



E. E. Robinson Park

E. E. ROBINSON PARK IS COMPOSED OF ONE PARCEL ACQUIRED IN 2007 (FOOTBALL COMPLEX) AND A SECOND ACQUIRED IN JUNE OF 2016 (BASEBALL/SOFTBALL COMPLEX). THE PARCEL CONTAINING THE FOOTBALL COMPLEX WAS ORIGINALLY CALLED LANIER COMMUNITY PARK SITE AND LATER LEVEL CREEK PARK SITE. THE BASEBALL/SOFTBALL PARCEL WAS ORIGINALLY THE CITY OF SUGAR HILL'S E. E. ROBINSON PARK. ON THE OCCASION OF THE COUNTY'S ACQUISITION OF THE CITY PARK THE COMBINED PARK ACREAGE WAS GIVEN THE E. E. ROBINSON PARK NAME.

ONLY THE FOOTBALL COMPLEX PORTION HAS BEEN FORMALLY MASTER PLANNED, WITH THAT PLAN'S REPORT TITLED LANIER COMMUNITY PARK SITE AND DATED MARCH OF 2013 (LOSE & ASSOC.). THE CURRENT MASTER PLAN GRAPHIC (AUGUST 2016) DISPLAYS REFINEMENTS MADE BY MDA DURING PHASE ONE CONSTRUCTION DOCUMENT DEVELOPMENT AND THE PARK'S FINAL NAME.

Gwinnett County
Department of Community
Services - Parks and
Recreation Division

Gwinnett County, Georgia

Lanier Community Park Site Master Plan

March 2013



Submitted by

**LOSE
& ASSOCIATES, INC.**
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

Lanier Community Park Site Master Plan

March 2013

Gwinnett County Department of Community Services –
Parks and Recreation Division

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Introduction

The Board of Commissioners acquired the land in 2007 to provide community park acreage for the northwestern sector of Gwinnett County. The 2007 Parks and Recreation Capital Improvement Plan advised that the site should be assessed to see if some combination of a small Baseball/Softball Complex, a Football Complex, Teen Facilities or a Pavilion/Playground Complex could be accommodated. The opening of the new Lanier High School provided an added impetus to provide active recreation facilities to serve the growing population of school age children in this area. Shortly after the commencement of the planning process in 2010, the economic downturn caused the Lanier Park Site project to be delayed until the latter years of the 2009 SPLOST program. Thus the master plan was completed in December of 2012 and the Master Plan Report completed in January of 2013. This report documents the process of seeking the optimum accommodation of identified facilities on a site that presented multiple significant constraints to development.

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Site Analysis

2.1 Location

The property for the Lanier Community Park Site is located on Peachtree Industrial Boulevard (PIB), between the intersections of W. Price Road /PIB and Spring Hill Drive/PIB in Sugar Hill, Georgia (**Figure 1**). This contiguous tract of land is bordered to the north by Level Creek and its broad floodplain while the southern boundary is adjacent to property reserved for the future extension of Sugarloaf Parkway. The site's western edge is next to a residential property with frontage on Level Creek Road and the eastern border is formed by PIB and a commercially zoned outparcel.

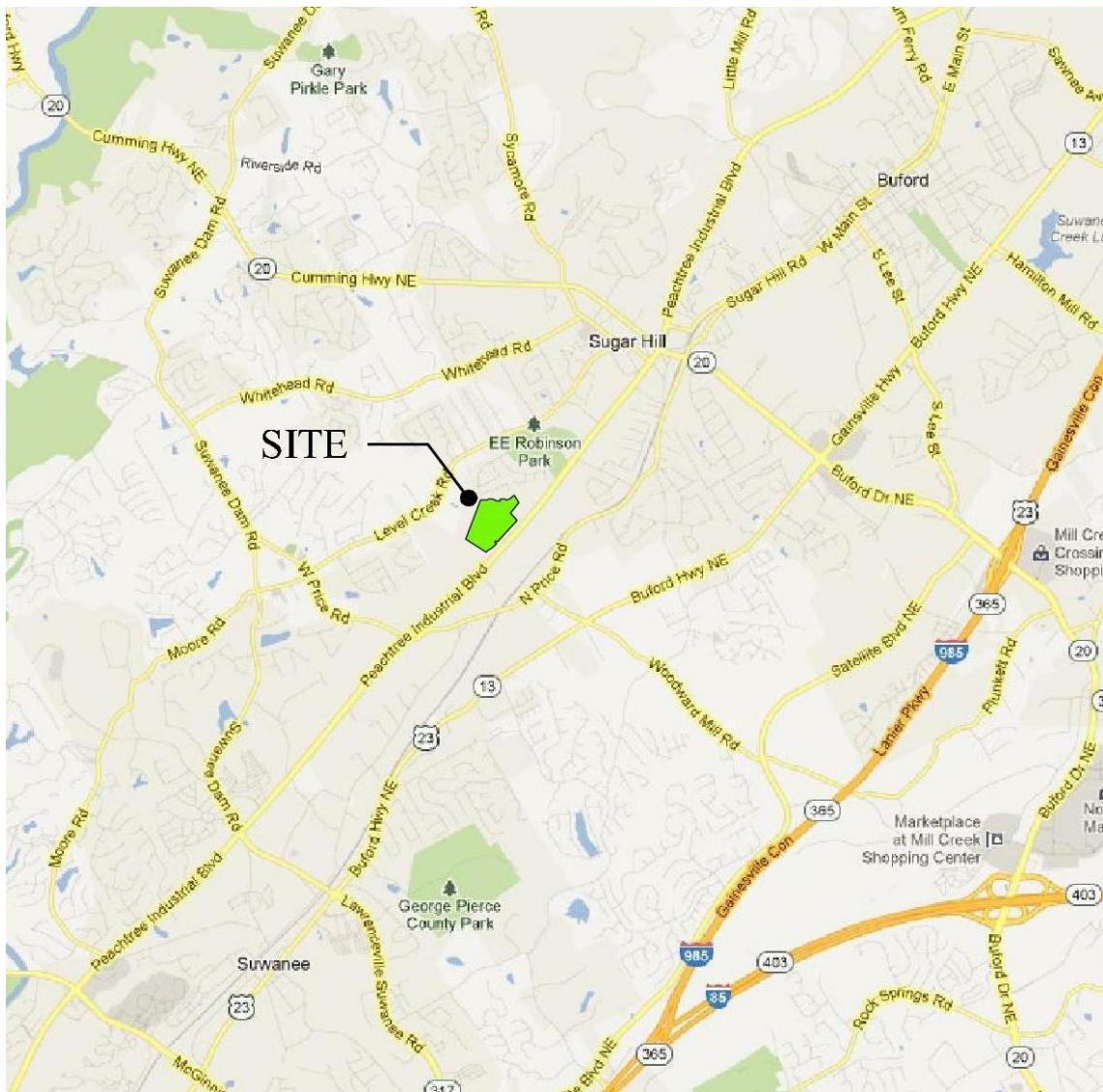


Figure 1- Park Property Location

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

Significant surface boulders and rock outcrops were observed in the southeastern area of the site. These features often bear a strong correlation with the presence of shallow subsurface rock. In order to better plan mass grading operations, a subsurface exploration report was prepared by United Consulting in 2007. Report findings did identify shallow subsurface rock at depths ranging from 8 to 11 feet in the southeastern area of the site. The remaining boring locations across the site indicated rock at depths of 19 feet or greater (almost half of which ranged from 30 to 52 feet). Master planning the site, including the routing of underground utility lines must take the findings of this report into consideration in order to avoid or minimize development impacts associated with removal of rock material.

2.4 Soils

The underlying soils of the site consist of loamy sands and clays that support development. Areas noted as poorly drained or highly erodible due to slope on the soils map coincide with other findings and field observations. A soils analysis map (**Figure 2**) was derived from the USDA and Soil Conservation Service soil survey of Gwinnett County. According to United Consulting's report, the residual soils encountered on the site should be generally suitable for reuse as engineered fill. For master planning purposes, the suitability for development of soils shown will be determined more by slope than by bearing capacity. A final determination on soil suitability is recommended following the generation of development plans.

2.5 Topography

The site's topography is composed of a series of ridges and swales with steep slopes and is consistent with other undeveloped parcels in this area of the County (**Figure 3**). Total relief across the property is approximately 132 feet. Sizeable sections of cut and fill will be required to accommodate large footprint facilities, which will determine their suitable locations on site as well as the vertical relationships between these and other park amenities. It is likely that retaining walls will be required where cut and fill slopes are not feasible. Although the site's topography will permit only a select amount of large active recreation complexes, it does provide for the

Figure 2

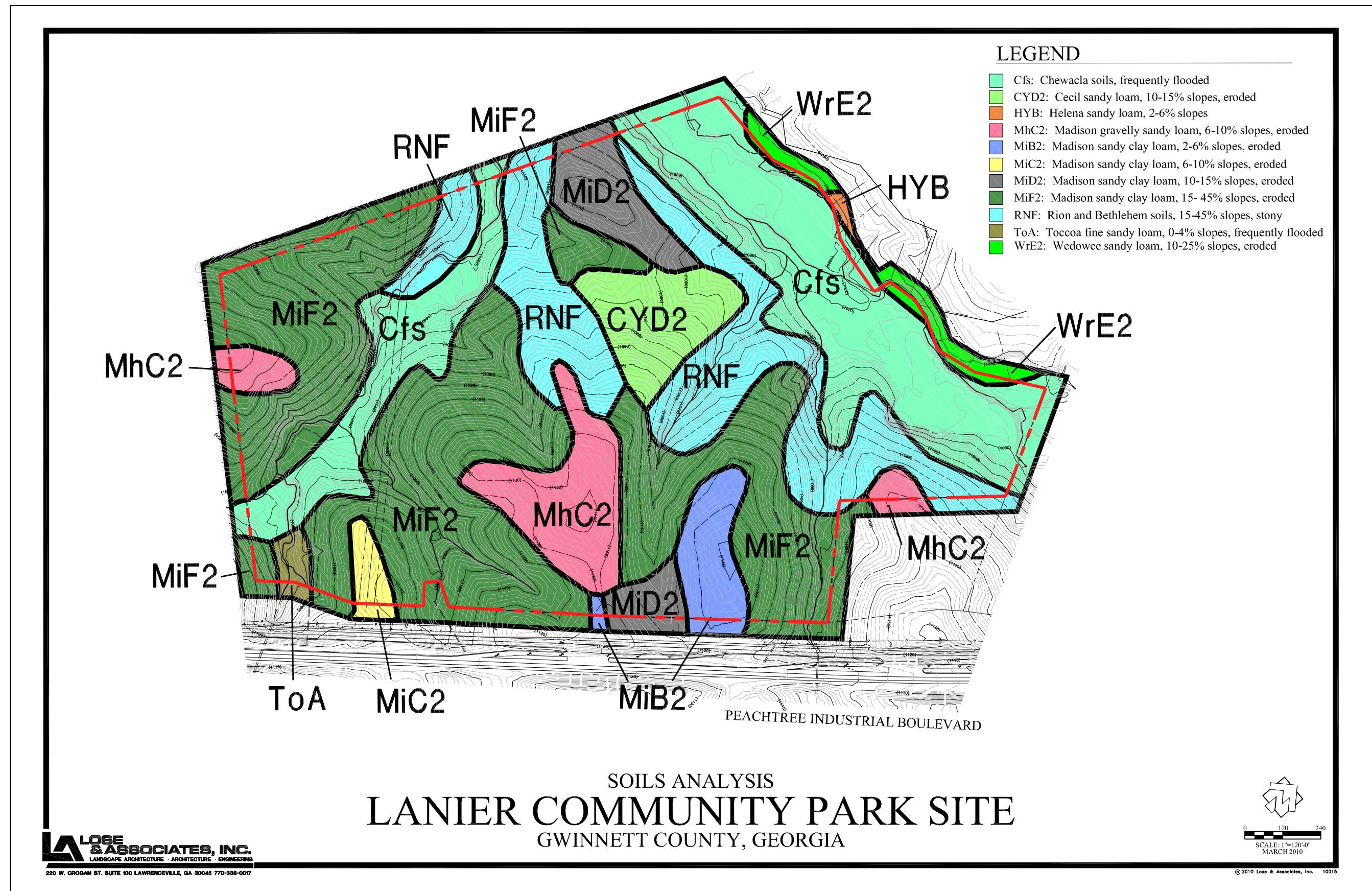
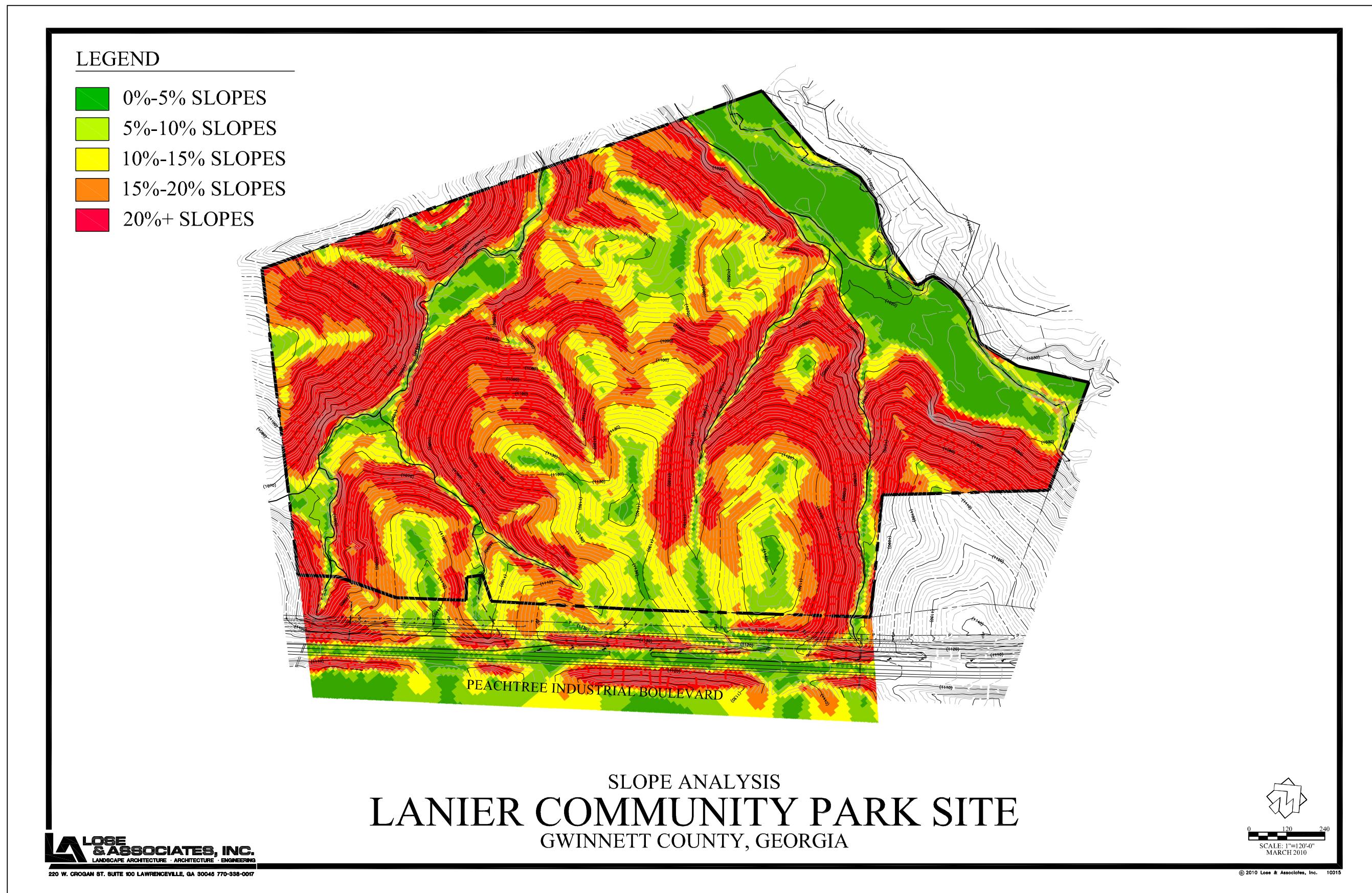


Figure 3



preservation of natural areas which can be accessed through trail networks and other forms of passive recreation.

2.6 Hydrology

Much of the site's aforementioned topography is dictated by the hydrolic features of the property. Two significant draws convey waters from perrenial streams entering the site from crossings beneath Peachtree Industrial Boulevard that discahrge onto the property. A third draw across the middle of the property produces an intermittent stream channel likely fed from a spring located on site. Each of these features are considered waters of the state and will require state and local stream buffers, which present challenges to development. In general, the site drains in a south to north direction towards Level Creek. The Level Creek floodplain encompasses a wide swath, ranging from 150 to 275 feet across, along the northern edge of the property. It is in these relatively flat stream corridors that site observations yeilded potential wetland conditions, which should be investigated to determine the limits of Jurisdictional Waters of the United States (**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 the land for the Lanier Community Park Site is the direct result of human intervention. Aerial photography dating back to the 1950s shows that the majority of the site has been previously used for timber production (**Figures 5-8**). Since that time, some hardwood species have been able to reestablish themselves. Due to the water features on site, timber harvesting on the southern portion of the site was likely difficult, which resulted in the preservation of much of the site's previously established hardwood forest (**Figure 9**). Although it is not a virgin forest, this portion of the property holds high concentrations of large mature specimen trees. While large grading operations are expected to remove a substantial portion of the vegetation on site, stands of mature specimens such as those in this area should be largely, undisturbed. Other portions of the site contained within stream buffers and floodplain should also remain in place.

