
		8	
	TEST PIT TERMINATED AT 8'		
		10	
		12	
		14	
		16	



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Sheet 1 of 1

LOG OF TEST PIT

CONTRACTED WITH: GWINNETT COUNTY DEPARTMENT OF ADMINISTRATION TEST PIT NO.: TP - 2
PROJECT NAME: RHODES JORDAN PARK EXTENSION JOB NO.: 2007.1187-01 DATE: 02/23/07

ELEV.	DESCRIPTION	DEPTH in FEET	NOTES
	3" - TOPSOIL	0	Excavated 60' North of TP-1 within the open Kudzu covered areas.
	Silt-some sand, trace mica; red-brown (Residual)		
	-some quartz fragments; orange-brown	2	
		4	
	TEST PIT TERMINATED AT 5'		
		6	
		8	
		10	
		12	
		14	
		16	

EXPLORATION PROCEDURES

Twenty-one borings were drilled and two test pits were excavated at the site at the approximate locations shown on the Boring Location Plan (Figure 1) in the Appendix. Soil test borings were performed in general accordance with ASTM D 1586. A narrative of field operations, soil classification information and a legend for symbols used on the Boring Logs are included on the Appendix tab page of this report. Soil samples obtained were examined by a geotechnical engineer and classified generally following the visual-manual procedure in ASTM D 2488-90.

The boring locations were determined by using a tape measure and estimating right angles from existing site features. An aerial photograph with the site boundary outlined and showing aerial run topography was provided by the client via email and was used as a guide to lay out the borings. As such, the boring locations should be considered very approximate.

Important Information About Your Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention.* Proper implementation of the recommendations conveyed in this report will *not of itself* be sufficient to prevent mold from growing in or on the structure involved.

Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



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Appendix B

- Final opinion of Probable Cost
- Final Opinion of Probable Cost – Recommended
Phase One Development
 - Phasing Summary Memo
 - Intersection Detail

Rhodes Jordan Park Phase I

Opinion of Probable Costs-11-5-07

Item	Qty.	Unit	\$/Unit	Total Cost
OVERALL SITE WORK				
Mass grading	8265	cy	\$ 3.50	\$ 28,927.50
Heavy clearing	1.03	ac	\$ 6,000.00	\$ 6,180.00
Erosion control	1	ls	\$ 90,000.00	\$ 90,000.00
Storm drainage	1	ls	\$ 90,000.00	\$ 90,000.00
Road demolition	1	ls	\$ 10,000.00	\$ 10,000.00
Concrete spillway adjustment	1	ls	\$ 7,500.00	\$ 7,500.00
Irrigation (Lake pump station)	1	ls	\$ 20,000.00	\$ 20,000.00
			SUBTOTAL	\$ 232,607.50
ENTRY ROAD				
Heavy duty asphalt drive lanes	92000	sf	\$ 4.00	\$ 368,000.00
Concrete curb and gutter	6800	lf	\$ 12.00	\$ 81,600.00
Raised crosswalks	2	ea	\$ 7,000.00	\$ 14,000.00
Directional signs	6	ea	\$ 500.00	\$ 3,000.00
Landscaping	1	ls	\$ 50,000.00	\$ 50,000.00
			SUBTOTAL	\$ 516,600.00
MULTI-USE TRAIL				
12' asphalt trail (includes paving picnic area lake frontage, but not building promenade as noted in overall opinion of probable costs)	4600	lf	\$ 45.00	\$ 207,000.00
12' asphalt trail repaving	11000	sf	\$ 5.00	\$ 55,000.00
Plaza area development	1	ls	\$ 50,000.00	\$ 50,000.00
Boardwalks	950	lf	\$ 550.00	\$ 522,500.00
Boardwalk abutment	10	ea	\$ 4,000.00	\$ 40,000.00
Spillway bridge structure	1	ls	\$ 250,000.00	\$ 250,000.00
Lake boardwalk structure	1	ls	\$ 200,000.00	\$ 200,000.00
Lake fountain element	1	ls	\$ 10,000.00	\$ 10,000.00
Rules signage	1	ls	\$ 1,000.00	\$ 1,000.00
			SUBTOTAL	\$ 1,335,500.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				\$ 2,517,284.31
			A&E, Prog. Mgt. Fees (12%)	\$ 302,074.12
PROJECT TOTAL				\$ 2,819,358.42

