Business Evaluation of Proposed Reopening of Sugar Creek Golf Course

Prepared For:

DeKalb County, GA

Chuck Ellis, Director of Recreation, Parks and Cultural Affairs 3681 Chestnut Street Scottdale, GA 30079

Prepared By:



501 N. Highway A1a Jupiter, FL 33477 (561) 744-6006

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General Limiting Conditions

This report is based on information that was current as of spring 2018. The assessment is based on conditions at the time of the analysis (e.g., economic and market conditions); significant changes in those conditions may affect the relevance of the assessment. Because future events and circumstances, many of which cannot be predicted as of the date of this study, may affect the estimates contained therein, no warranty or representation is made by NGF Consulting that any of the projected values or results contained in this study will actually be achieved.

Although we believe that the expectations in this report are reasonable, any or all of the estimates contained herein could prove to be incorrect. To the extent possible, the NGF has attempted to verify and confirm all estimates and assumptions used in this analysis. However, some assumptions may not materialize as a result of known or unknown risks and/or unanticipated events. Consequently, actual results achieved by any new golf facility during the period covered by NGF projections may vary from our estimates and these variations may be material. As such, the National Golf Foundation accepts no liability in relation to the estimates provided herein.

To protect you and other clients, and to assure that the research results of NGF Consulting's work will continue to be accepted as objective and impartial by the business community, it is understood that our fee for the undertaking of this project is in no way dependent upon the specific conclusions reached or the nature of the advice given by us in our report to DeKalb County.

Every reasonable effort will be exerted in order that the data contained in the written report reflects the most accurate and timely information possible, and is believed to be reliable. However, no responsibility will be assumed for inaccuracies in reporting by the client, client's agents, or any other data source used in preparing the report.

The client agrees that the report is not to be used in conjunction with any public or private offering of debt or equity securities or to otherwise induce investment without the prior written consent of NGF Consulting which may be conditioned upon client agreeing to pay an additional fee in an amount to be reasonably determined by NGF Consulting.

This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

Introduction & Purpose

DeKalb County, Georgia ("County") retained National Golf Foundation Consulting ("NGF" or "NGFC") to provide planning and evaluation services for the 18-hole Sugar Creek Golf & Tennis Club, one of two 18-hole golf courses owned by the County. (For purposes of this study, NGF will refer to the facility as "Sugar Creek Golf Course" or "Sugar Creek GC"). The golf course - positioned as a 'value' public access golf facility in the southern Atlanta market - closed in October 2017 in the face of deteriorating conditions and the lessee vacating its agreement to manage the property and make rent payments to the County. The County retained NGF specifically to analyze the financial implications of reopening the golf course—from both capital improvement and operational perspectives — and to make recommendations regarding the optimal management structure and other operational considerations.

Sugar Creek GC is a highly valued component of the County's overall Parks offering, but the Board requires a clear vision of how much it will cost to improve the facility to the point it can be reasonably opened for play, as well as the ongoing cost of sustaining operations and future capital improvement needs. This independent evaluation is intended to provide DeKalb County with the information required to objectively evaluate the viability of rehabilitating and reopening Sugar Creek GC for play, including a prioritized list of deferred maintenance and capital improvement needs. NGF will also provide recommendations regarding key business planning elements for the course if the County does decide to open the golf course for play. This document comprises a summary report of key NGF findings and recommendations, and includes:

- Prioritized summary of capital needs and identification of recommended improvement plan (short-term and longer-term)
- Market analysis comprising demographic & economic profile, golf supply and demand indicators, and competitive review
- Review of viable management structures for Sugar Creek, with recommendation
- Operational recommendations (fees, marketing, programming, etc.)
- NGF's preliminary use projections and 5-year net-operating income projections assuming recommended capital upgrades and potential reconfiguration

The study effort was managed by NGF Director of Consulting Ed Getherall, with assistance from Senior Director of Consulting Richard Singer and Consulting Administrator Jodi Reilly. David Downing II, Vice President/Agronomist for Golf Maintenance Solutions (GMS), assisted NGF with the physical and agronomic evaluation of Sugar Creek. NGF's activities conducted in completion of this report included:

- Meetings with Director of Recreation, Parks and Cultural Affairs, Parks Services Division Manager, and Parks Maintenance Superintendent
- Phone interview with Cornerstone Golf employee Chet Frazier, former superintendent.
- Facility tour, including golf course, clubhouse, driving range and maintenance yard
- ▶ Golf course tour of Mystery Valley Golf Course
- Golf market competitive analysis and research
- Analysis of recent Sugar Creek GC financial performance
- Review of DeKalb County demographic and economic factors

Executive Summary

This section comprises NGF Consulting's summary of key findings, recommendations, and financial analyses related to the proposed rehabilitation and reopening plan for Sugar Creek GC, based on our team's review in the spring of 2018.