2.8 Cultural Impacts

Man has been active on the property for some time and developments on surrounding property - both existing and planned- have had an impact on the site. As noted previously, much of the property has been utilized for timber production over the last century. Peachtree Industrial Boulevard is a large transportation corridor whose demand will continue to increase alongside development in the surrounding areas. High speeds and traffic noise will continue to be issues along this road as its utilization expands. A gas pipeline with a 50 foot easement already crosses the site and the expansion of Sugarloaf Expressway will eventually reach the southern end of the property. Consideration for adjacent residential and commercial properties will have to be given

as well. The County has also identified this site as a potential connection to the Ivy Creek Greenway Corridor. A graphic representation of the cultural impacts on the site can be seen in **Figure 10**.

Figure 4

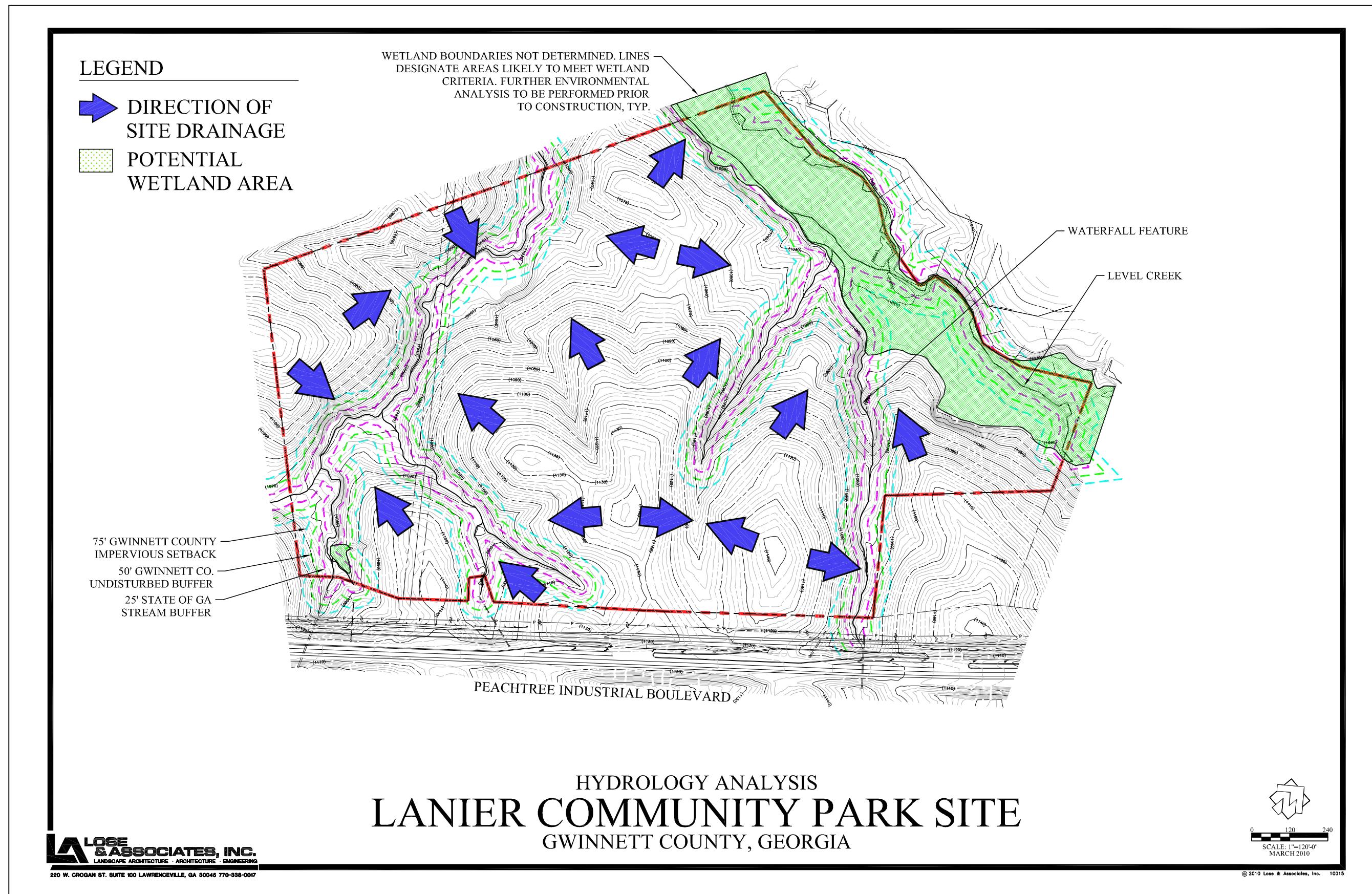


Figure 5

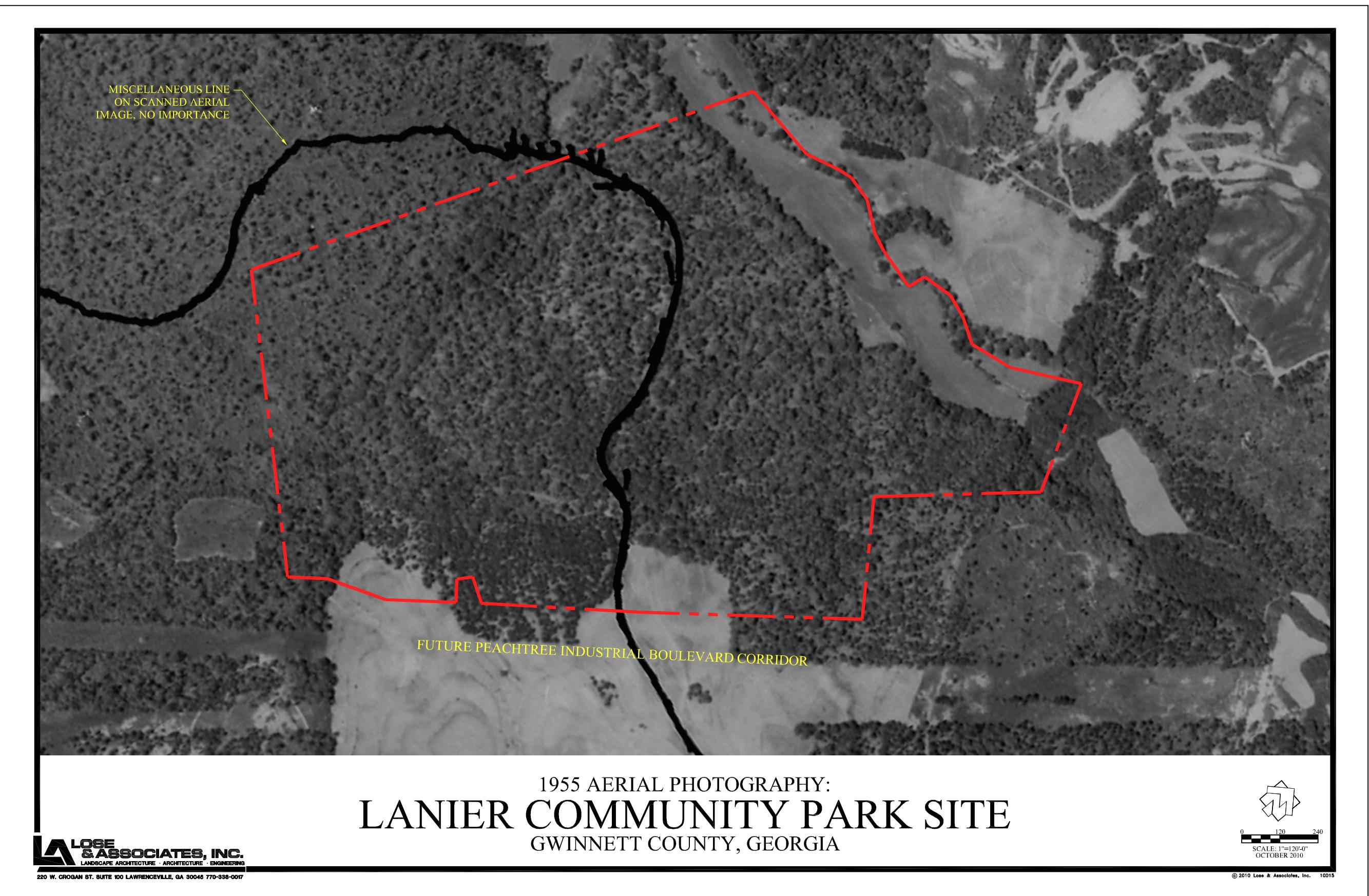


Figure 6

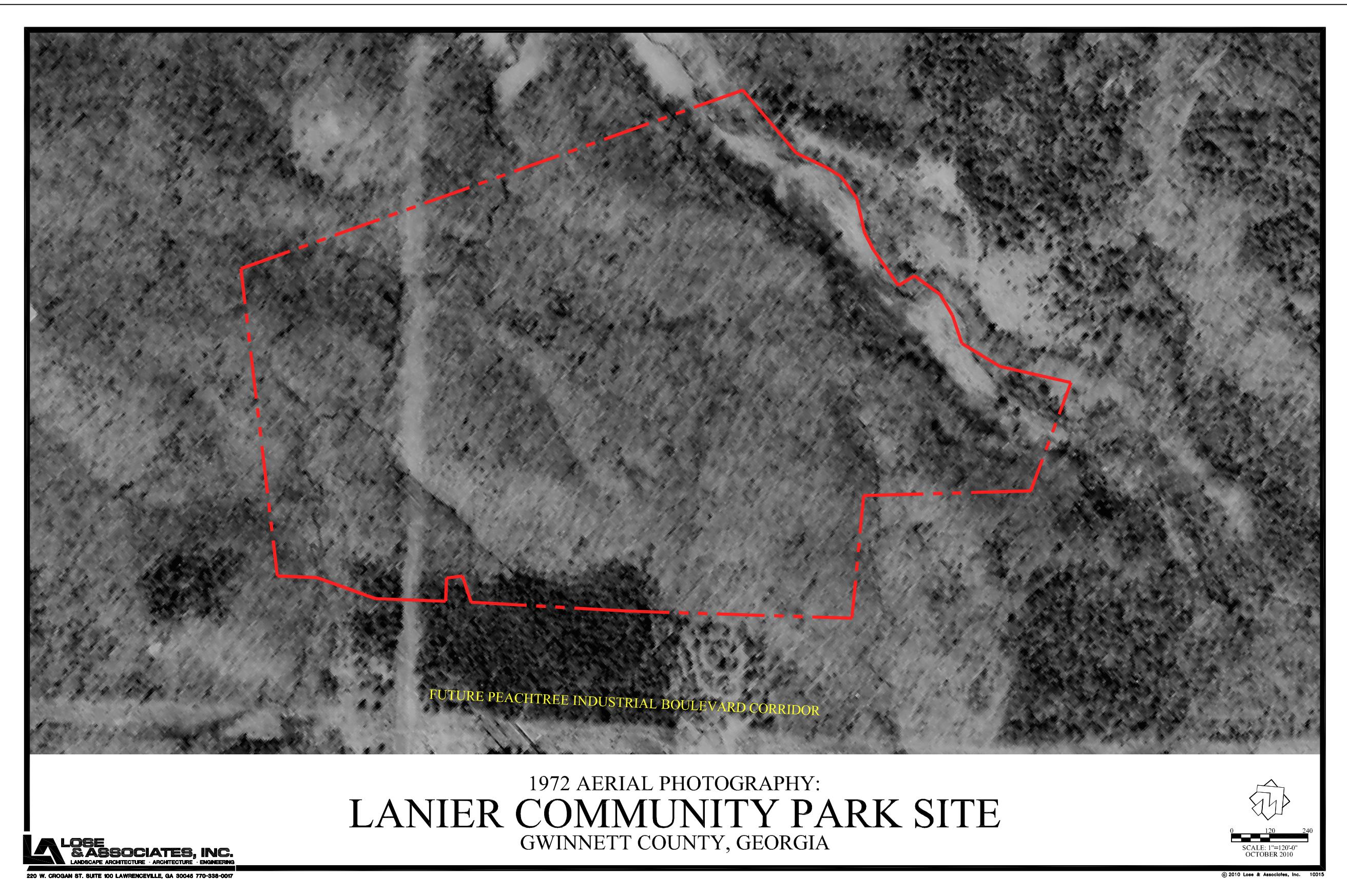


Figure 7

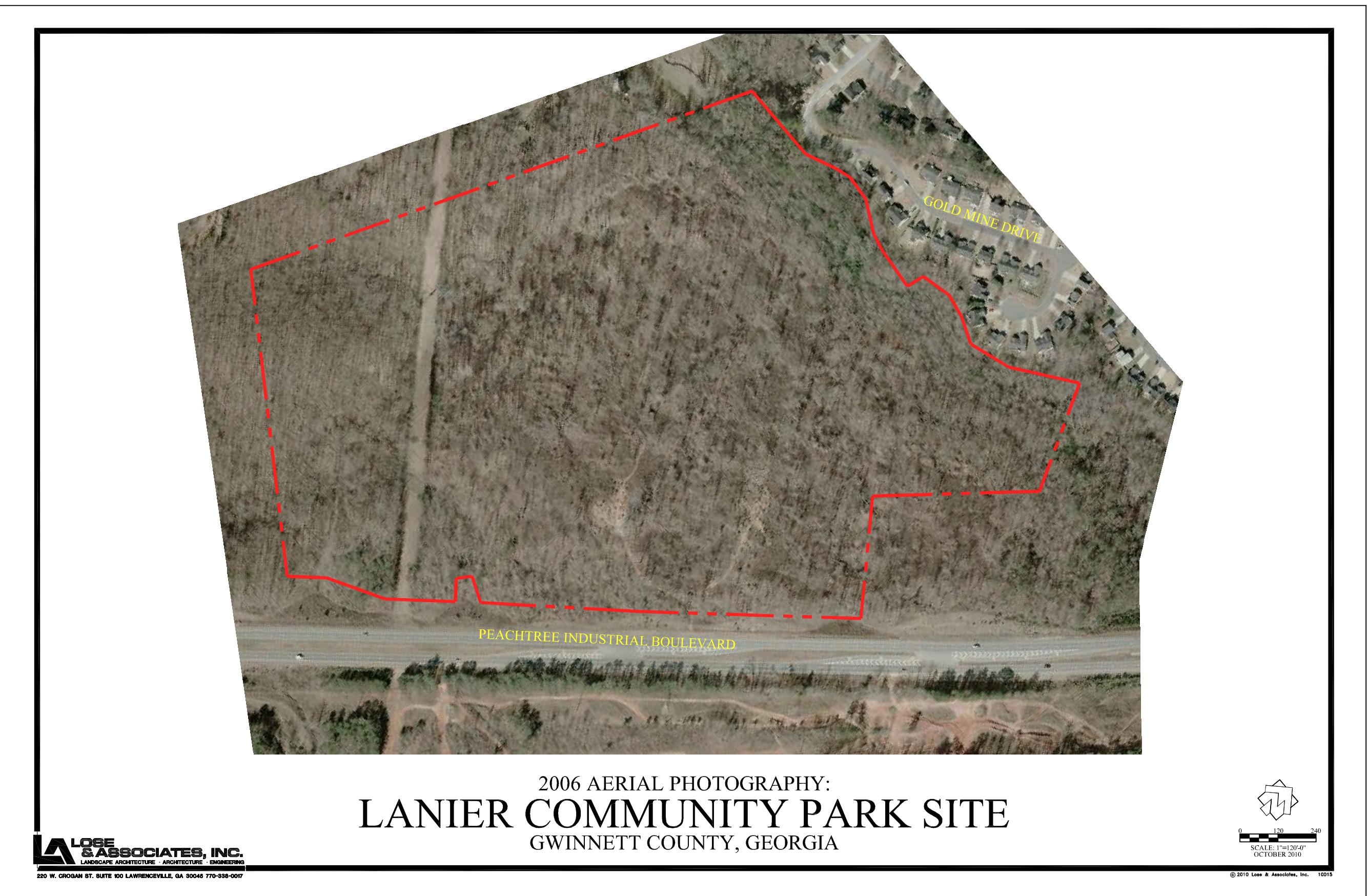


Figure 8

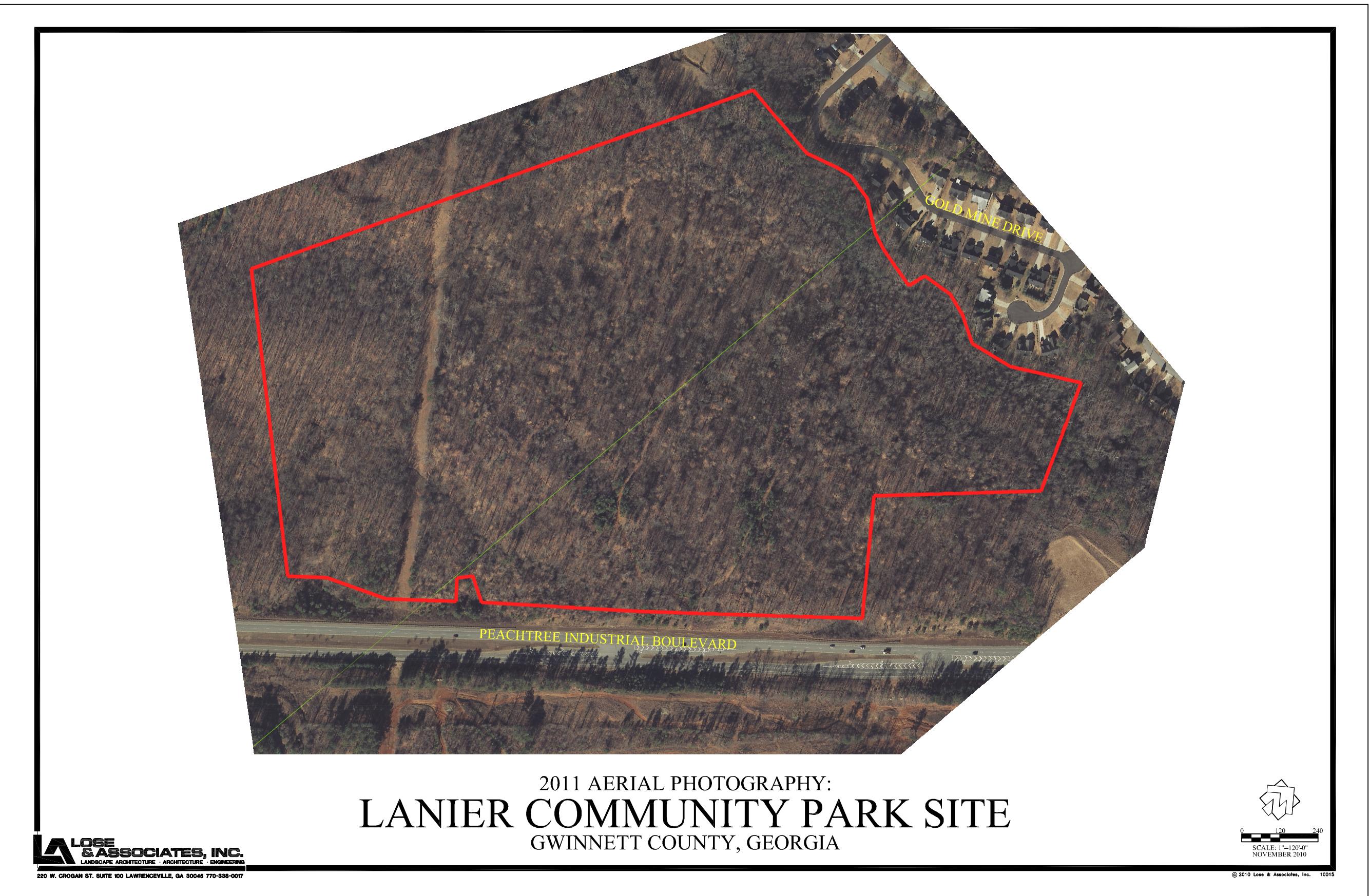


Figure 9

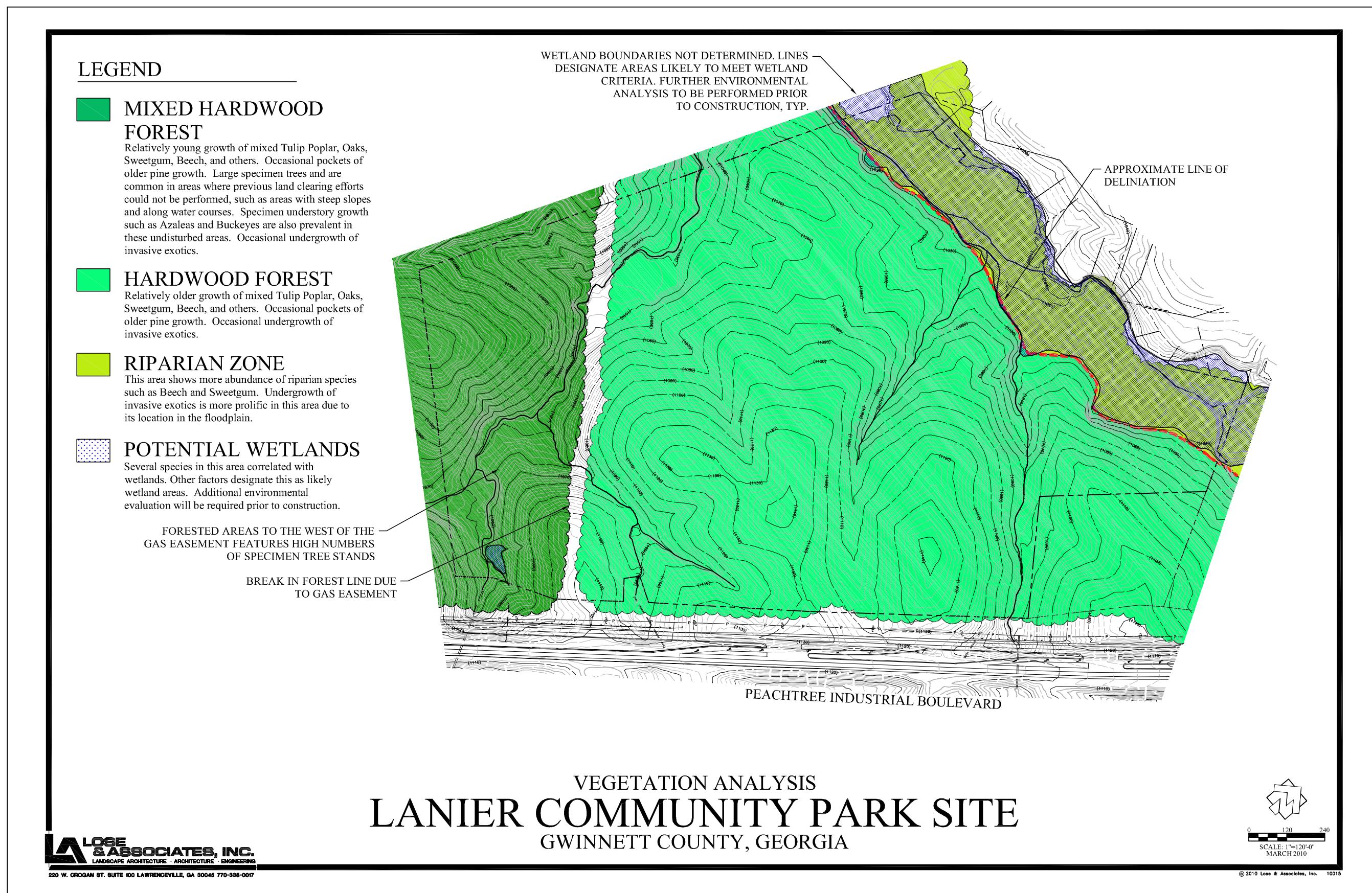
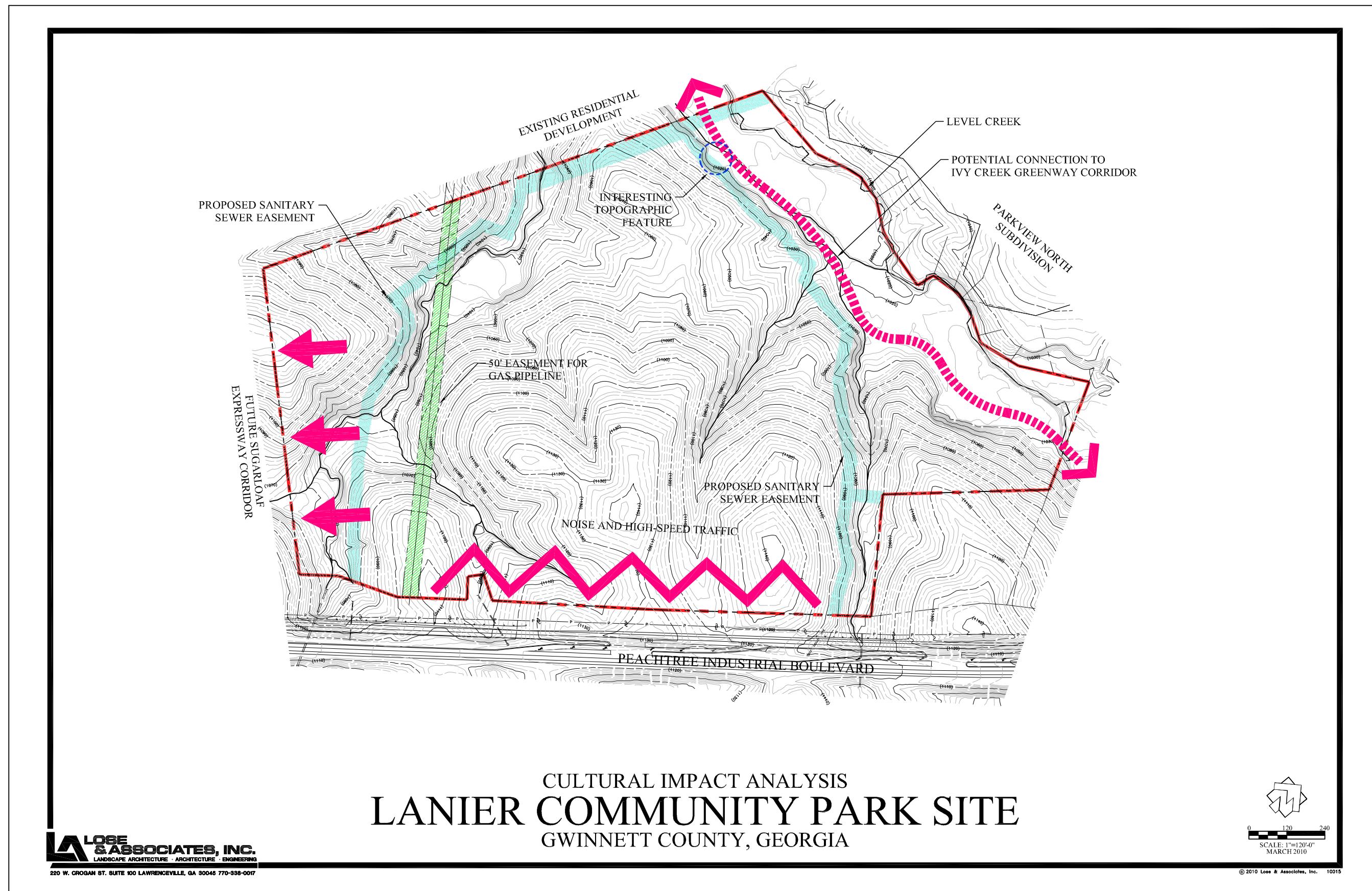


Figure 10



Public Input and Feasibility Studies

3.1 Initial Program Development

To initiate the public input process, a meeting was held at Lanier High School on October 5, 2010, to allow members of the community an opportunity to voice their desires for the programming on the land for the Lanier Community Park Site. Gwinnett County staff presented a map of the park, site analysis plans and aerial photography that dated back to the 1950's.

During this meeting, some citizens (mostly those representing youth athletics) expressed concern that the site could not accommodate all of their desires for sports field development. County staff acknowledged that, while sports fields are a desired component of the park program, residents outside of youth athletic programs have expressed an interest in passive recreation opportunities, which can be adequately supported by the site. County staff also highlighted the fact that community parks that included large sports field complexes are often the result of years of property acquisition and that the current proposal is merely the first phase of the establishment of these facilities for the area.

The citizens were asked to fill out survey forms outlining their wishes and concerns for the park development. The following is a list of suggestions gathered at the meeting with a number following each item that demonstrates the number of times each item was requested. Because some requests were very specific (indoor tennis) and others were more general (tennis courts), some similar items are grouped together. The items are prioritized based on the number of times mentioned.

- Paved trails (8)-one person asked for them to be lighted.
- Football field(s) (7)-one person specifically asked for them to be lighted
- Playground (7)-one person asked for this to be a special needs playground, another asked for it to include wooden play forts and bridges.
- Baseball/softball fields (5) -one person specifically asked for them to be lighted
- Pavilion/picnicking areas (5)-one person asked that individual tables be provided, not in pavilions
- Activity building/gymnasium (4)
- Aquatic center (4)-one person asked for these features to be more natural in design
- Outdoor tennis (4)
- Nature trails (4)
- Disc golf (3)
- Basketball courts (3)
- Pond/lake (3)
- Disc golf (3)
- Open lawn/free play irrigated turf fields (2)