Rhodes Jordan Park Master Plan

Opinion of Probable Costs-1-7-08

Item	Qty.	Unit	\$/Unit	Total Cost
PHASE 1: LOOP TRAIL				
OVERALL SITE WORK				
Mass grading	9000	cy	\$ 3.50	\$ 31,500.00
Heavy clearing	1.03	ac	\$ 6,000.00	\$ 6,180.00
Erosion control	1	ls	\$ 90,000.00	\$ 90,000.00
Storm drainage	1	ls	\$ 90,000.00	\$ 90,000.00
Road demolition	1	ls	\$ 10,000.00	\$ 10,000.00
Concrete spillway adjustment	1	ls	\$ 7,500.00	\$ 7,500.00
Irrigation (Lake pump station)	1	ls	\$ 20,000.00	\$ 20,000.00
			SUBTOTAL	\$ 235,180.00
ENTRY ROAD				
Heavy duty asphalt drive lanes	92000	sf	\$ 4.00	\$ 368,000.00
Concrete curb and gutter	6800	lf	\$ 12.00	\$ 81,600.00
Raised crosswalks	2	ea	\$ 7,000.00	\$ 14,000.00
Directional signs	6	ea	\$ 500.00	\$ 3,000.00
Landscaping	1	ls	\$ 50,000.00	\$ 50,000.00
			SUBTOTAL	\$ 516,600.00
MULTI-USE TRAIL				
12' asphalt trail (includes paving picnic area lake frontage, but not building promenade as noted in overall opinion of probable costs)	4600	lf	\$ 45.00	\$ 207,000.00
12' asphalt trail repaving	11000	sf	\$ 5.00	\$ 55,000.00
Plaza area development	1	ls	\$ 50,000.00	\$ 50,000.00
Boardwalks	950	lf	\$ 550.00	\$ 522,500.00
Boardwalk abutment	10	ea	\$ 4,000.00	\$ 40,000.00
Spillway bridge structure	1	ls	\$ 250,000.00	\$ 250,000.00
Lake boardwalk structure	1	ls	\$ 200,000.00	\$ 200,000.00
Lake fountain element	1	ls	\$ 10,000.00	\$ 10,000.00
Rules signage	1	ls	\$ 1,000.00	\$ 1,000.00
			SUBTOTAL	\$ 1,335,500.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				\$ 2,520,390.60
A&E, Prog. Mgt. Fees (12%)				\$ 302,446.87
PROJECT TOTAL				\$ 2,822,837.47
PHASE 2				
PICNIC AREA				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	60000	cy	\$ 3.50	\$ 210,000.00
Heavy clearing	0.25	ac	\$ 6,000.00	\$ 1,500.00
Lake dredging	5000	cy	\$ 15.00	\$ 75,000.00
Storm drainage	1	ls	\$ 250,000.00	\$ 250,000.00
Erosion control	1	ls	\$ 30,000.00	\$ 30,000.00
2" Domestic water meter (includes charges)	1	ls	\$ 22,000.00	\$ 22,000.00
3" Irrigation water meter (includes charges)	1	ls	\$ 45,000.00	\$ 45,000.00
Domestic backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
Irrigation backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
Double-detector check	1	ea	\$ 6,000.00	\$ 6,000.00
1/2" Water service(domestic)	1500	lf	\$ 12.00	\$ 18,000.00
2" Water service(domestic)	800	lf	\$ 20.00	\$ 16,000.00
4" Water service(irrigation)	150	lf	\$ 35.00	\$ 5,250.00
8" Fire water service	200	lf	\$ 42.00	\$ 8,400.00
8" water service (relocation of main)	360	lf	\$ 50.00	\$ 18,000.00

Fire hydrant w/ fee	1	ea	\$	5,200.00	\$	5,200.00
8" Sewer service w/ structures	400	lf	\$	65.00	\$	26,000.00
Heavy duty asphalt drive lanes	68500	sf	\$	4.00	\$	274,000.00
Light duty asphalt parking bays	40100	sf	\$	3.00	\$	120,300.00
Concrete curb and gutter	4800	lf	\$	12.00	\$	57,600.00
Concrete wheelstops	67	ea	\$	50.00	\$	3,350.00
Vehicular striping	1	ls	\$	3,500.00	\$	3,500.00
Concrete paving-4" sidewalks/plaza areas	28000	sf	\$	4.00	\$	112,000.00
Raised crosswalks	3	ea	\$	7,000.00	\$	21,000.00
Decorative pavement-plaza areas	8100	sf	\$	4.00	\$	32,400.00
Promenade-stairs	160	lf	\$	375.00	\$	60,000.00
Promenade-walls and trail	510	lf	\$	300.00	\$	153,000.00
Seat walls	225	lf	\$	100.00	\$	22,500.00
Columns (at seat wall)	6	ea	\$	2,000.00	\$	12,000.00
Dumpster enclosure(inc. conc, fencing, bollards, and gate)	1	ea	\$	3,000.00	\$	3,000.00
Octagon pavilion	1	ls	\$	115,500.00	\$	115,500.00
Restroom/concessions building	1	ls	\$	900,000.00	\$	900,000.00
Rental/ activities building	1	ls	\$	150,000.00	\$	150,000.00
Courtesy dock	1	ls	\$	30,000.00	\$	30,000.00
4' vinyl-coated fence	210	lf	\$	15.00	\$	3,150.00
Benches	8	ea	\$	1,000.00	\$	8,000.00
Picnic tables	30	ea	\$	1,500.00	\$	45,000.00
Trash receptacle	6	ea	\$	500.00	\$	3,000.00
Rules signage	4	ls	\$	1,000.00	\$	4,000.00
Vehicular/ handicapped signage	15	ea	\$	250.00	\$	3,750.00
Irrigation	1	ls	\$	30,000.00	\$	30,000.00
Parking lot trees(2.5" cal.)	45	ea	\$	350.00	\$	15,750.00
Landscaping	1	ls	\$	100,000.00	\$	100,000.00
				SUBTOTAL	\$	3,044,150.00
TENNIS AREA						
New pro shop	1	ls	\$	175,000.00	\$	175,000.00
				SUBTOTAL	\$	175,000.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency					\$	3,887,123.63
					A&E, Prog. Mgt. Fees (12%)	\$
						466,454.84
					PROJECT TOTAL	\$
						4,353,578.46
PHASE 3						
SOCCER COMPLEX						
Electrical service	1	ls	\$	20,000.00	\$	20,000.00
Mass grading	120000	cy	\$	3.50	\$	420,000.00
Heavy clearing	16	ac	\$	6,000.00	\$	96,000.00
Storm drainage	1	ls	\$	200,000.00	\$	200,000.00
Erosion control	1	ls	\$	40,000.00	\$	40,000.00
8" Sewer service w/ structures	830	lf	\$	65.00	\$	53,950.00
2" Water service(domestic)	1650	lf	\$	20.00	\$	33,000.00
4" Water service(irrigation)	1200	lf	\$	35.00	\$	42,000.00
8" Fire water service	1100	lf	\$	42.00	\$	46,200.00
Fire hydrant w/ fee	2	ea	\$	5,200.00	\$	10,400.00
Retaining walls	1	ls	\$	920,000.00	\$	920,000.00
Heavy duty asphalt drive lanes	77610	sf	\$	4.00	\$	310,440.00
Light duty asphalt parking bays	64350	sf	\$	3.00	\$	193,050.00
Concrete curb and gutter	4840	lf	\$	12.00	\$	58,080.00
Concrete wheelstops	272	ea	\$	50.00	\$	13,600.00
Vehicular striping	1	ls	\$	5,000.00	\$	5,000.00
Concrete paving-4" sidewalks/plaza areas	22440	sf	\$	4.00	\$	89,760.00