INTRODUCTION AND PURPOSE

National Golf Foundation Consulting was retained to provide DeKalb County with a plan to reopen Sugar Creek Golf Course for the short term, identify the cost of needed facility improvements, and provide guidance regarding a longer-term plan for improvements and operations at SCGC. This independent evaluation is intended to provide the County with the information required to objectively evaluate the viability of rehabilitating and reopening Sugar Creek GC for play, including a prioritized list of deferred maintenance and capital improvement needs. NGF has also provided recommendations regarding key business planning elements for the course once it is open for play. This document comprises a summary report of key NGF findings and recommendations, and includes:

- Prioritized summary of capital needs and identification of recommended improvement plan (short-term and longer-term)
- Market analysis comprising demographic & economic profile, golf supply and demand indicators, and competitive review
- Review of viable management structures for Sugar Creek
- Operational recommendations (fees, marketing, programming, etc.)
- NGF's preliminary use projections and 5-year net-operating income projections assuming recommended improvements and the new management structure

SITUATION ANALYSIS

Overview of Sugar Creek Golf Course Conditions - Spring 2018

Below we provide a high-level summary overview of SCGC conditions based on review of historical materials and inspections of Sugar Creek Golf Course by NGF Director of Consulting Ed Getherall and subcontractor Dave Downing, Vice President/Agronomist for Golf Maintenance Solutions ("GMS"), on May 21-22, 2018. County staff members Paige K. Singer, Division Manager, Park Services, and Ken Roberson, Park Maintenance Superintendent, directed the facility tours for the consultants. Information was also provided by former superintendent Chet Frazier.

The golf course has been closed since the fall of 2017. Our interviews with Parks staff and online reviews indicate that the maintenance standards prior to the closing were minimal and the course suffered from greens condition issues, excessive weeds, and lack of bunker maintenance and general mowing. As with any living thing, a golf course deteriorates with time (see ASGCA Expected Life Cycle chart in Appendix A). At Sugar Creek, there is a significant number of "mission-critical" deferred maintenance and capital needs that must be addressed immediately to reopen the golf course under even minimally acceptable playing conditions. There are a variety of other improvement needs that also must be addressed in the short term in order for the golf course to be somewhat competitive in the golf market, thus minimizing operating deficits.

During the visit, the NGF team observed the following conditions:

- The Water Source (South River), due to lack of flow and lack of an adequate wet well, pumps sediment into the pump station wet well causing excessive wear to the pumps and system.
 - The system consistently needs to be backwashed and then primed to keep it functioning.
- ▶ The Irrigation System has not been maintained or operated correctly.
 - We were told only the greens have been watered and the remainder of the system was not used.
 - At least some of the controllers have been replaced with Homeowner/Landscape controllers, which are more prone to power surges than golf course irrigation controllers.
- Greens have very thin turf coverage and are weed-infested; there are heavy organic layers under the surface.
 - A period of 60 to 90 days will be needed to grow in the greens.
 - Work needs to be completed prior to September 15th
 - Greens have shrunk 20 30% from their original size.
 - Soil testing needs to be done:
 - Fertility
 - Physical properties ISTRC Labs
 - Nematode Assay
 - Determine if greens are USGA construction
- Tees, Fairways, Driving Range and Roughs are weed-infested. Height at time of consultants' visit was 6-10 inches.
 - Bermudagrass base looked to be in good condition under the weeds.
 - Fortunately, the County had mowed the course in the fall; otherwise, the height of grass/weeds would have been double what it currently is.
- Ditches & Creek are overgrown and in need of being cut back and growth controlled. Bottoms must be dug out to allow for efficient movement of water.
- Bridges need to have boards replaced.
- **B** Bunkers are weed-infested and severely contaminated with soil, preventing drainage.
 - Need to determine if bunkers have drainage.
- Maintenance compound is overgrown and there are piles of trash and debris.
- Maintenance Building is extremely dirty and has a leaking roof.
- There is no golf course equipment.
 - County would need to provide unless private maintenance contract.
- Cart paths are very uneven from tree root invasion as well as areas where they have sunk.
- Tree and limb debris, as well as overgrown brush, exists throughout the course and should be removed.
 - Dead trees and stumps need to be removed.

- Trees that are interfering with the line of play need to be removed.
- Understory should be cleaned up.