- Splash pad (2)
- Dog park (2)

- Lacrosse field (1)
- Soccer field(s) (1)
- Community center (1)
- Indoor tennis (1)
- Racquetball (1)
- Ample parking (1)
- Sand volleyball (1)
- Wall ball (1)
- Mountain bike trails (1)
- Ropes course (1)

Additionally, the following is a list of citizen concerns. The number following each item demonstrates the number of times each item was mentioned.

- Encroachment on surrounding neighborhoods, restricting access to surrounding neighborhoods (2)
- Negative connotation of skatepark/basketball (2)
- Edges of park should be left natural (1)
- Public safety (1)
- Vandalism (1)
- Loss of trees and greenspace (1)
- The project will cost too much and should be stopped (1)
- Avoid duplication of services already provided by Sugar Hill (1)
- Enough free fields need to be provided, or an arrangement needs to be made with Sugar Hill, so that this association is not the only one in the County required to rent fields (1)
- More land be acquired to accommodate all the needs of the community (1)
- Avoid crowding too many facilities into the park (1)
- Make sure that the needs of all citizens are met (1)

Following this meeting, County Staff asked Lose & Associates to suspend master planning until such time as the County could coordinate with the City of Sugar Hill to determine a desired program for the Lanier Park property. The project remained dormant for nearly 18 months until March of 2012.

3.2 Program Refinement and Feasibility Studies

Following discussions between Gwinnett County staff and the City of Sugar Hill, a list of desired program features was generated. Lose & Associates was directed to provide two distinct “Feasibility Studies” using the following program features and design approaches:

Feasibility Study 1:

- Option A
 - Proposed layout and grading to minimize use of retaining walls.
 - Provide County standard multi-purpose field with associated parking.

- Maximize grading without walls in remaining developable areas to provide pads for “General Recreation Areas”. The facilities within these areas will be determined at a later date.
- Provide multi-purpose trail loop around the perimeter of these pads at the top of the slope. Provide shade tree plantings as needed along the trail.
- Option B
 - Utilize walls up to 20 feet high in order to maximize development potential. Walls may not constitute more than \$700,000 of budget.
 - Provide County standard multi-purpose field with associated parking.
 - Provide County standard pavilion/playground facility with associated parking.
 - Provide 2 full-size basketball courts, 2 half-size basketball courts with associated parking.
 - Provide 14,000 sf skatepark with associated parking.
 - Provide 5,000 sf interactive fountain with restroom/shower house to be shared by the pavilion/playground area.
 - Provide multi-purpose trail loop taking advantage of site’s natural features.
- Provide Sanitary Sewer Study showing proposed routing of sewer connection to existing County lift station across Level Creek.

Feasibility Study 2:

- Provide County standard multi-purpose field with associated parking.
- Utilize walls up to 20 feet high in order to maximize development potential. Walls may not constitute more than \$700,000 of budget.
- Provide as many baseball fields (180 to 225 feet) as possible with associated parking.
- Provide County standard pavilion/playground facility, interactive fountain and restroom/shower building as described in Feasibility Study 1- Option B.
- Provide multi-purpose trail loop as defined in Feasibility Study 1- Option B.
- Provide Sanitary Sewer Study showing proposed routing of sewer connection to existing County lift station across Level Creek.