Decorative pavement-plaza areas	4670	sf	\$ 4.00	\$ 18,680.00
Raised crosswalks	2	ea	\$ 7,000.00	\$ 14,000.00
Concrete stairs	1	ls	\$ 4,000.00	\$ 4,000.00
Dumpster enclosure(inc. conc, fencing, bollards, and gate)	1	ea	\$ 3,000.00	\$ 3,000.00
Restrooms/ concessions building	1	ls	\$ 375,000.00	\$ 375,000.00
Lighting	3	field	\$ 90,000.00	\$ 270,000.00
Irrigation	3	field	\$ 30,000.00	\$ 90,000.00
Goals	6	ea	\$ 2,000.00	\$ 12,000.00
Soccer backstop netting	1	ls	\$ 55,000.00	\$ 55,000.00
Picnic tables	4	ea	\$ 1,500.00	\$ 6,000.00
Trash receptacle	3	ea	\$ 500.00	\$ 1,500.00
Rules signage	2	ls	\$ 1,000.00	\$ 2,000.00
Vehicular/ handicapped signage	15	ea	\$ 250.00	\$ 3,750.00
Sod	336000	sf	\$ 0.35	\$ 117,600.00
Parking lot trees(2.5" cal.)	67	ea	\$ 350.00	\$ 23,450.00
Landscaping	1	ls	\$ 75,000.00	\$ 75,000.00
Maintenance compound	1	ls	\$ 185,000.00	\$ 185,000.00
			SUBTOTAL	\$ 3,807,460.00
COMMUNITY CENTER AREA				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	6000	cy	\$ 3.50	\$ 21,000.00
Erosion control	1	ls	\$ 10,000.00	\$ 10,000.00
1/2" Water service(domestic)	350	lf	\$ 12.00	\$ 4,200.00
Concrete paving-4" sidewalks	5500	sf	\$ 4.00	\$ 22,000.00
Decorative pavement-plaza areas	2200	sf	\$ 4.00	\$ 8,800.00
Seat walls	70	lf	\$ 100.00	\$ 7,000.00
Basketball courts (acrylic surface over asphalt paving, fencing)	2	ea	\$ 50,000.00	\$ 100,000.00
Shade pavilion(at basketball courts)	1	ea	\$ 50,000.00	\$ 50,000.00
Horseshoe courts	12	ea	\$ 1,000.00	\$ 12,000.00
Shade pavilion(at horseshoe pits)	1	ea	\$ 50,000.00	\$ 50,000.00
Badminton set (incl. net, posts, and sleeves)	2	ea	\$ 750.00	\$ 1,500.00
Picnic tables	2	ea	\$ 1,500.00	\$ 3,000.00
Drinking fountain	2	ea	\$ 5,000.00	\$ 10,000.00
Trash receptacle	2	ea	\$ 500.00	\$ 1,000.00
Rules signage	2	ls	\$ 1,000.00	\$ 2,000.00
			SUBTOTAL	\$ 322,500.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				
			\$	4,986,926.70
			A&E, Prog. Mgt. Fees (12%)	\$ 598,431.20
			PROJECT TOTAL	\$ 5,585,357.90
PHASE 4				
TEEN AREA				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	62500	cy	\$ 3.50	\$ 218,750.00
Heavy clearing	0.1	ac	\$ 6,000.00	\$ 600.00
Storm drainage	1	ls	\$ 110,000.00	\$ 110,000.00
Erosion control	1	ls	\$ 20,000.00	\$ 20,000.00
1/2" Water service(domestic)	800	lf	\$ 12.00	\$ 9,600.00
Heavy duty asphalt drive lanes	19000	sf	\$ 4.00	\$ 76,000.00
Light duty asphalt parking bays	14000	sf	\$ 3.00	\$ 42,000.00
Concrete curb and gutter	1350	lf	\$ 12.00	\$ 16,200.00
Concrete wheelstops	22	ea	\$ 50.00	\$ 1,100.00
Vehicular striping	1	ls	\$ 2,000.00	\$ 2,000.00
Concrete paving-4" sidewalks/plaza areas	12000	sf	\$ 4.00	\$ 48,000.00