*The requested studies were performed by Lose & Associates (see **Figures 11-15**) and submitted to County staff for review. Following this submission, the County Once again asked Lose & Associates to suspend master planning until a determination could be made by the County as to their preference for the direction of the master planning process. The project remained dormant for over 6 months until November of 2012.*

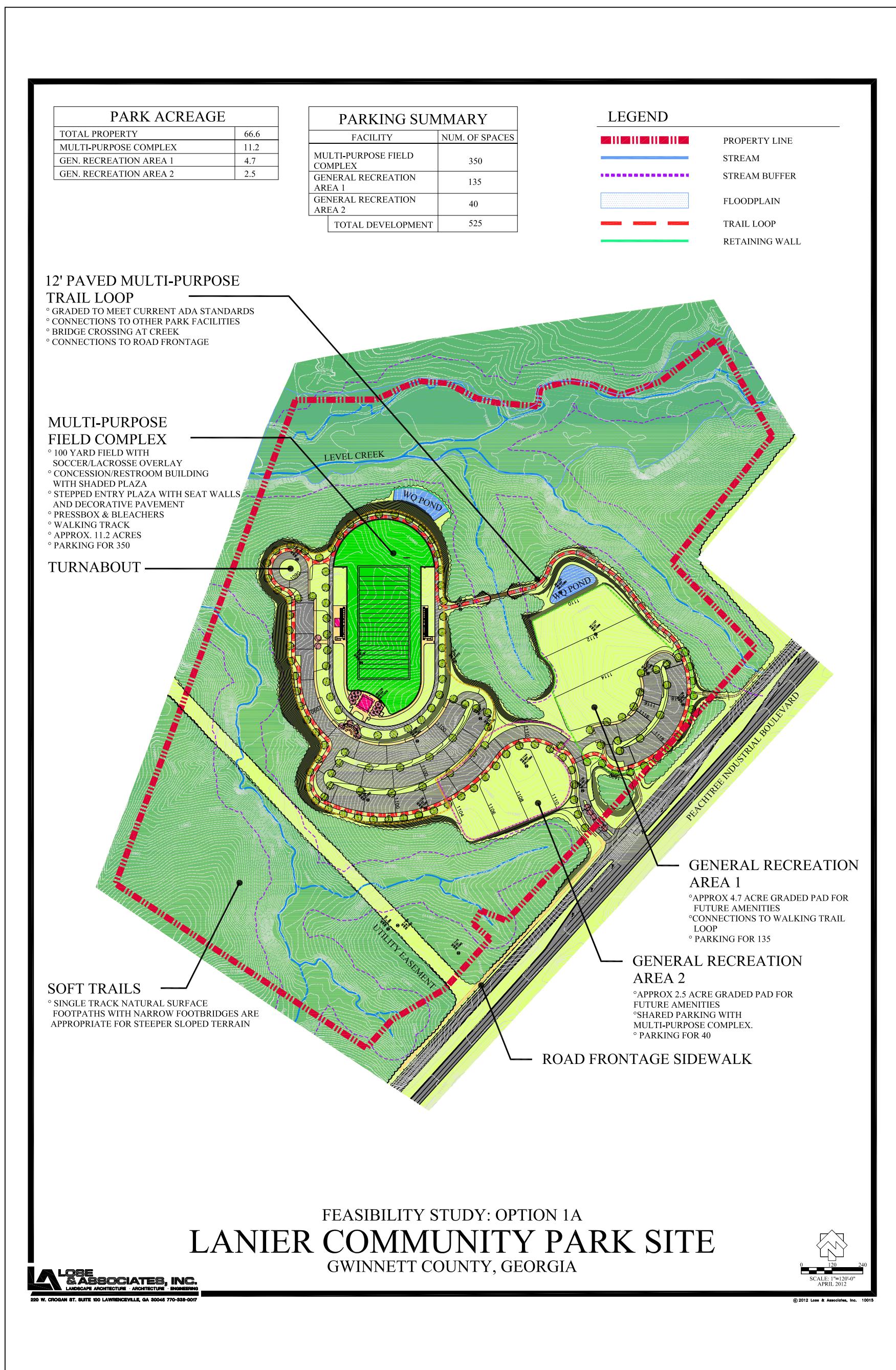


Figure 11

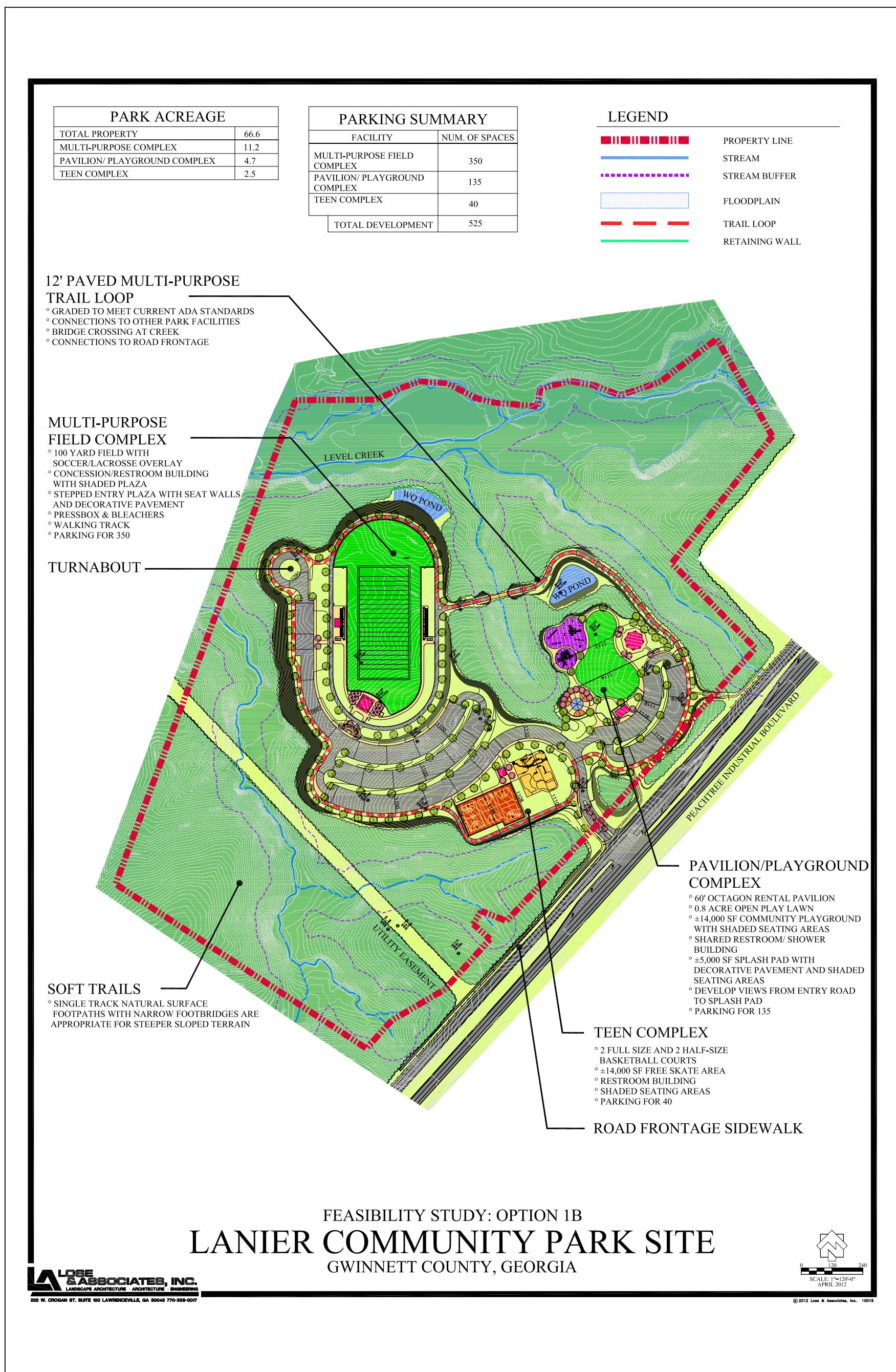


Figure 12

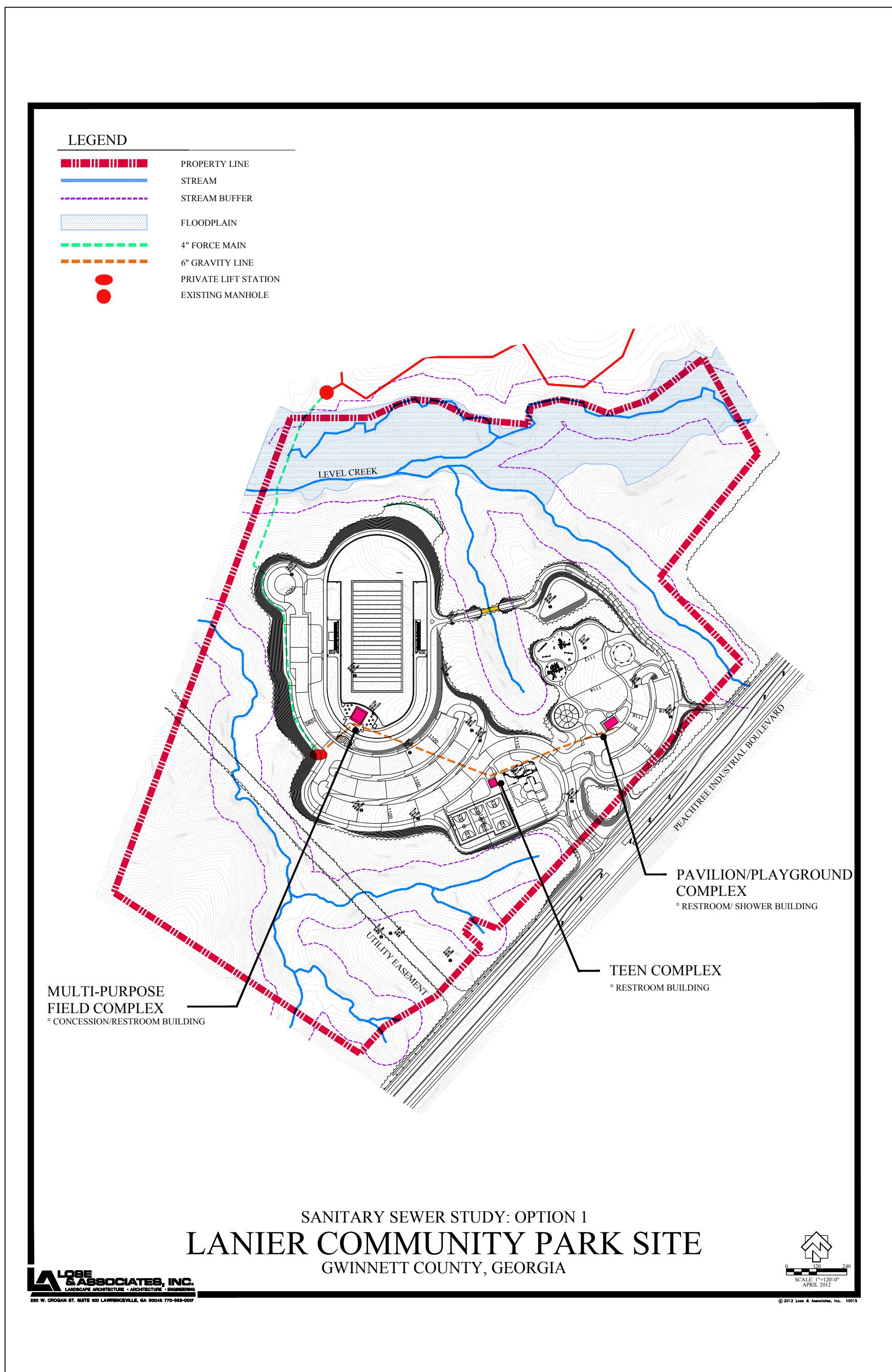


Figure 13

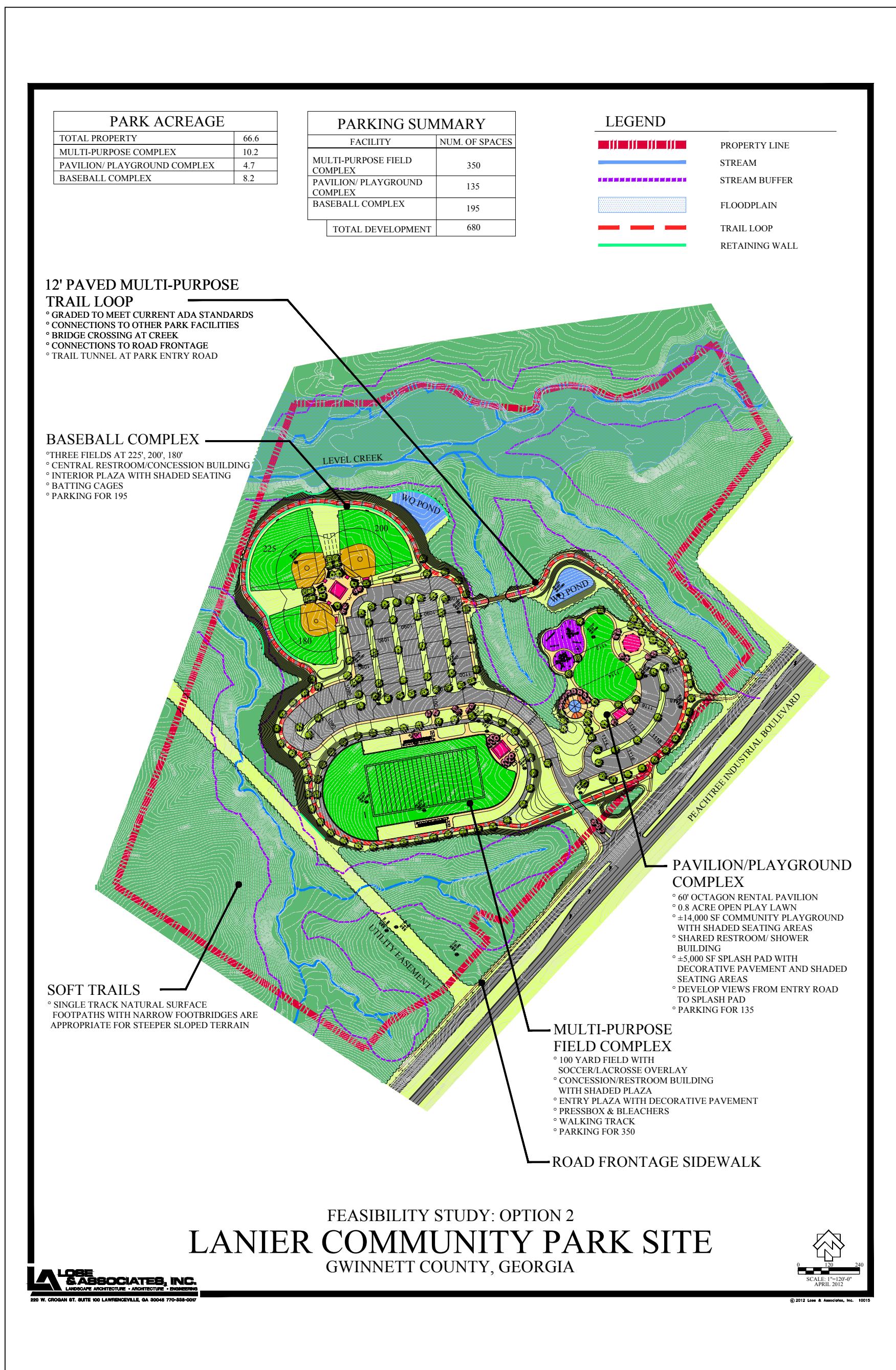


Figure 14

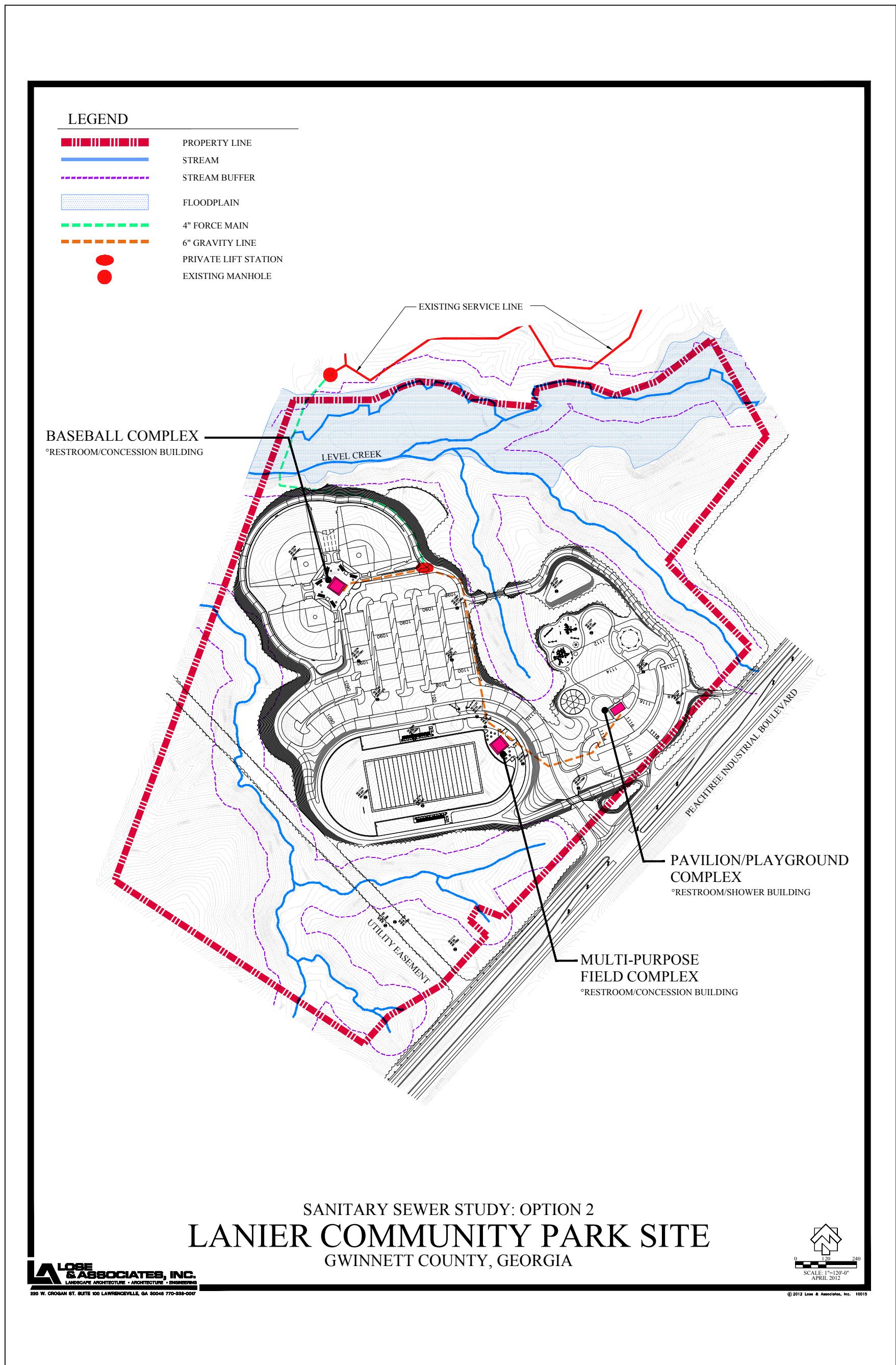


Figure 15

Alternative Preliminary Master Plans

4.1 Alternative Programming

Following extensive review of the feasibility studies previously provided by Lose & Associates, County Staff determined that changes to the layout and programming be made to generate Alternative Preliminary Master Plans. Both alternatives are derived from the initial facilities and relationships presented in Feasibility Study - Option 1B. The cost of retaining walls and grading needed to realize Feasibility Study - Option 2 were deemed insupportable. The requested revisions are as follows:

Preliminary Master Plan Option 1 (**Figure 16**):

- Alternate locations of pavilion and splash pad at the pavilion/playground facility.
- Revise teen complex to provide outdoor court complex including: 2 sand volleyball courts, 3 artificial turf badminton courts, 2 half-court basketball, restroom building, small gathering area and shade pavilions.
- Adjust trail crossing at park entry to tunnel below driveway as shown in Feasibility Study 2.
- Provide county standard maintenance facility adjacent to outdoor court complex.
- Utilize existing moderate slopes in southeast corner to provide trailhead with direct access to multi-purpose trail loop. Provide soft trail layout from trailhead to undevelopable portions of the site with connections to other park amenities.