Decorative pavement-plaza areas	5400	sf	\$ 4.00	\$ 21,600.00
Retaining walls	1	ls	\$ 43,000.00	\$ 43,000.00
Octagon pavilion	1	ls	\$ 115,500.00	\$ 115,500.00
Free-skate area	7500	sf	\$ 30.00	\$ 225,000.00
Basketball courts-1/2 court (acrylic surface over asphalt paving, fencing)	1	ls	\$ 40,000.00	\$ 40,000.00
Sand volleyball court (8" sand, 4"gravel, netting, boundary lines, etc.)	1	ls	\$ 5,000.00	\$ 5,000.00
Picnic tables	2	ea	\$ 1,500.00	\$ 3,000.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Trash receptacle	3	ea	\$ 500.00	\$ 1,500.00
Rules signage	2	ls	\$ 1,000.00	\$ 2,000.00
Vehicular/ handicapped signage	4	ea	\$ 250.00	\$ 1,000.00
Parking lot trees(2.5" cal.)	14	ea	\$ 350.00	\$ 4,900.00
Landscaping	1	ls	\$ 5,000.00	\$ 5,000.00
			SUBTOTAL	\$ 1,036,750.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				\$ 1,251,875.63
			A&E, Prog. Mgt. Fees (12%)	\$ 150,225.08
			PROJECT TOTAL	\$ 1,402,100.70
PHASE 5				
DOG PARK				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	11000	cy	\$ 3.50	\$ 38,500.00
Heavy clearing	1.6	ac	\$ 6,000.00	\$ 9,600.00
Storm drainage	1	ls	\$ 22,000.00	\$ 22,000.00
Erosion control	1	ls	\$ 20,000.00	\$ 20,000.00
2" Domestic water meter (includes charges)	1	ls	\$ 22,000.00	\$ 22,000.00
3" Irrigation water meter (includes charges)	1	ls	\$ 45,000.00	\$ 45,000.00
Domestic backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
Irrigation backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
Double-detector check	1	ea	\$ 6,000.00	\$ 6,000.00
1/2" Water service(domestic)	350	lf	\$ 12.00	\$ 4,200.00
2" Water service(domestic)	480	lf	\$ 20.00	\$ 9,600.00
4" Water service(irrigation)	480	lf	\$ 35.00	\$ 16,800.00
8" Fire water service	50	lf	\$ 42.00	\$ 2,100.00
Fire hydrant w/ fee	1	ea	\$ 5,200.00	\$ 5,200.00
8" Sewer service w/ structures	1025	lf	\$ 65.00	\$ 66,625.00
Retaining walls	1	ls	\$ 40,000.00	\$ 40,000.00
Restroom	1	ea	\$ 120,000.00	\$ 120,000.00
Heavy duty asphalt drive lanes	13600	sf	\$ 4.00	\$ 54,400.00
Light duty asphalt parking bays	7150	sf	\$ 3.00	\$ 21,450.00
Concrete curb and gutter	1460	lf	\$ 12.00	\$ 17,520.00
Concrete wheelstops	42	ea	\$ 50.00	\$ 2,100.00
Vehicular striping	1	ls	\$ 1,000.00	\$ 1,000.00
Concrete paving-4" sidewalks/plaza areas	3280	sf	\$ 4.00	\$ 13,120.00
Raised crosswalk	1	ls	\$ 7,000.00	\$ 7,000.00
6' vinyl-coated fence	2500	lf	\$ 33.00	\$ 82,500.00
Agility equipment	1	ls	\$ 50,000.00	\$ 50,000.00
Water fountain	2	ea	\$ 5,000.00	\$ 10,000.00
Benches	10	ea	\$ 1,000.00	\$ 10,000.00
Trash receptacle	2	ea	\$ 500.00	\$ 1,000.00
Rules signage	1	ls	\$ 1,000.00	\$ 1,000.00
Vehicular/ handicapped signage	3	ea	\$ 250.00	\$ 750.00
Sod	102500	sf	\$ 0.35	\$ 35,875.00
Irrigation	1	ls	\$ 30,000.00	\$ 30,000.00
Parking lot trees(2.5" cal.)	6	ea	\$ 350.00	\$ 2,100.00

Landscaping	1	ls	\$ 20,000.00	\$ 20,000.00
			SUBTOTAL	\$ 812,440.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				\$ 981,021.30
			A&E, Prog. Mgt. Fees (12%)	\$ 117,722.56
			PROJECT TOTAL	\$ 1,098,743.86
OTHER PROJECTS NOT IDENTIFIED IN PHASING				
FOOTBALL AREA				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	34110	cy	\$ 3.50	\$ 119,385.00
Storm drainage	1	ls	\$ 60,000.00	\$ 60,000.00
Erosion control	1	ls	\$ 20,000.00	\$ 20,000.00
Heavy duty asphalt drive lanes	36000	sf	\$ 4.00	\$ 144,000.00
Light duty asphalt parking bays	20000	sf	\$ 3.00	\$ 60,000.00
Concrete curb and gutter	6360	lf	\$ 12.00	\$ 76,320.00
Concrete wheelstops	110	ea	\$ 50.00	\$ 5,500.00
Raised crosswalks	2	ea	\$ 7,000.00	\$ 14,000.00
Vehicular striping	1	ls	\$ 2,000.00	\$ 2,000.00
Concrete paving-4" sidewalks/plaza areas	10800	sf	\$ 4.00	\$ 43,200.00
Vehicular/ handicapped signage	6	ea	\$ 250.00	\$ 1,500.00
Parking lot trees(2.5" cal.)	13	ea	\$ 350.00	\$ 4,550.00
Landscaping	1	ls	\$ 20,000.00	\$ 20,000.00
			SUBTOTAL	\$ 590,455.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency				\$ 712,974.41
			A&E, Prog. Mgt. Fees (12%)	\$ 85,556.93
			PROJECT TOTAL	\$ 798,531.34
SOFTBALL AREA				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Mass grading	2750	cy	\$ 3.50	\$ 9,625.00
Storm drainage	1	ls	\$ 150,000.00	\$ 150,000.00
Erosion control	1	ls	\$ 10,000.00	\$ 10,000.00
1/2" Water service(domestic)	300	lf	\$ 12.00	\$ 3,600.00
Heavy duty asphalt drive lanes	8970	sf	\$ 4.00	\$ 35,880.00
Light duty asphalt parking bays	2250	sf	\$ 3.00	\$ 6,750.00
Concrete curb and gutter	840	lf	\$ 12.00	\$ 10,080.00
Concrete wheelstops	10	ea	\$ 50.00	\$ 500.00
Vehicular striping	1	ls	\$ 2,000.00	\$ 2,000.00
Concrete paving-4" sidewalks/plaza area	7900	sf	\$ 4.00	\$ 31,600.00
Decorative pavement-plaza areas	3000	sf	\$ 4.00	\$ 12,000.00
Seat walls	400	lf	\$ 100.00	\$ 40,000.00
Shade pavilions	2	ea	\$ 50,000.00	\$ 100,000.00
Relocating batting cages and storage sheds	1	ls	\$ 10,000.00	\$ 10,000.00
Picnic tables	4	ea	\$ 1,500.00	\$ 6,000.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Trash receptacle	3	ea	\$ 500.00	\$ 1,500.00
Vehicular/ handicapped signage	12	ea	\$ 250.00	\$ 3,000.00
Parking lot trees(2.5" cal.)	3	ea	\$ 350.00	\$ 1,050.00
Landscaping	1	ls	\$ 10,000.00	\$ 10,000.00
I.D. sign	1	ls	\$ 5,000.00	\$ 5,000.00
			SUBTOTAL	\$ 473,585.00

Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency			\$	571,853.89
		A&E, Prog. Mgt. Fees (12%)	\$	68,622.47
		PROJECT TOTAL	\$	640,476.35
OVERLOOK AREA				
Electrical service	1	ls	\$ 5,000.00	\$ 5,000.00
Mass grading	2550	cy	\$ 3.50	\$ 8,925.00
Storm drainage	1	ls	\$ 21,000.00	\$ 21,000.00
Erosion control	1	ls	\$ 10,000.00	\$ 10,000.00
1/2" Water service(domestic)	400	lf	\$ 12.00	\$ 4,800.00
Light duty asphalt parking bays	3210	sf	\$ 3.00	\$ 9,630.00
Concrete curb and gutter	500	lf	\$ 12.00	\$ 6,000.00
Vehicular striping	1	ls	\$ 500.00	\$ 500.00
Concrete paving-4" sidewalks/plaza areas	5050	sf	\$ 4.00	\$ 20,200.00
Overlook structures	3	ea	\$ 75,000.00	\$ 225,000.00
Picnic tables	6	ea	\$ 1,500.00	\$ 9,000.00
Trash receptacle	3	ea	\$ 500.00	\$ 1,500.00
Vehicular/ handicapped signage	1	ea	\$ 250.00	\$ 250.00
Parking lot trees(2.5" cal.)	10	ea	\$ 350.00	\$ 3,500.00
Landscaping	1	ls	\$ 5,000.00	\$ 5,000.00
			SUBTOTAL	\$ 330,305.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency			\$	398,843.29
		A&E, Prog. Mgt. Fees (12%)	\$	47,861.19
		PROJECT TOTAL	\$	446,704.48
OTHER MULTI-USE TRAILS				
Mass grading	12000	cy	\$ 3.50	\$ 42,000.00
Heavy clearing	3	ac	\$ 6,000.00	\$ 18,000.00
Erosion control	1	ls	\$ 130,000.00	\$ 130,000.00
12' asphalt trail	8100	lf	\$ 45.00	\$ 364,500.00
8' asphalt trail	2650	lf	\$ 30.00	\$ 79,500.00
Boardwalks	400	lf	\$ 550.00	\$ 220,000.00
Boardwalk abutment	6	ea	\$ 4,000.00	\$ 24,000.00
Rules signage	1	ls	\$ 1,000.00	\$ 1,000.00
			SUBTOTAL	\$ 879,000.00
Development subtotal w/ 5% mobilization, bonds, etc., & 15% contingency			\$	1,061,392.50
		A&E, Prog. Mgt. Fees (12%)	\$	127,367.10
		PROJECT TOTAL	\$	1,188,759.60
		GRAND TOTAL	\$	18,337,090.17

**RHODES JORDAN PARK MASTER PLAN
OPINION OF PROBABLE COSTS SUMMARY**

January 7, 2008

Note: Each item includes material costs, contractor fees and mobilization, A&E design fees and Construction Management fees, and a 15% contingency factor.

PHASE 1: DEVELOPMENT OF LOOP TRAIL AROUND LAKE: \$2,823,000.00
(Includes improvements to dam spillway for future detention requirements, development of enough entry road to make new connection, development of boardwalks and structures around lake and paving of picnic area lake frontage trail -- if no promenade is to be built).

PHASE 2: PICNIC/PLAYGROUND AREA & TENNIS BUILDING: \$4,354,000.00
(Includes improvements to dam spillway for future detention requirements, development of enough entry road to make new connection and development of boardwalks and structures around lake).

**PHASE 3: SOCCER COMPLEX, MAINTENANCE COMPOUND, HORSESHOES,
OUTDOOR BASKETBALL, BADMINTON AREA
\$5,585,000.00**

PHASE 4: TEEN AREA: \$1,402,000.00

PHASE 5: DOG PARK: \$1,099,000.00

OTHER PROJECTS IDENTIFIED FOR FUTURE PHASING:

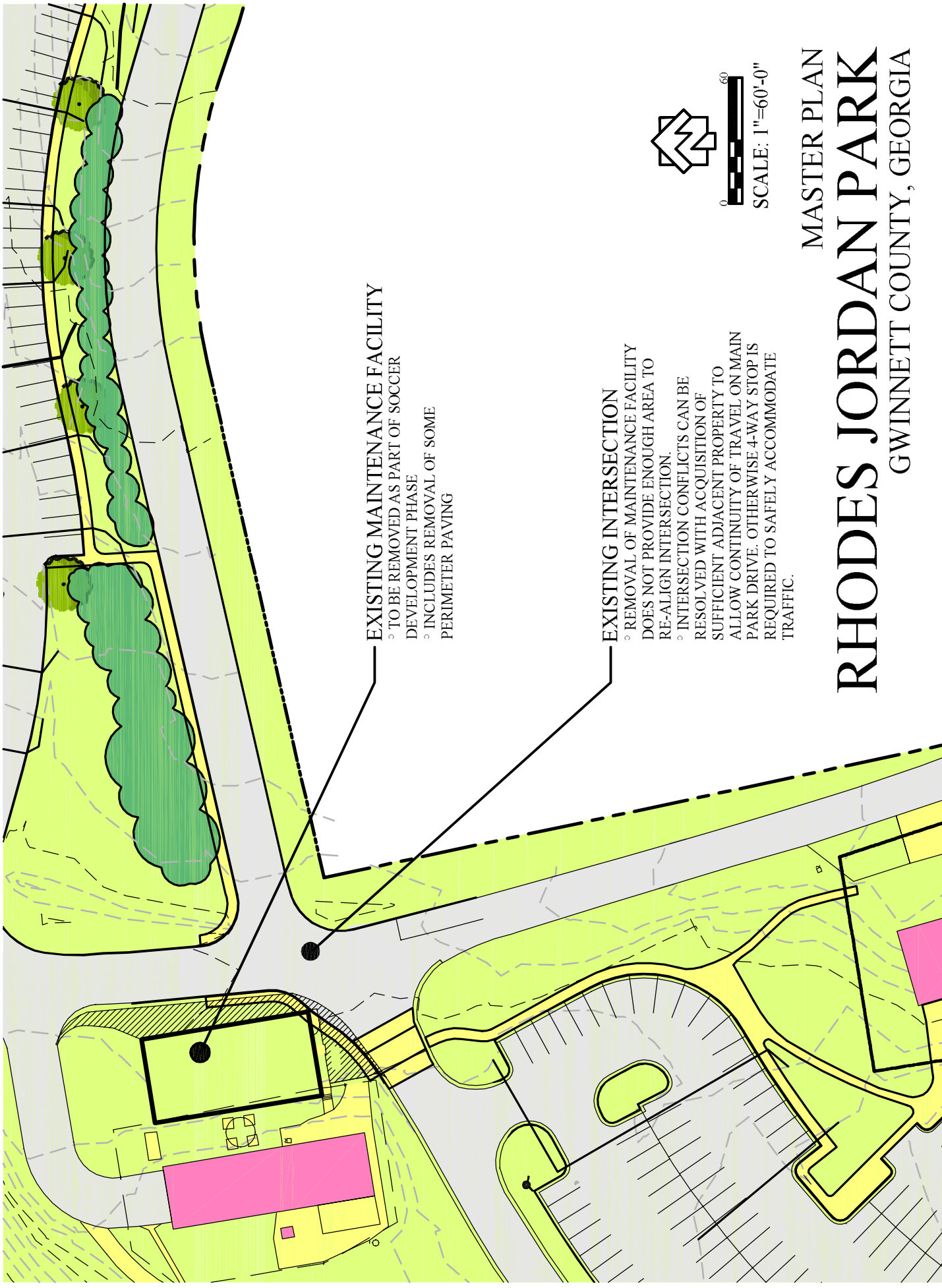
FOOTBALL COMPLEX: \$799,000.00
(Improvements to existing facilities, parking improvements)

SOFTBALL COMPLEX: \$640,000.00
(Improvements to existing facilities, some new amenities)

OVERLOOK AREA: \$447,000.00
(Shelters, plaza, small parking area)

MULTI-USE TRAIL: \$1,189,000.00
(Continuation of trail network around other facilities)

TOTAL MASTER PLAN COSTS: \$18,338,000.00



EXISTING MAINTENANCE FACILITY

- TO BE REMOVED AS PART OF SOCCER DEVELOPMENT PHASE
- INCLUDES REMOVAL OF SOME PERIMETER PAVING

EXISTING INTERSECTION

- REMOVAL OF MAINTENANCE FACILITY DOES NOT PROVIDE ENOUGH AREA TO RE-ALIGN INTERSECTION.
- INTERSECTION CONFLICTS CAN BE RESOLVED WITH ACQUISITION OF SUFFICIENT ADJACENT PROPERTY TO ALLOW CONTINUITY OF TRAVEL ON MAIN PARK DRIVE. OTHERWISE 4-WAY STOP IS REQUIRED TO SAFELY ACCOMMODATE TRAFFIC.



SCALE: 1"=60'-0"

MASTER PLAN
RHODES JORDAN PARK
GWINNETT COUNTY, GEORGIA

Appendix C

Meeting Minutes

MEMORANDUM

August 24, 2007

To: Rex Schuder

From: Chris Hoitink

Re: Rhodes Jordan Park County Feedback Meeting

On

August 24, 2007, a meeting was held at the Rhodes Jordan Community Center to review the preliminary master plan for Rhodes Jordan Park. Present were Grant Guess, Rex Schuder, Sharon Plunkett, Whit Alexander, Chris Hoitink, Tina Flemming, Brian Kumm, John Register, Christie Simms, Jim Mackel, Whitney Layton, Lamar Warner, Phil Hooking, Randy Huckabey, Jimmy Binion, Jarold White, and Anthony Pane.

The meeting began with introductions, and Whit presented the historical aerial photos and then reviewed the existing site conditions and site analysis. He next presented the three conceptual plans. As the plans were presented, different ideas and discussions took place as to how to achieve the best layout for the different facilities.

The following are items discussed for the associated facilities:

DOG PARK AREA

1. Shade is a necessity in the dog park. It was noted that in the existing dog parks around the county, people tend to migrate to the part of the dog park with trees to take advantage of the shade on hot summer days.
2. If the dog park is to be sodded and irrigated with limited trees, then multiple shade structures will be required.
3. Rex noted that if the dog park is to go in the southwest corner of the park, it would be acceptable to place it under the existing specimen trees. Some internal fencing would be required around the base of these trees to protect the root zone, but this could provide a nice opportunity to maximize the use in this area of the park and also provide the necessary shade in the dog park.
4. It was noted by the majority, that this area in the southwest corner of the park under the specimen trees would be the best location for the dog park.

MULTI-PURPOSE TRAIL

5. Different routes for the multi-purpose trail were presented. If the teen area is located in the rear of the park, the trail needs to loop this facility as much as possible.

SOCCKER AREA

6. The group discussed some concern with there being three soccer fields proposed. It was suggested that one of these fields be designated as a multi-purpose field, as football is overcrowded in this park. Rex noted that further staff discussions would take place about the best balance of sports fields.
7. The group preferred the layout of the soccer area in concepts #1 and #2. Ultimately, it was decided that concept #1 would be the best, with the large parking area directly across from the existing baseball handicapped parking lot, which would also place the parking at approximately the same elevation as the baseball fields. This could also serve as some overflow parking for the softball complex if needed.
8. Also discussed was exploring the option of modifying concept #1 to turn the third field 90 degrees and providing some more parking between the field and the park drive, similar to the parking lot in concept #2.