Preliminary Master Plan Option 2 (**Figure 17**):

- Remove teen complex and provide dog park at this location. Dog park is to have a minimum enclosed area of 2.2 acres and shall include separate areas for large and small dogs.
- Adjust parking area to provide appropriate quantity of spaces required for dog park.
- Provide maintenance facility as described above.
- Adjust trail crossing at park entry drive as described above.
- Provide maintenance facility as described above.
- Provide trailhead and soft trails as described above.

4.2 Recreation Authority Presentation

On November 14, 2012, a meeting was held at the Dacula Activity Building to present the alternative preliminary master plans to the Gwinnett County Recreation Authority. The presentation included boards showing the performed site analysis, feasibility studies, sanitary sewer studies and the preliminary master plans. The following is a description of each of the design components as well as a review of the design process associated with them:

Multi-Purpose Field Complex: The amount of grading required on site to provide this large footprint feature drove the desired location and orientation on the site. This field is sized to

accommodate soccer and football play, as well as the required safety zones for both. Home field side includes a pressbox facing east as well as direct access to the adjacent parking. Maintenance access to the field is gained through the handicapped parking isle. The perimeter of the field is encircled with the County's standard asphalt walking track. Portions of this walking track have been incorporated into the perimeter multi-purpose trail loop. This complex also features the county standard restroom/concession building with shaded picnic plaza that features decorative pavement and a future association grilling area. Due to the arrangement of parking serving this field, a primary entry plaza has been provided on an axial relationship to the parking lot drive way which features stone seat walls and decorative pavement. Since this facility is located on the terminal end of development, the parking lot includes a turnaround sized for fire truck access.

Pavilion/Playground Complex: As part of the County's standard for this feature, a 60 ft octagon rental pavilion, large community playground, restroom building and open play lawn have been provided. Each amenity is separated from the other to provide opportunities for passive security. Both the restroom building and the pavilion are located closer to the parking lot for ease of access for gatherings. A 14,000 sf community playground has been provided with separate play areas for 2-5 and 5-12 year olds as well as shaded seating areas for parents. This size of playground is large enough to accommodate a wide variety of play experiences. The open play lawn provides an area for passive recreation but is sized and shaped in a manner that deters users from utilizing the space as a practice field for sports.

Interactive Fountain: Adjacent to the pavilion/playground complex, a 5,000 sf interactive water feature has also been planned. This feature will incorporate decorative pavement and shaded seating areas. As a result of this feature, the standard restroom building has been expanded to include room for a bath house, if required by permit officials. Water serving the interactive fountain will be treated and filtered recirculated water with the mechanical elements installed in an underground vault.

Maintenance Facility: Due to the location of this park in relation to other facilities in the area, County staff requested that a maintenance facility be provided at this site. The facility will include a maintenance building/shop with offices, restroom, storage space and both enclosed and covered equipment bays. The yard will be completely enclosed with fence and will include material storage bins.

12' Paved Multi-Purpose Trail Loop: At over 3/4 of a mile, the paved trail loop encircles the perimeter of the developable area and is graded to meet trail ADA standards. Since the trail is primarily located at the top of the slope along the cleared development area, significant canopy tree plantings will have to be provided as needed along the trail to provide intermittent shade for users. Where portions of the trail double as sidewalk access for parking lots, wheelstops and trail widening to fifteen feet will have to be provided at these parking spaces to maintain a twelve foot clear path for trail users. A bridge crossing at one of the stream beds will be required to access scenic areas of the remaining forested area. In order to avoid conflicts with the park entry road, the trail will pass through a tunnel beneath the road, thereby creating a more continuous and safe trail experience.

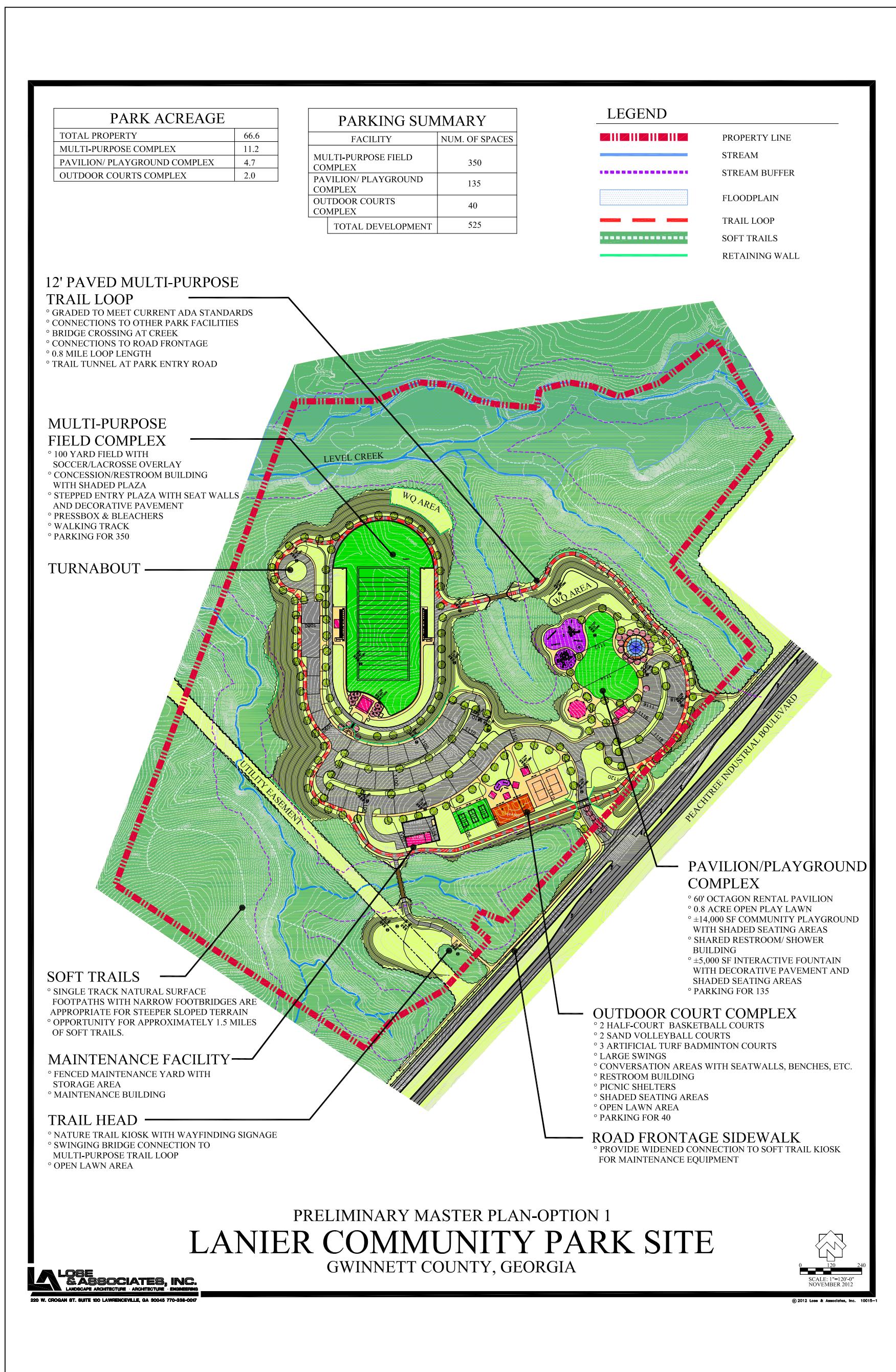


Figure 16

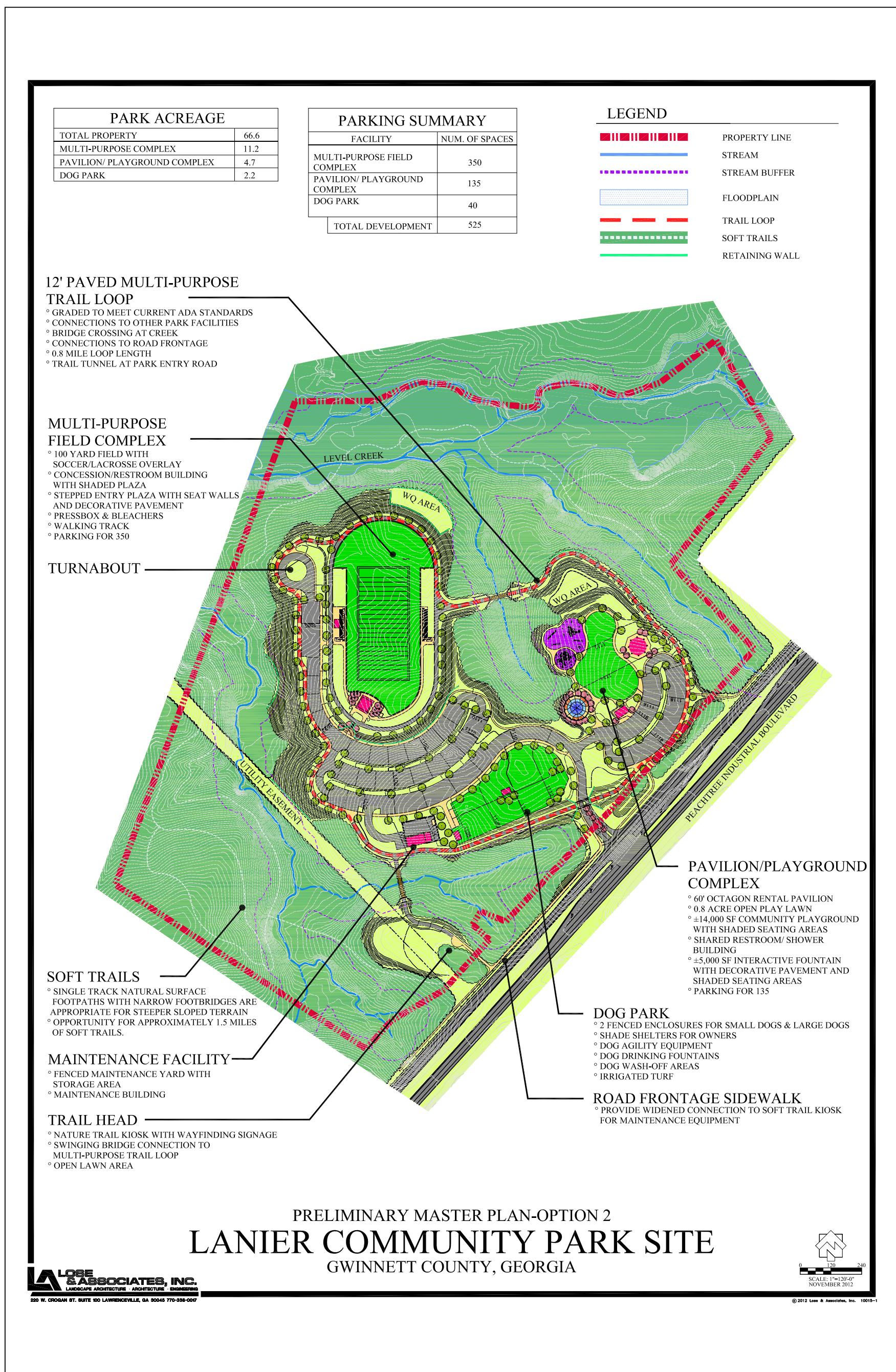


Figure 17

Park Entry Road & Road Frontage Sidewalk: The location of the park entry road was determined by its relationship with Peachtree Industrial Boulevard (PIB). The driveway is centered on the median break on PIB, which is also at the crest of the road, providing ideal site lines in and out of the park. A deceleration lane into the park is provided per the County DOT requirements. Furthermore, a right turn exit lane has been provided to ease traffic backup within the park due to drivers wishing to turn northbound on PIB. Where portions of the multi-purpose trail cannot be substituted, road frontage sidewalks provide a pedestrian access route along the front of the property. The portion of this sidewalk from the park entry road to the trailhead will be widened and paved with heavy duty pavement to accommodate maintenance equipment trying to access the trailhead area.

Trailhead/Soft Trails: Utilizing the excess fill material generated from the grading of the maintenance facility, a trailhead with kiosk and open lawn was located across the utility easement to provide an access point for passive park users wishing to access the soft trail system. This area can be accessed from either the road frontage sidewalk or a swinging bridge connection to the multi-purpose trail loop. Pavement is limited to areas outside of the easement and grading fills are minimal to meet the utility company standards. Narrow, natural surface soft trails with footbridges were deemed more appropriate for the undevelopable areas of the site with steeper slopes. Here passive park users can access some of the more intimate features of the site, including mature hardwoods, stream corridors, and other features such as waterfalls discovered on site. The soft trail system is looped and has connections to the multi-purpose trail in other areas of the park.

Outdoor Courts Complex (Option 1): This facility is located close to the park entry to provide passive policing opportunities for the area. The complex includes three artificial turf badminton courts, two half-court basketball courts, and two sand volleyball courts. Each of these amenities has benches for passive spectator areas in addition to the shared gathering areas at the center of the complex. Multiple picnic shelters have also been provided at the center of the complex, along with its own restroom building. Small open lawn areas have also been provided for gathering but are small enough to deter use as a practice field. Large bench swings have also been provided in this area to serve as a gathering area for conversations and casual viewing of the court activities.

Dog Park (Option 2): In Option 2, a dog park is proposed in lieu of the outdoor courts complex. This enclosed lawn area encompasses over two acres and is divided into two areas designated for use by large dogs and small dogs. Both areas will feature a shade shelter with bench seating for owners as well as dog agility equipment, pet/owner drinking fountains, dog wash-off areas and irrigated turf. The location of this feature in relationship to other park amenities is ideal in that it will be isolated from other park users yet visible enough to remain an attractive feature.

The Recreation Authority approved Preliminary Master Plan- Option 1 with a request that the teen area be reviewed to ensure that it better meets community needs, and that the small potentially usable area near the water quality pond serving the pavilion/playground complex be somehow incorporated into the plan.

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Final Master Plan & Opinion of Probable Cost

After the preliminary master plan was presented and County Staff was able to perform an internal review, the requested modifications were made and a final master plan (**Figure 18**), proposed sanitary sewer routing plan (**Figure 19**) and the opinion of probable cost were developed. The final master plan was presented to the Gwinnett County Recreation Authority on December 13, 2012 at the Dacula Activity Building.

5.1 Master Plan Description

Entrance Drive

Due to the existing conditions and high use of the Peachtree Industrial Boulevard (PIB) corridor, the park entry had to be located where ideal site lines could be provided for park users entering and exiting the site. As such, the park entry is shown at the crest of a hill on the highway and is centered on a turning land break. Grade transitions at the entry drive are very mild to increase safety along the main throat of the driveway. Right turn exit lanes will relieve any internal congestion resulting from drivers wishing to turn northbound on PIB.

Multi-Purpose Field Complex

The layout of this facility is commonly found throughout the Gwinnett Parks system and has been developed through the implementation of design standards. Like others before it, this complex features a large rectangle field supporting football, soccer and lacrosse, two elevated championship-sized bleachers, a pressbox, as well as a concessions/restroom building with shaded plazas and space for a future grilling shelter to be provided by the association. This facility is also surrounded by an independently lighted walking track and features a formal entry area with decorative paving accents and shaded seat walls.

Pavilion/Playground Complex

Using guidelines established in the County's Design Standards Manual, this area features a large community playground, rental pavilion, open play lawn and restroom building. The playground will accommodate separate areas for different age groups and will incorporate shaded seating areas. The county standard rental pavilion is located near the parking lot for ease of access. As previously mentioned, the open play lawn's size and layout deters use as a practice facility for athletics.

Interactive Fountain

The incorporation of the interactive fountain required the expansion of the restroom to accommodate the potential need for a bath house. The restroom/bath house is oriented towards

the open play lawn for ease of visibility from other complex amenities. Decorative pavement, seatwalls and landscape beds will be incorporated into the design of the interactive fountain. Water serving this amenity will be treated and filtered and recirculated via mechanical equipment stored in an underground vault.

Maintenance Facility

The maintenance facility is located in an area that can be hidden with grading and screen plantings to increase the visual appeal of the park's interior. Minimal walls may be required to grade in the pad necessary for this facility. An enclosed yard will house outdoor storage bins as well as the county's standard maintenance shop.

12' Paved Multi-Purpose Trail Loop

This 0.8 mile long ADA trail loop encircles the developable areas of the park and provides pedestrian connections to all park amenities. Bridges and tunnels are incorporated in the design to provide access to natural site features as well as to provide a safe alternative at vehicular crossings. Canopy trees will be planted at intervals along portions of the trail to provide shade cover along the route. Trail shoulders should be maximized to add safety as well as planting areas for these trees. In order to utilize a portion of the wooded site with moderate, accessible slopes, a trail spur leading to a council ring has been provided. This council ring will be a grassed area with stone seatwalls to be used for passive recreation. Trail users wishing to use the walking track at the multi-purpose field may add another 0.33 miles to this trail loop experience by circling the track before continuing on the trail.