EXISTING FOOTBALL/BASEBALL FIELD

9. There was much discussion about moving field #7 away from the football field. This field, being in its current location away from the other fields, causes programming issues. This location of the baseball field also forces the visiting fans bleachers for the football field to be located in the infield clay mix. Rex noted that further staff discussions would take place about the best balance of sports fields.
10. It was mentioned that if field #7 is to stay where it is, then building bleachers into the hill on the far side of the field would provide the opportunity for both home and visiting fans to sit on the same side of the field, away from the infield clay mix.
11. Parking is a problem for football games. Currently, the gravel area adjacent to the maintenance building is used. It was suggested that this area be developed into additional parking.
12. The single access route to the current football parking lot causes congestion problems during football games. It was suggested that this parking lot contain two ingress/egress points.

HORSESHOES AREA

13. The group discussed the two different locations of the horseshoe pits and came to the conclusion that the location near the tennis courts would best suit this activity from an operational standpoint, as the county will most likely want to staff this area to provide the opportunity to rent equipment.

TEEN FACILITY

14. The group discussed the different options for the location of the teen facility. Security and the ability to police this area were the main concerns.

15. The group decided that placing the teen facility in the southwest corner of the park would not be the best idea because this area cannot be seen from the rest of the park due to the higher elevation.
16. The group also discussed placing the teen area near the soccer area. Placing the teen area up on a hill above the soccer fields, accessible from E. Crogan St., was briefly discussed as well. It would not be accessible from the park entry drive and would require another park entrance in order for it to be visible by people driving down E. Crogan St.
17. The group discussed placing the teen area in the back of the park near the picnic area. Although this area seems secluded, the multi-purpose trail would offer the most security and policing opportunities, as the trail would be the most heavily used feature of the park. This would also limit use of the area to daylight hours only, as this part of the park contains no site lighting. The basketball facilities would be closer to the current gymnasium for expanded basketball programming. Some courts could be built on the gym side of the creek.
18. No consensus was achieved on the teen area's location, but most discussions seemed to prefer the existing driving loop area at the rear of the park.

PICNIC AREA

19. The group liked the three options for the promenade along the lake edge. It was mentioned that incorporating the three different ideas for this promenade in different areas along the lake edge would be a good idea. The option of separating the playground area and the multi-purpose trail by lowering the trail down closer to the water level and retaining the lawn and play area was suggested to prevent children from interfering with people enjoying the trail. It was agreed that exploring different options along different areas of the lake edge would be ideal.
20. The group discussed placing a corporate pavilion in the passive use area. It was mentioned that corporate pavilions in different parks are always rented and the system could use another; however, this might be better suited at Tribble Mill, if space is limited in the Rhodes Jordan plan.
21. The group also liked the ideas associated with re-organizing the picnic area, but no clear direction was given.

ARCHITECTURAL ELEMENTS

22. Whit presented the spillway, overlook, and boardwalk structures. The group agreed that these structures would all add to the overall draw of the park.
23. It was mentioned that the spillway structure would help to draw people into the park by adding a little flair and by presenting the idea that there is more to this park than the football field you initially see from E. Crogan St.

ADDITIONAL TOPICS

24. It was mentioned that the large pavilions are used on a regular basis by teams that use the football, baseball, and softball facilities. Small pavilions added around the existing

recreational facilities were suggested for use by these teams before and after games.

25. Relocating the maintenance facility to a more centralized location was mentioned. This would not only provide easier access to all park facilities for maintenance staff, but would also provide a smoother park entry drive opportunity. The armory building could be removed.
26. The group discussed the need to dredge the lake near the open lawn area due to silt build up.
27. The group discussed how the park is hidden from the main road and how the park sign is unreadable from Hwy. 124. It was suggested that different options be explored for making the park more noticeable from the main road. An arched sign spanning the park entry road was one option mentioned.

End of Memo

MEMORANDUM

September 20, 2007

To: Rex Schuder

From: Chris Hoitink

Re: Rhodes Jordan Park County Feedback Meeting

On

September 20, 2007, a meeting was held at the Rhodes Jordan Community Center to review the preliminary master plan for Rhodes Jordan Park. Present were Grant Guess, Rex Schuder, Sharon Plunkett, Whit Alexander, David Clark, Eric Horne, Chris Hoitink, Tina Flemming and Brian Kumm.

The meeting began with Rex providing an update to Judy Jordan Johnson who sits on the City of Lawrenceville City Council. Ms. Jordan Johnson had another engagement that evening and was unable to stay for the remainder of the meeting. The presentation continued with introductions, and Whit discussed the presentations of the first input meeting and how the group decided upon the layout of the preliminary master plan based on everyone's previous comments.

The following are items discussed for the associated facilities:

PARK ENTRY ROAD

28. Rex discussed how the city had requested that the drive continue along existing Henson St., to provide access to the properties that are located along the street from both Corbin St. and Victor St.

SOCCKER AREA

29. Whit discussed the three field arrangement of the soccer fields. It was noted that parking has been designed to adequately provide spaces for the soccer fields and to provide some extra parking for the softball complex if needed.
30. Whit noted that the way the fields have been graded to provide a balance of cut and fill. In order to provide this balance, retaining walls are required not only along the back side of the fields, but also along the front side along the park road. The fields have been graded at a 1.25% cross slope, and staff noted that a 2% cross slope would be required.
31. Rex mentioned that backstop netting will be needed along the road side of the fields to prevent balls from rolling over the retaining wall into the street.

PICNIC/ PLAYGROUND AREA

32. The next topic discussed was the promenade area. It was noted that the master plan shows two large staircases that provide seating overlooking the lake. This area could be arranged to incorporate all three promenade designs if desired.
33. The group expressed some concern over the geese population taking over this area. It was decided that providing a buffer of plantings, such as cattails and miscanthus, would help deter the geese in select areas. It was noted that the option 3 planting scheme should be solid enough to prevent the geese from walking through it, but also low enough to provide views out to the lake.
34. Rex mentioned that a dumpster pad and concession service access is needed in this area to serve the concessions/restroom building.

BASKETBALL COURTS

35. The group discussed the three court locations. It was decided that the best location for the basketball courts is where the two are located on the other side of the parking from the community center building. It was decided that the location of the court immediately adjacent to the community center would not be the best location. The group discussed leaving this area an open grassed area, providing post sleeves for badminton.
36. The group decided a small shade structure would be good between the two courts near the parking lot.

DOG PARK

37. Whit noted the size of the proposed dog park and the number of parking spaces to be provided, which is 29 spaces. The group discussed whether this would be enough parking, and decided that maximizing the number of spaces in this area would be ideal.
38. Rex pointed out that Lose should determine the size of required detention to help determine how much more parking could be provided.
39. Whit mentioned that providing a single loaded parking lot on one side of the dog park entry road may be possible without sacrificing the size of the dog park.

HOSRESHOE PITS

40. Whit noted that there are 10 horseshoe pits and two shuffleboard courts proposed. The group agreed that removing the two shuffleboard courts and adding two more horseshoe pits would be ideal.
41. The group noted that lighting these horseshoe pits would be ideal as well

FOOTBALL AREA

42. The group discussed the overflow parking area along the entry road and decided that no picnic shelters would be needed there; the current number of shelters throughout the park was deemed adequate.
43. The group then discussed the built-in bleachers at the football field. They decided that removing the existing press box and building another for the built-in bleachers would not be an option. It was decided that placing aluminum bleachers on either side of the existing press box would be ideal.

SOFTBALL AREA

44. The group next discussed what to do with the handicapped parking area at the softball complex. It was decided that providing a baseball/softball facility sign with a flagpole and landscaping in the island adjacent to the handicap parking would be nice.

ADDITIONAL TOPICS

45. Rex mentioned that a 5' sidewalk along the north side of the road, across from the overlook plaza, would be nice to provide access from the picnic area to the tennis center without having to cross the street.
46. Rex also wanted enough study performed on the lake/quantity detention plan to ensure it will work, to inform the cost estimate, and also to understand what effects modifications to the existing weir will have on the overall lake.
47. Subsequent to the meeting, Rex requested that the field lengths for each of the baseball and softball fields be included on the master plan graphic, and that the 2:1 fill slopes upon which the new northern pavilion and the skate park were designed be replaced with a feature that includes a 12' wide flat patio/walkway extension terminating at a retaining wall to eliminate un-maintainable steep planted zones.

End of Memo

MEMORANDUM

October 29, 2007

To: Rex Schuder

From: Chris Hoitink

Re: Rhodes Jordan Park Final Master Plan County Feedback Meeting

On October 29, 2007, a meeting was held at the Gwinnett County Parks and Recreation offices to review the final master plan for Rhodes Jordan Park. Present were Grant Guess, Rex Schuder, Sharon Plunkett, Whit Alexander, David Clark, Eric Horne, Chris Hoitink, Tina Flemming, Brian Kumm, and various other parks and recreation staff.

The presentation began with Rex noting that an original intent of this project, as noted in the RFP, was to provide a Phase I, which would include a revised entry drive and a multi-purpose trail loop. He then asked Whit to present to the group which section of trail phase one consists of and how the entry drive in this first phase would take shape.

Whit began the discussion by pointing out which areas of the plan had been revised since the last meeting. In the soccer area, the soccer fields had been re-graded to provide a steeper slope and better drainage. In the community center area, the basketball courts had been relocated slightly at the edge of the community center parking lot and the single court immediately next to the community center had been removed allowing for the open lawn area to accommodate a couple badminton courts. In the horseshoe pit area, the two shuffleboard courts had been replaced with two more horseshoe pits. Finally, the dog park was expanded slightly and the parking in this area was maximized.

The group next discussed any concerns they had about the layout presented. One concern expressed was the need for shade in the dog park area. Whit explained that the specimen trees that are to remain should provide adequate shade in this area. Also noted, was that there needs to be at least 80' of cleared area provided along the outside of the dog park fencing for maintenance accessibility.

Grant next discussed, because of the current watering issues associated with the drought conditions, the feasibility of providing the water for irrigating the park from the lake. It was agreed upon that this would be the best option at this time.

Next discussed was how each of the park facilities were to be phased, beginning with the entry drive and trail.

Phase I

As mentioned earlier in the meeting, Phase I of construction will consist of relocation of the park entry drive and development of a multi-purpose trail loop. The group decided that the drive would be constructed to a finished level, including all curb & gutter. The lake loop of the park is to be included in this phase of the project as well and will include all the boardwalks necessary through the low lying areas, the dam bridge structure, and just the boardwalk structure without the shade features where the trail crosses the lake. The additional shade structures and boardwalks for this trail will be provided as alternates in this bid.

Phase II

The next area constructed will be the playground area. The group agreed that all the large octagon pavilions need to be replaced with the standard county pavilions. It was noted that the county's standard look for the structures needs to be kept in mind ,and not to stray too far from this look when trying to accommodate the Senior Center architecture into the park. In addition to the playground area, the group decided that the existing tennis area trailer needs to be replaced in this phase with the standard restroom/office building similar to the building from Rock Springs Park. Also included in this phase will be the dredging of the lake, both near the overlook area as well as near the trail boardwalk structure.

Phase III

The third phase will consist of the soccer and maintenance area, the basketball courts, and the horseshoe pits area.

Phase IV

The fourth phase will be the teen area.

Phase V

The fifth and final phase will be the dog park area.

Also noted was the need for the drainage between baseball fields #5 and #6 to be redesigned with underground drainage. It was noted that the estimated cost of this would not exceed \$200,000.

Whit then noted that the primary detention solution called for raising the dam structure about 3" to accommodate the sites detention requirements.

End of Memo