Road Frontage Sidewalk

As part of the County's requirement to provide frontage sidewalks along new developments, a blend of sidewalks and multi-purpose trails are provided. Where maintenance access routes are required to reach remote parts of the park, these sidewalks should be widened and reinforced with thicker pavement.

Trailhead and Soft Trails

A trailhead marking the primary entrance to the soft trail system has been provided in a remote location of the park. This area is accessed by a swinging bridge suspended over a large draw which is connected to the multi-purpose trail and the parking area. The trailhead incorporates a kiosk with wayfinding signage and a seating area. Due to the existing slopes and sensitive nature of the undevelopable areas, soft surface nature trails and narrow foot bridges provide access to various natural features of the site.

Outdoor Courts Complex

Located at the front of the park, this area features three artificial turf badminton courts, two half-sized basketball courts, one full-sized basketball court, a sand volleyball court, bench swings, gathering areas with picnic shelters and a restroom building. The restroom building is slightly

removed from the courts area to help serve both the paved and soft trails on the site. The sand volleyball court is isolated from the rest of the complex to contain the sand within the immediate area. The remaining areas near this complex include passive open areas that could be maintained as lawns or naturalized into meadows. A small area of turf is provided for unstructured play.

5.2 Master Plan Acceptance and Opinion of Probable Cost

On December 13, 2012, the Gwinnett County Recreation Authority voted to accept the final master plan as the guiding document for the future development of this community park. The result of this vote was a unanimous decision to accept the final plan.

After the presentation, the members analyzed the opinion of probable cost associated with the proposed development. Copies of the opinion of probable cost can be found in **Appendix A**.

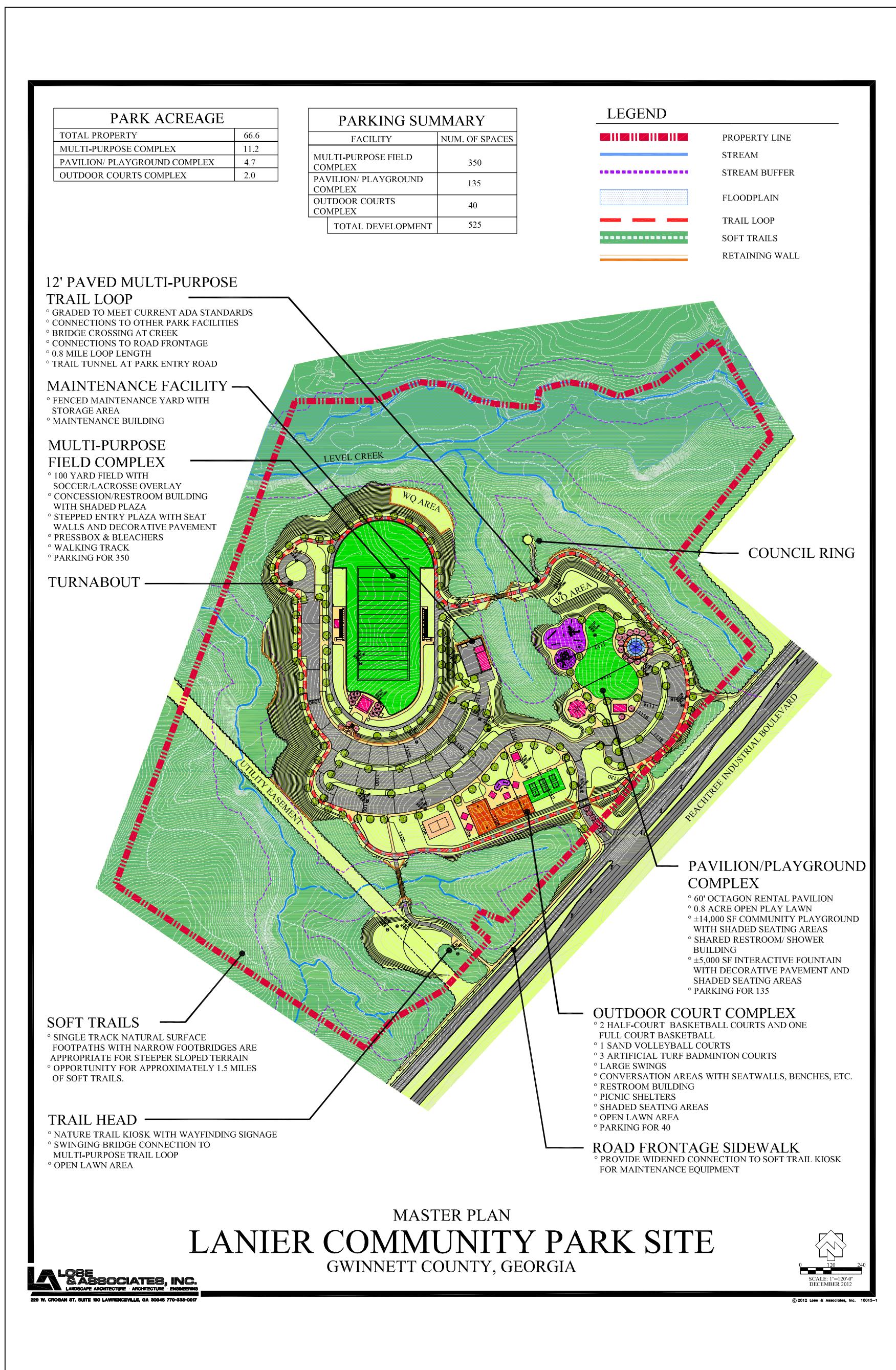


Figure 18

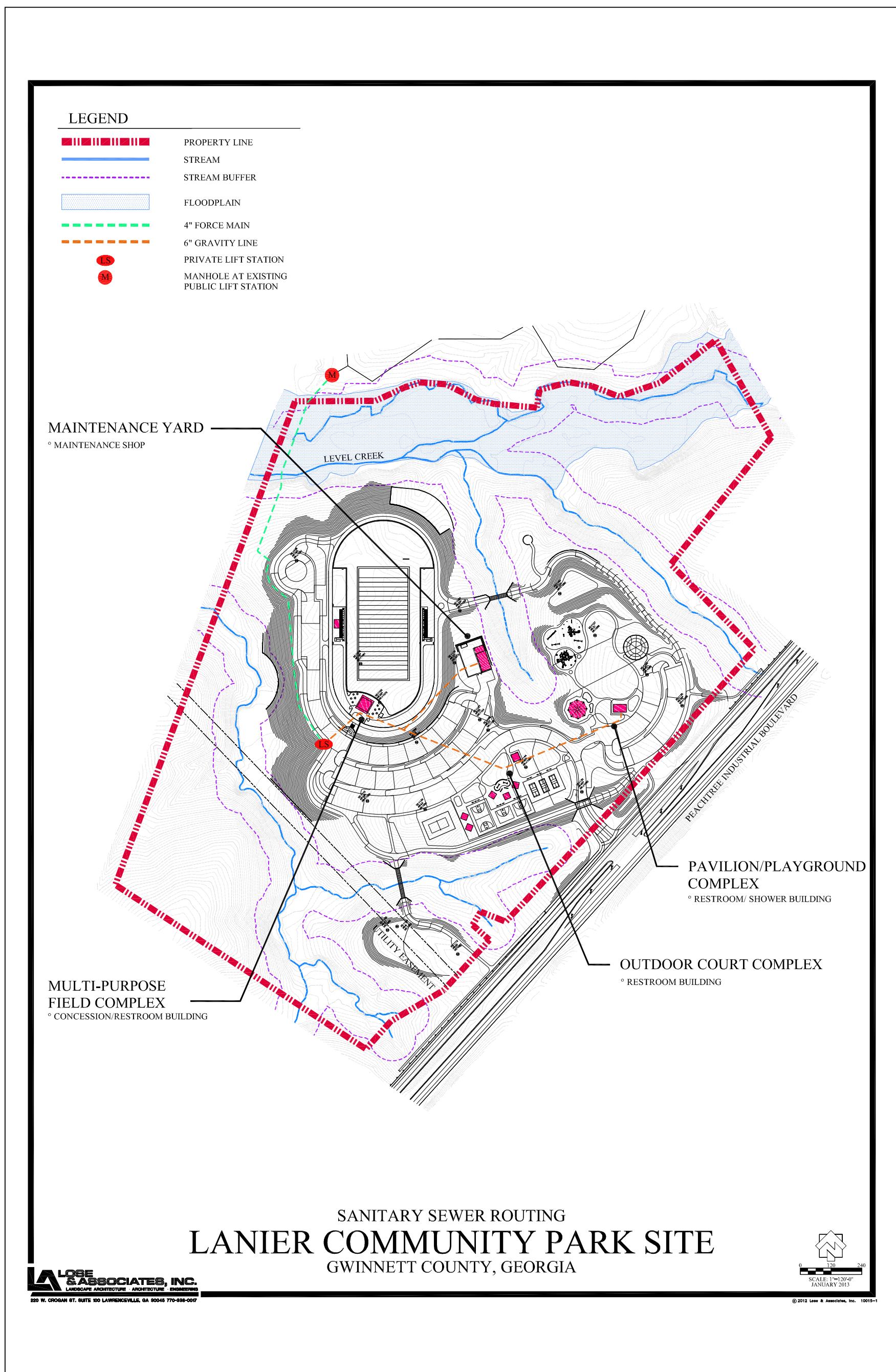


Figure 19

Final Master Plan with Tennis Courts Revision

Following approval of the final master plan, County Staff requested a final amendment to the master plan to replace the Outdoor Courts Complex with a Tennis Court Complex. This revision to the previous plan was deemed necessary to better meet the needs of the community, as expressed by representatives of the Sugar Hill governing authorities. After this requested modification was made, a revised version of the final master plan (**Figure 20**) and the revised opinion of probable costs were created. The final master plan was presented to the Gwinnett County Recreation Authority on March 14, 2013 at the Dacula Activity Building.

6.1 Master Plan Description

Tennis Court Complex

Using the same graded pad previously designated for a various outdoor court activities, a tennis complex featuring six lighted courts was provided. This complex also features a tennis office with player restrooms as well as shaded spectator areas using overhead shade structures. Shade structures have also been provided at a small gathering area near the complex entry that will include small picnic tables for players and spectators.

Picnic Area

Using the remaining open space adjacent to the tennis courts, a small picnic area with open play lawn provides an access corridor leading to the soft trail network's trailhead. This area features small picnic pavilions and open picnic areas along its perimeter. Landscaping and fencing along the edges of the picnic area provide a buffer between other park amenities, creating a more enjoyable passive park experience.

Note: Please see Section 5.1 for a written description of other master plan elements (except for the Outdoor Courts Complex, which was replaced by the aforementioned Tennis Court Complex).

6.2 Master Plan Acceptance and Opinion of Probable Cost

On March 14, 2013, the Gwinnett County Recreation Authority voted to accept the final master plan as the guiding document for the future development of this community park. The result of this vote was a unanimous decision to accept the final plan.

After the presentation, the members analyzed the opinion of probable cost associated with the proposed development. Copies of the opinion of probable cost can be found in **Appendix C**.

6.3 Proposed Cut Analysis

Following acceptance of the final master plan, County staff requested a graphic analysis of the proposed cuts to be performed with the development of the park property. This graphic (**Figure 21**) provides County Staff and design consultants a useful tool to understand the range of proposed cuts on the site as well as the potential for encountering subsurface rock.

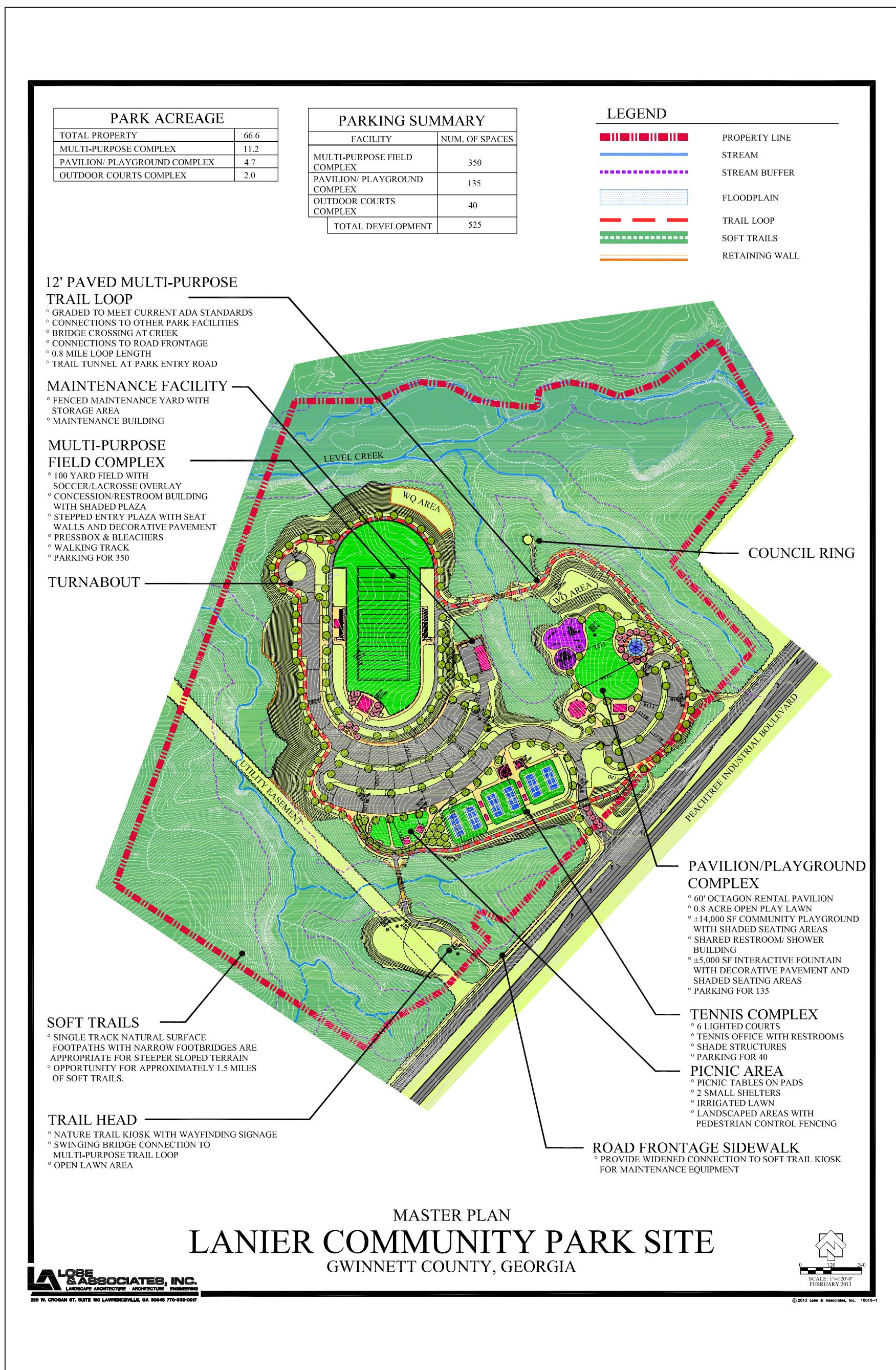
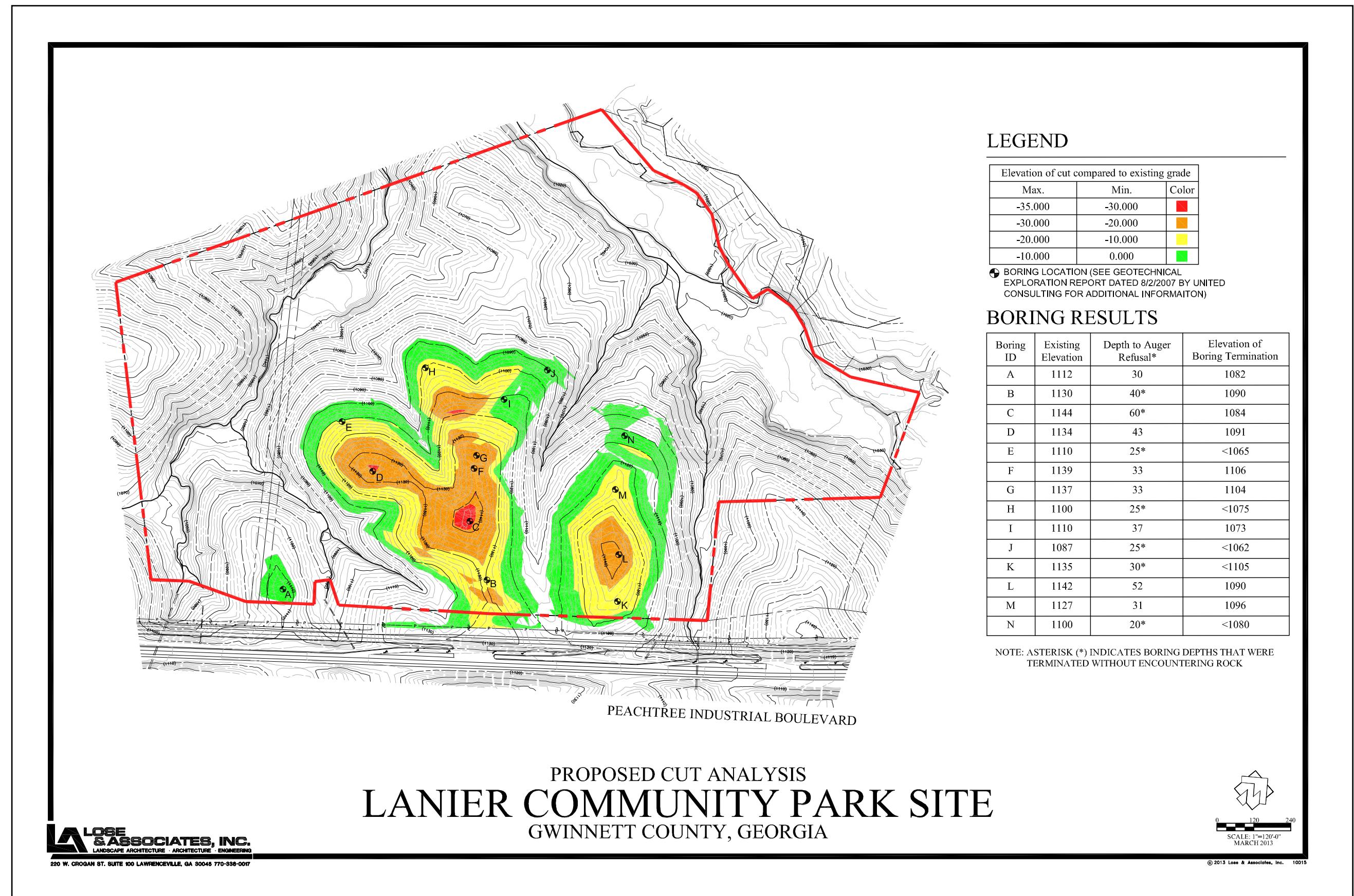


Figure 20

Figure 21



Cited Resources

7.1 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.”

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Appendix A

Final Opinion of Probable Cost

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Lanier Community Park Site Master Plan

Opinion of Probable Cost- 12-11-12

Item	Qty.	Unit	\$/Unit	Cost
Overall Site Work/ Utilities				
Layout survey	30	ac	\$ 350.00	\$ 10,500.00
Balanced grading	360000	cy	\$ 3.50	\$ 1,260,000.00
Rock open blasting and grading (budget)	500	cy	\$ 30.00	\$ 15,000.00
Rock trench blasting and grading (budget)	1000	cy	\$ 55.00	\$ 55,000.00
Retaining wall (modular block, >=25' high)	18000	ff	\$ 25.00	\$ 450,000.00
Retaining wall (CIP, 10' high)	110	cy	\$ 500.00	\$ 55,000.00
4' Chain link fence (along top of walls >30")	2100	lf	\$ 17.00	\$ 35,700.00
Erosion control (budget, includes tree protection fencing, silt fence, erosion control matting, etc.)	1	ls	\$ 175,000.00	\$ 175,000.00
Storm drainage (budget)	1	ls	\$ 125,000.00	\$ 125,000.00
Outlet structure	1	ea	\$ 3,500.00	\$ 3,500.00
Heavy duty clearing	28	ac	\$ 10,000.00	\$ 280,000.00
6" Sewer service (includes structures)	1100	lf	\$ 60.00	\$ 66,000.00
4" PVC force main (includes structures)	1300	lf	\$ 12.00	\$ 15,600.00
Packaged sanitary sewer pump station (budget)	1	ls	\$ 45,000.00	\$ 45,000.00
2" Domestic water meter	1	ls	\$ 60,000.00	\$ 60,000.00
Domestic backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
3" Irrigation water meter	1	ls	\$ 42,000.00	\$ 42,000.00
Irrigation backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
8" Fire service	1500	lf	\$ 42.00	\$ 63,000.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
3" Domestic water service	250	lf	\$ 12.00	\$ 3,000.00
4" Domestic water service	425	lf	\$ 15.00	\$ 6,375.00
Heavy duty asphalt pavement	64000	sf	\$ 3.50	\$ 224,000.00
Concrete curb and gutter	3500	lf	\$ 13.00	\$ 45,500.00
Concrete wheelstops	150	ea	\$ 50.00	\$ 7,500.00
Striping	1	ls	\$ 3,000.00	\$ 3,000.00
Vehicular signage	3	ea	\$ 250.00	\$ 750.00
Directional signage	2	ea	\$ 1,000.00	\$ 2,000.00
Parking lot lighting	1	ls	\$ 50,000.00	\$ 50,000.00
Light duty concrete pavement	13500	sf	\$ 3.50	\$ 47,250.00
Pipe gates	1	ea	\$ 3,500.00	\$ 3,500.00
Dumpster pad (budget)	1	ls	\$ 4,000.00	\$ 4,000.00
Park entry signage (includes landscaping, electrical service)	1	ea	\$ 10,000.00	\$ 10,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				\$ 3,831,850.31

Multi-Purpose Field Complex				
Electrical service	1	ls	\$ 30,000.00	\$ 30,000.00
Storm drainage (budget)	1	ls	\$ 75,000.00	\$ 75,000.00
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00
8" Fire service	10	lf	\$ 42.00	\$ 420.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
3/4" Domestic water service	300	lf	\$ 10.00	\$ 3,000.00
2" Domestic water service	550	lf	\$ 11.00	\$ 6,050.00
Heavy duty asphalt pavement	105000	sf	\$ 3.50	\$ 367,500.00
Concrete curb and gutter	4600	lf	\$ 13.00	\$ 59,800.00
Concrete wheelstops	240	ea	\$ 50.00	\$ 12,000.00
Striping	1	ls	\$ 4,000.00	\$ 4,000.00
Vehicular signage	5	ea	\$ 250.00	\$ 1,250.00
Parking lot lighting	1	ls	\$ 50,000.00	\$ 50,000.00
Striping	1	ls	\$ 6,500.00	\$ 6,500.00
Vehicular and handicapped signage	7	ea	\$ 250.00	\$ 1,750.00
Heavy duty concrete pavement	1650	sf	\$ 4.00	\$ 6,600.00
Light duty concrete pavement	18000	sf	\$ 3.00	\$ 54,000.00
Stairs (budget, includes handrails)	1	ls	\$ 6,500.00	\$ 6,500.00

Decorative concrete pavement	3000	sf	\$ 8.00	\$ 24,000.00
Modified post curb (for athletic field surfacing)	1525	lf	\$ 18.00	\$ 27,450.00
Synthetic turf at Multi-purpose field	141250	sf	\$ 7.50	\$ 1,059,375.00
Post curb	200	lf	\$ 7.00	\$ 1,400.00
4' Chain link fence	1600	lf	\$ 17.00	\$ 27,200.00
6' Chain link fence	1750	lf	\$ 20.00	\$ 35,000.00
4' High, 5' wide gate	1	ea	\$ 500.00	\$ 500.00
4' High, 8' wide gate	2	ea	\$ 650.00	\$ 1,300.00
4' High, 14' wide gate	2	ea	\$ 1,000.00	\$ 2,000.00
6' High, 5' wide gate	2	ea	\$ 500.00	\$ 1,000.00
6' High, 10' wide gate	2	ea	\$ 1,000.00	\$ 2,000.00
6' High, 14' wide gate	3	ea	\$ 1,200.00	\$ 3,600.00
6' Decorative steel fence	50	lf	\$ 70.00	\$ 3,500.00
5-Row, elevated bleacher	2	ea	\$ 30,000.00	\$ 60,000.00
Walking track (light duty asphalt pavement)	20697	sf	\$ 4.00	\$ 82,788.00
Walking track lighting	1	ls	\$ 34,000.00	\$ 34,000.00
Bench	4	ea	\$ 1,000.00	\$ 4,000.00
Picnic table	6	ea	\$ 1,500.00	\$ 9,000.00
Waste receptacle	8	ea	\$ 500.00	\$ 4,000.00
Team bench	4	ea	\$ 1,500.00	\$ 6,000.00
Flagpole	1	ea	\$ 1,500.00	\$ 1,500.00
Combination football/soccer goal	2	ea	\$ 7,000.00	\$ 14,000.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Plaza tree grates	10	ea	\$ 500.00	\$ 5,000.00
Sports field lighting	1	ls	\$ 90,000.00	\$ 90,000.00
Sound system conduit	1	ls	\$ 2,500.00	\$ 2,500.00
Facility rules signage	2	ea	\$ 1,000.00	\$ 2,000.00
Trail rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Restrooms/concession building	1	ea	\$ 375,000.00	\$ 375,000.00
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 65,000.00	\$ 65,000.00
Irrigation (budget, includes artificial turf rotors, plaza trees pits and shrub areas)	1	ls	\$ 45,000.00	\$ 45,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 3,241,996.22

Outdoor Court Complex				
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00
Storm drainage (budget)	1	ls	\$ 35,000.00	\$ 35,000.00
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00
3/4" Domestic water service	75	lf	\$ 10.00	\$ 750.00
1.5" Domestic water service	150	lf	\$ 10.75	\$ 1,612.50
Light duty concrete pavement	24500	sf	\$ 3.00	\$ 73,500.00
Post curb	250	lf	\$ 7.00	\$ 1,750.00
Modified post curb (for athletic field surfacing)	200	lf	\$ 18.00	\$ 3,600.00
Synthetic turf at badminton courts	8900	sf	\$ 7.50	\$ 66,750.00
Seat walls	110	lf	\$ 75.00	\$ 8,250.00
Basket ball courts (2 half size courts, 1 full size court, includes fencing, court surfacing, striping, lighting, equipment)	1	ls	\$ 140,000.00	\$ 140,000.00
Bench	15	ea	\$ 1,000.00	\$ 15,000.00
Picnic table	10	ea	\$ 1,500.00	\$ 15,000.00
Waste receptacle	5	ea	\$ 500.00	\$ 2,500.00
Bench swings	2	ea	\$ 2,500.00	\$ 5,000.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Facility rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Small pavilion	5	ea	\$ 50,000.00	\$ 250,000.00
Restroom building	1	ea	\$ 110,000.00	\$ 110,000.00
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 25,000.00	\$ 25,000.00
Irrigation (budget, includes lawn and shrub areas)	1	ls	\$ 15,000.00	\$ 15,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 961,064.34
Pavilion/Playground Complex				

Electrical service	1	ls	\$ 10,000.00	\$ 10,000.00
Storm drainage (budget)	1	ls	\$ 40,000.00	\$ 40,000.00
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00
3/4" Domestic water service	80	lf	\$ 10.00	\$ 800.00
1.5" Domestic water service	50	lf	\$ 10.75	\$ 537.50
2" Domestic water service	350	lf	\$ 11.00	\$ 3,850.00
Heavy duty asphalt pavement	48500	sf	\$ 4.00	\$ 194,000.00
Concrete curb and gutter	2100	lf	\$ 13.00	\$ 27,300.00
Concrete wheelstops	135	ea	\$ 50.00	\$ 6,750.00
Striping	1	ls	\$ 3,250.00	\$ 3,250.00
Parking lot lighting	1	ls	\$ 20,000.00	\$ 20,000.00
Vehicular and handicapped signage	5	ea	\$ 250.00	\$ 1,250.00
Light duty concrete pavement	14000	sf	\$ 3.00	\$ 42,000.00
Post curb	400	lf	\$ 7.00	\$ 2,800.00
Large community playground (budget, includes equipment and safety surfacing)	1	ls	\$ 275,000.00	\$ 275,000.00
Interactive fountain (budget, +/- 5000sf, includes pavement, pumps, jets, water vault, seat walls, etc)	1	ls	\$ 135,000.00	\$ 135,000.00
Bench	5	ea	\$ 1,000.00	\$ 5,000.00
Large picnic table (at pavilion)	20	ea	\$ 1,500.00	\$ 30,000.00
Waste receptacle	5	ea	\$ 500.00	\$ 2,500.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Facility rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Playground rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Octagon rental pavilion	1	ea	\$ 115,000.00	\$ 115,000.00
Restroom/ bath house	1	ea	\$ 220,000.00	\$ 220,000.00
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 35,000.00	\$ 35,000.00
Irrigation (budget, includes artificial turf rotors, plaza trees pits and shrub areas)	1	ls	\$ 20,000.00	\$ 20,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 1,446,871.78

Maintenance Complex				
Electrical service	1	ls	\$ 10,000.00	\$ 10,000.00
8" Fire service	10	lf	\$ 42.00	\$ 420.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
1.5" Domestic water service	75	lf	\$ 10.75	\$ 806.25
Heavy duty asphalt pavement	8000	sf	\$ 4.00	\$ 32,000.00
Concrete curb and gutter	75	lf	\$ 13.00	\$ 975.00
Concrete wheelstops	3	ea	\$ 50.00	\$ 150.00
Striping	1	ls	\$ 3,250.00	\$ 3,250.00
Vehicular and handicapped signage	1	ea	\$ 250.00	\$ 250.00
Heavy duty concrete pavement	1250	sf	\$ 4.00	\$ 5,000.00
10' Chain link fence	265	lf	\$ 35.00	\$ 9,275.00
10' High, 14' wide gate	1	ea	\$ 1,400.00	\$ 1,400.00
Maintenance storage bins	1	ls	\$ 2,000.00	\$ 2,000.00
Maintenance building	1	ls	\$ 120,000.00	\$ 120,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 230,301.95

Trailhead/ Trails				
Storm drainage (budget, cross drains)	1	ls	\$ 15,000.00	\$ 15,000.00
Heavy duty asphalt pavement	30000	sf	\$ 4.00	\$ 120,000.00
Light duty concrete pavement	22500	sf	\$ 3.00	\$ 67,500.00
Mulch trails (3' wide)	8700	lf	\$ 9.00	\$ 78,300.00
Decorative concrete pavement (council ring, trail head)	650	sf	\$ 8.00	\$ 5,200.00
Suspension bridge (budget, 100 LF, includes structural)	1	ls	\$ 150,000.00	\$ 150,000.00
Trail bridge (budget, 60 LF, rated for light trucks,	1	ls	\$ 60,000.00	\$ 60,000.00
Tunnel (budget, at park entry road)	1	ls	\$ 55,000.00	\$ 55,000.00
Site furnishings (budget)	1	ls	\$ 30,000.00	\$ 30,000.00
Trail rules signage	7	ea	\$ 1,000.00	\$ 7,000.00
Trail loop signage	4	ea	\$ 250.00	\$ 1,000.00
Kiosk with interpretive signage	1	ls	\$ 7,500.00	\$ 7,500.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 720,273.75

	TOTAL DEVELOPMENT	\$	10,432,358.36

This opinion of probable cost is provided by Lose & Associates, Inc. for Lanier Community Park. Estimates of construction quantities and opinions of probable cost provided by us are made on the basis of our experience, level of design and known construction costs. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and opinions of probable costs. Lose & Associates makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.

Appendix B

Meeting Minutes

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MEMORANDUM

Date: 10-6-10

To: Rex Schuder

From: Whit Alexander

Re: Lanier Community Park Site Master Plan Citizen Input Meeting 10-5-10

On 10-5-10, a meeting was held at Lanier High School to gather public input for the master plan program and to begin to assemble the citizen input committee for the project. Park and Recreation Division staff included Grant Guess and Rex Schuder. Whit Alexander represented Llose & Associates. Approximately 13 citizens were in attendance.

Grant welcomed the citizens in attendance. He explained the purpose of the meeting and introduced Rex, who continued, noting what defines a community park (a mix of active and passive) and asked that the citizens fill out their input surveys for items they would like to see in the park.

While the citizens filled out their surveys, there was a good bit of discussion between Rex and the citizens regarding the property. Most (those representing youth athletics) were concerned that the property was not large enough or did not present enough flat ground to serve their all their desires for sports fields. Rex noted that the sports fields were but one component of the park program, and that other residents who desired other amenities might find the park more than adequate for their priorities. Some representing the youth athletic organizations asked that the county look for another site, one with enough land to serve all their sports field needs. Rex explained that the development of most community parks was a multi-step process, sometimes taking many years and many expansions of land to accommodate all the fields that the residents wanted. He noted that in many cases it takes multiple sales tax programs and multiple land purchases spread out over time for a community to accumulate enough land for all the sports fields.

He then explained the master planning process and stressed that those wishing to serve on the input committee consider the time commitment required.

The following are the results of a survey gathered at the meeting. The number following each item demonstrates the number of times each item was requested. Because some requests were very specific (indoor tennis) and others were more general (tennis courts), some similar items are grouped together. The items are prioritized based on the number of times mentioned.

- Paved trails (8)-one person asked for them to be lighted.
- Football field(s) (7)-one person specifically asked for them to be lighted
- Playground (7)-one person asked for this to be a special needs playground, another asked for it to include wooden play forts and bridges.
- Baseball/softball fields (5) -one person specifically asked for them to be lighted
- Pavilion/picnicking areas (5)-one person asked that individual tables be provided, not in pavilions
- Activity building/gymnasium (4)
- Aquatic center (4)-one person asked for these features to be more natural in design
- Outdoor tennis (4)
- Nature trails (4)
- Disc golf (3)
- Basketball courts (3)
- Pond/lake (3)
- Disc golf (3)
- Open lawn/free play irrigated turf fields (2)
- Splash pad (2)
- Dog park (2)
- Lacrosse field (1)
- Soccer field(s) (1)
- Community center (1)
- Indoor tennis (1)
- Racquetball (1)
- Ample parking (1)
- Sand volleyball (1)
- Wall ball (1)
- Mountain bike trails (1)
- Ropes course (1)

Additionally, the following is a list of citizen concerns. The number following each item demonstrates the number of times each item was mentioned.

- Encroachment on surrounding neighborhoods, restricting access to surrounding neighborhoods (2)
- Negative connotation of skatepark/basketball (2)
- Edges of park should be left natural (1)
- Public safety (1)
- Vandalism (1)
- Loss of trees and greenspace (1)
- The project will cost too much and should be stopped (1)
- Avoid duplication of services already provided by Sugar Hill (1)
- Enough free fields need to be provided, or an arrangement needs to be made with Sugar Hill, so that this association is not the only one in the County required to rent fields (1)
- More land be acquired to accommodate all the needs of the community (1)

- Avoid crowding too many facilities into the park (1)
- Make sure that the needs of all citizens are met (1)

End of Memo

Thank you.

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Appendix C

Final Opinion of Probable Costs: Master Plan Revision with Tennis Courts

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Lanier Community Park Site Master Plan

Opinion of Probable Cost- 2-22-13

Item	Qty.	Unit	\$/Unit	Cost
Overall Site Work/ Utilities				
Layout survey	30	ac	\$ 350.00	\$ 10,500.00
Balanced grading	360000	cy	\$ 3.50	\$ 1,260,000.00
Rock open blasting and grading (budget)	500	cy	\$ 30.00	\$ 15,000.00
Rock trench blasting and grading (budget)	1000	cy	\$ 55.00	\$ 55,000.00
Retaining wall (modular block, >=25' high)	18000	ff	\$ 25.00	\$ 450,000.00
Retaining wall (CIP, 10' high)	110	cy	\$ 500.00	\$ 55,000.00
4' Chain link fence (along top of walls >30")	2100	lf	\$ 17.00	\$ 35,700.00
Erosion control (budget, includes tree protection fencing, silt fence, erosion control matting, etc.)	1	ls	\$ 175,000.00	\$ 175,000.00
Storm drainage (budget)	1	ls	\$ 125,000.00	\$ 125,000.00
Outlet structure	1	ea	\$ 3,500.00	\$ 3,500.00
Heavy duty clearing	28	ac	\$ 10,000.00	\$ 280,000.00
6" Sewer service (includes structures)	1100	lf	\$ 60.00	\$ 66,000.00
4" PVC force main (includes structures)	1300	lf	\$ 12.00	\$ 15,600.00
Packaged sanitary sewer pump station (budget)	1	ls	\$ 45,000.00	\$ 45,000.00
2" Domestic water meter	1	ls	\$ 60,000.00	\$ 60,000.00
Domestic backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
3" Irrigation water meter	1	ls	\$ 42,000.00	\$ 42,000.00
Irrigation backflow preventer	1	ls	\$ 2,500.00	\$ 2,500.00
8" Fire service	1500	lf	\$ 42.00	\$ 63,000.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
3" Domestic water service	250	lf	\$ 12.00	\$ 3,000.00
4" Domestic water service	425	lf	\$ 15.00	\$ 6,375.00
Heavy duty asphalt pavement	64000	sf	\$ 3.50	\$ 224,000.00
Concrete curb and gutter	3500	lf	\$ 13.00	\$ 45,500.00
Concrete wheelstops	150	ea	\$ 50.00	\$ 7,500.00
Striping	1	ls	\$ 3,000.00	\$ 3,000.00
Vehicular signage	3	ea	\$ 250.00	\$ 750.00
Directional signage	2	ea	\$ 1,000.00	\$ 2,000.00
Parking lot lighting	1	ls	\$ 50,000.00	\$ 50,000.00
Light duty concrete pavement	13500	sf	\$ 3.50	\$ 47,250.00
Pipe gates	1	ea	\$ 3,500.00	\$ 3,500.00
Dumpster pad (budget)	1	ls	\$ 4,000.00	\$ 4,000.00
Park entry signage (includes landscaping, electrical service)	1	ea	\$ 10,000.00	\$ 10,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
				\$ 3,831,850.31

Multi-Purpose Field Complex				
Electrical service	1	ls	\$ 30,000.00	\$ 30,000.00
Storm drainage (budget)	1	ls	\$ 75,000.00	\$ 75,000.00
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00
8" Fire service	10	lf	\$ 42.00	\$ 420.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
3/4" Domestic water service	300	lf	\$ 10.00	\$ 3,000.00
2" Domestic water service	550	lf	\$ 11.00	\$ 6,050.00
Heavy duty asphalt pavement	105000	sf	\$ 3.50	\$ 367,500.00
Concrete curb and gutter	4600	lf	\$ 13.00	\$ 59,800.00
Concrete wheelstops	240	ea	\$ 50.00	\$ 12,000.00
Striping	1	ls	\$ 4,000.00	\$ 4,000.00
Vehicular signage	5	ea	\$ 250.00	\$ 1,250.00
Parking lot lighting	1	ls	\$ 50,000.00	\$ 50,000.00
Striping	1	ls	\$ 6,500.00	\$ 6,500.00
Vehicular and handicapped signage	7	ea	\$ 250.00	\$ 1,750.00
Heavy duty concrete pavement	1650	sf	\$ 4.00	\$ 6,600.00
Light duty concrete pavement	18000	sf	\$ 3.00	\$ 54,000.00
Stairs (budget, includes handrails)	1	ls	\$ 6,500.00	\$ 6,500.00
Decorative concrete pavement	3000	sf	\$ 8.00	\$ 24,000.00

Modified post curb (for athletic field surfacing)	1525	lf	\$ 18.00	\$ 27,450.00
Synthetic turf at Multi-purpose field	141250	sf	\$ 7.50	\$ 1,059,375.00
Post curb	200	lf	\$ 7.00	\$ 1,400.00
4' Chain link fence	1600	lf	\$ 17.00	\$ 27,200.00
6' Chain link fence	1750	lf	\$ 20.00	\$ 35,000.00
4' High, 5' wide gate	1	ea	\$ 500.00	\$ 500.00
4' High, 8' wide gate	2	ea	\$ 650.00	\$ 1,300.00
4' High, 14' wide gate	2	ea	\$ 1,000.00	\$ 2,000.00
6' High, 5' wide gate	2	ea	\$ 500.00	\$ 1,000.00
6' High, 10' wide gate	2	ea	\$ 1,000.00	\$ 2,000.00
6' High, 14' wide gate	3	ea	\$ 1,200.00	\$ 3,600.00
6' Decorative steel fence	50	lf	\$ 70.00	\$ 3,500.00
5-Row, elevated bleacher	2	ea	\$ 30,000.00	\$ 60,000.00
Walking track (light duty asphalt pavement)	20697	sf	\$ 4.00	\$ 82,788.00
Walking track lighting	1	ls	\$ 34,000.00	\$ 34,000.00
Bench	4	ea	\$ 1,000.00	\$ 4,000.00
Picnic table	6	ea	\$ 1,500.00	\$ 9,000.00
Waste receptacle	8	ea	\$ 500.00	\$ 4,000.00
Team bench	4	ea	\$ 1,500.00	\$ 6,000.00
Flagpole	1	ea	\$ 1,500.00	\$ 1,500.00
Combination football/soccer goal	2	ea	\$ 7,000.00	\$ 14,000.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Plaza tree grates	10	ea	\$ 500.00	\$ 5,000.00
Sports field lighting	1	ls	\$ 90,000.00	\$ 90,000.00
Sound system conduit	1	ls	\$ 2,500.00	\$ 2,500.00
Facility rules signage	2	ea	\$ 1,000.00	\$ 2,000.00
Trail rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Restrooms/concession building	1	ea	\$ 375,000.00	\$ 375,000.00
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 65,000.00	\$ 65,000.00
Irrigation (budget, includes artificial turf rotors, plaza trees pits and shrub areas)	1	ls	\$ 45,000.00	\$ 45,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				
\$ 3,241,996.22				

Tennis Complex					
Electrical service	1	ls	\$ 20,000.00	\$ 20,000.00	
Storm drainage (budget)	1	ls	\$ 35,000.00	\$ 35,000.00	
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00	
3/4" Domestic water service	75	lf	\$ 10.00	\$ 750.00	
1.5" Domestic water service	150	lf	\$ 10.75	\$ 1,612.50	
Light duty concrete pavement	12600	sf	\$ 3.00	\$ 37,800.00	
Tennis courts (2 courts pod, includes fencing, court surfacing, striping, lighting, equipment)	3	ea	\$ 135,000.00	\$ 405,000.00	
Bleacher	4	ea	\$ 5,000.00	\$ 20,000.00	
Picnic table	4	ea	\$ 1,500.00	\$ 6,000.00	
Waste receptacle	5	ea	\$ 500.00	\$ 2,500.00	
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00	
Facility rules signage	1	ea	\$ 1,000.00	\$ 1,000.00	
Shade structure	4	ea	\$ 12,000.00	\$ 48,000.00	
Restroom/Office building	1	ea	\$ 165,000.00	\$ 165,000.00	
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 25,000.00	\$ 25,000.00	
Irrigation (budget, includes lawn and shrub areas)	1	ls	\$ 15,000.00	\$ 15,000.00	
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency					\$ 952,551.47

Picnic Area					
Storm drainage (budget)	1	ls	\$ 5,000.00	\$ 5,000.00	
Light duty concrete pavement	6000	sf	\$ 3.00	\$ 18,000.00	
Picnic table	4	ea	\$ 1,500.00	\$ 6,000.00	
Waste receptacle	4	ea	\$ 500.00	\$ 2,000.00	
4' Chain link fence	420	lf	\$ 17.00	\$ 7,140.00	
Facility rules signage	1	ea	\$ 1,000.00	\$ 1,000.00	
Small pavilion	2	ea	\$ 50,000.00	\$ 100,000.00	

Landscape (budget, includes common area sod and parking lot trees)	1	ls	\$ 10,000.00	\$ 10,000.00
Irrigation (budget, includes lawn and shrub areas)	1	ls	\$ 10,000.00	\$ 10,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				\$ 192,161.55
Pavilion/Playground Complex				
Electrical service	1	ls	\$ 10,000.00	\$ 10,000.00
Storm drainage (budget)	1	ls	\$ 40,000.00	\$ 40,000.00
6" Sewer service (includes structures)	20	lf	\$ 60.00	\$ 1,200.00
3/4" Domestic water service	80	lf	\$ 10.00	\$ 800.00
1.5" Domestic water service	50	lf	\$ 10.75	\$ 537.50
2" Domestic water service	350	lf	\$ 11.00	\$ 3,850.00
Heavy duty asphalt pavement	48500	sf	\$ 4.00	\$ 194,000.00
Concrete curb and gutter	2100	lf	\$ 13.00	\$ 27,300.00
Concrete wheelstops	135	ea	\$ 50.00	\$ 6,750.00
Striping	1	ls	\$ 3,250.00	\$ 3,250.00
Parking lot lighting	1	ls	\$ 20,000.00	\$ 20,000.00
Vehicular and handicapped signage	5	ea	\$ 250.00	\$ 1,250.00
Light duty concrete pavement	14000	sf	\$ 3.00	\$ 42,000.00
Post curb	400	lf	\$ 7.00	\$ 2,800.00
Large community playground (budget, includes equipment and safety surfacing)	1	ls	\$ 275,000.00	\$ 275,000.00
Interactive fountain (budget, +/- 5000sf, includes pavement, pumps, jets, water vault, seat walls, etc)	1	ls	\$ 135,000.00	\$ 135,000.00
Bench	5	ea	\$ 1,000.00	\$ 5,000.00
Large picnic table (at pavilion)	20	ea	\$ 1,500.00	\$ 30,000.00
Waste receptacle	5	ea	\$ 500.00	\$ 2,500.00
Drinking fountain	1	ea	\$ 5,000.00	\$ 5,000.00
Facility rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Playground rules signage	1	ea	\$ 1,000.00	\$ 1,000.00
Octagon rental pavilion	1	ea	\$ 115,000.00	\$ 115,000.00
Restroom/ bath house	1	ea	\$ 220,000.00	\$ 220,000.00
Landscape (budget, includes shrub beds, common area sod and parking lot trees)	1	ls	\$ 35,000.00	\$ 35,000.00
Irrigation (budget, includes artificial turf rotors, plaza trees pits and shrub areas)	1	ls	\$ 20,000.00	\$ 20,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				\$ 1,446,871.78
Maintenance Complex				
Electrical service	1	ls	\$ 10,000.00	\$ 10,000.00
8" Fire service	10	lf	\$ 42.00	\$ 420.00
Fire hydrant (incl fees.)	1	ea	\$ 5,200.00	\$ 5,200.00
1.5" Domestic water service	75	lf	\$ 10.75	\$ 806.25
Heavy duty asphalt pavement	8000	sf	\$ 4.00	\$ 32,000.00
Concrete curb and gutter	75	lf	\$ 13.00	\$ 975.00
Concrete wheelstops	3	ea	\$ 50.00	\$ 150.00
Striping	1	ls	\$ 3,250.00	\$ 3,250.00
Vehicular and handicapped signage	1	ea	\$ 250.00	\$ 250.00
Heavy duty concrete pavement	1250	sf	\$ 4.00	\$ 5,000.00
10' Chain link fence	265	lf	\$ 35.00	\$ 9,275.00
10' High, 14' wide gate	1	ea	\$ 1,400.00	\$ 1,400.00
Maintenance storage bins	1	ls	\$ 2,000.00	\$ 2,000.00
Maintenance building	1	ls	\$ 120,000.00	\$ 120,000.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				\$ 230,301.95
Trailhead/ Trails				
Storm drainage (budget, cross drains)	1	ls	\$ 15,000.00	\$ 15,000.00
Heavy duty asphalt pavement	30000	sf	\$ 4.00	\$ 120,000.00
Light duty concrete pavement	22500	sf	\$ 3.00	\$ 67,500.00
Mulch trails (3' wide)	8700	lf	\$ 9.00	\$ 78,300.00
Decorative concrete pavement (council ring, trail head)	650	sf	\$ 8.00	\$ 5,200.00
Suspension bridge (budget, 100 LF, includes structural)	1	ls	\$ 150,000.00	\$ 150,000.00
Trail bridge (budget, 60 LF, rated for light trucks,	1	ls	\$ 60,000.00	\$ 60,000.00

Tunnel (budget, at park entry road)	1	ls	\$ 55,000.00	\$ 55,000.00
Site furnishings (budget)	1	ls	\$ 30,000.00	\$ 30,000.00
Trail rules signage	7	ea	\$ 1,000.00	\$ 7,000.00
Trail loop signage	4	ea	\$ 250.00	\$ 1,000.00
Kiosk with interpretive signage	1	ls	\$ 7,500.00	\$ 7,500.00
Subtotal with 5% Mobilization, Fees, Etc. and 15% Contingency				\$ 720,273.75
			TOTAL DEVELOPMENT	\$ 10,616,007.03
				.

This opinion of probable cost is provided by Lose & Associates, Inc. for Lanier Community Park. Estimates of construction quantities and opinions of probable cost provided by us are made on the basis of our experience, level of design and known construction costs. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and opinions of probable costs. Lose & Associates makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.



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PARKING SUMMARY

FACILITY	NUM. OF SPACES
MULTI-PURPOSE FIELD COMPLEX	350
PAVILION/ PLAYGROUND COMPLEX	135
OUTDOOR COURTS COMPLEX	40
TOTAL DEVELOPMENT	525

PARK ACREAGE

TOTAL PROPERTY	66.6
MULTI-PURPOSE COMPLEX	11.2
PAVILION/ PLAYGROUND COMPLEX	4.7
OUTDOOR COURTS COMPLEX	2.0

12' PAVED MULTI-PURPOSE TRAIL LOOP

- ° GRADED TO MEET CURRENT ADA STANDARDS
- ° CONNECTIONS TO OTHER PARK FACILITIES
- ° BRIDGE CROSSING AT CREEK
- ° CONNECTIONS TO ROAD FRONTAGE
- ° 0.8 MILE LOOP LENGTH
- ° TRAIL UNDERPASS AT PARK ENTRY ROAD

MULTI-PURPOSE FIELD COMPLEX

- ° 100 YARD FOOTBALL FIELD WITH SOCCER/LACROSSE OVERLAY
- ° CONCESSION/RESTROOM BUILDING WITH SHADED PLAZA
- ° STEPPED ENTRY PLAZA WITH SEAT WALLS AND DECORATIVE PAVEMENT
- ° PRESSBOX & BLEACHERS
- ° 0.33 MILE WALKING TRACK
- ° PARKING FOR 350

TURNABOUT

PICNIC AREA

- ° (2) 20' PICNIC PAVILIONS
- ° 5 PICNIC TABLES ON CONCRETE PADS
- ° FOUR SQUARE COURT
- ° 8,629 SF OF LAWN AREA
- ° 12,572 SF OF REFORESTATION AREA WITH PEDESTRIAN CONTROL FENCING
- ° 39 PARKING SPACES



MASTER PLAN

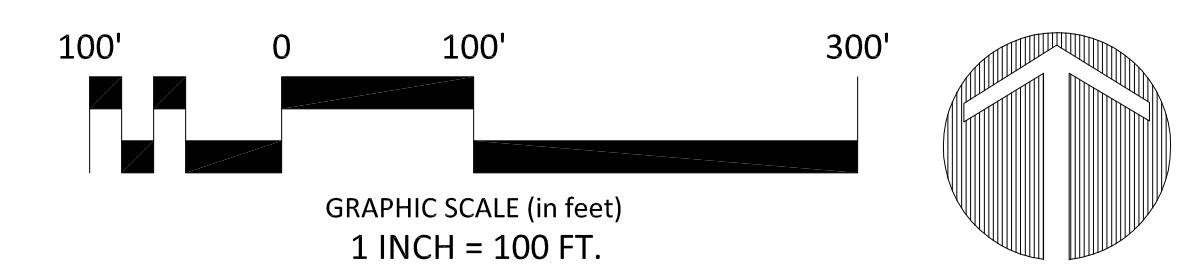
E.E. ROBINSON PARK

GWINNETT COUNTY DEPARTMENT OF
COMMUNITY SERVICES

AUGUST 2016



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