There are really two distinct phases that need to occur for the golf course to be operational. The first phase is a reclamation project, and the second phase is normal maintenance operations. Phase one is needed as the course is not in a playable condition. Recommended improvements, with cost estimates, follow later in this summary.

Current & Pending Contractual Agreements

The County currently has private food & beverage and tennis vendors under contract at Sugar Creek. The F&B agreement is for one year, with four 1-year options to renew. The County will receive 1% of total gross revenues in year 1. The County is also reviewing a bid from a golf maintenance company that calls for an initial annual fee of \$712,000, but which may be amended to include the initial golf course rehabilitation. There is currently no contract in place for a contract golf professional/manager, though the County will soon be soliciting one through and Invitation to Bid (ITB). The County has projected, at least preliminarily, a budgeted salary of \$65,000 for the golf professional, who would also receive lesson revenue.

Recent Operating Results

As noted, historical rounds played and financial information for Sugar Creek supplied to NGF was incomplete and sparse. The table below summarizes what the County was able to provide to NGF for the periods of 2008 through 2011 (County operation) and 2012 through partial 2017 (lessee operation).

- Scant information is available on rounds played at Sugar Creek GC, with 2015 and 2016 showing an average of about 10,600 rounds. Due to the presence of annual passholders, it is likely that not all rounds were recorded. Looking at the trend in facility gross revenues (more below), it is possible that rounds played were as high as the mid 20,000s back in the 2008 and 2009 period.
- Total facility gross revenues at Sugar Creek plummeted under County operation, falling by nearly \$300,000, or 41%, between 2008 and 2011 when only \$435,000 was brought in. Reported revenues continued to decline under the private lessee, bottoming out at only \$192,000 in 2016.
- Operating expenses under County operation were generally in the \$1.1 million to \$1.25 million range over the 2008-2011 period. We were told maintenance staffing included 8 full-time plus 4 seasonal part-time workers. It is unclear if the reported expense numbers included any capital items or other one-time or extraordinary charges.
- Poperating net income to the County ranged from as low as about \$450,000 in 2009 to nearly \$830,000 in 2012. Leasing the golf course "stopped the bleeding", with the County collecting about \$24,000 in total rent payments between 2012 and 2016, but at price that NGF commonly observes in the golf industry the golf course condition severely deteriorated and the County was left with an asset requiring a large capital investment (detailed later in report).

GOLF MARKET OVERVIEW

Below, NGF Consulting provides a summary of key "external" factors that characterize the trade area in which Sugar Creek GC operates, as well as NGF's macro perspective of the U.S. golf industry. On a local/regional basis, the overview includes basic demographic measures that have the potential to affect the economic performance of the golf facility, as well as an analysis of supply and demand indicators in the public golf market.

National Golf Industry Overview

While socio-demographic, financial and cultural headwinds certainly persist for golf, the industry continued its macro trend toward stabilization in 2015-2017. The game remains popular and is fortunate to have a deep well of interested prospects. While golf's pay-for-play green fee revenues and other spending will always be vulnerable to outside forces such as weather and the economy, its chief challenge remains *getting more of those non-golfers who express interest in playing ('latent demand') to actually give golf a try, and converting more beginners into committed participants*. Still, some socioeconomic and demographic trends continue to present challenges for golf operators. For instance, golf is having trouble attracting and retaining young adults (i.e., Millennials).

Key Trends in Demand

- Participation The national golfer number (participation) showed net attrition since 2012, declining by about ±1.2 million to 23.8 million people in both 2016 and 2017 that played at least one round of golf in the prior year. Research shows that this attrition was primarily among occasional/less committed golfers. However, the vast majority of "core" golfers remain in the game. Indeed, the game's most committed golfers − those who account for approximately 95% of all rounds-played and spending − held steady at roughly 20 million last year. This segment, those golfers essential for businesses that make a living in the industry, represents about 82% of those who play.
- ▶ Rounds Played 2016-2017 Nationally, 456 million rounds were played in 2017, representing a 2.7% decrease year-over-year. For Georgia, rounds were down 7.1%, with the Atlanta submarket down 5.9%. YTD 2018 is off to a very rough start nationally and in Atlanta, with year-over-year rounds down by 8.9% and 15.2%, respectively, through April. (Data source: Golf Datatech see <u>Appendix B</u>).
- ▶ **Looking Ahead Baby Boomer Effect** As Baby Boomers age and retire over the next 15 years, we expect to see a measurable increase in total rounds played in the U.S. Boomers born between 1946 and 1964 are currently 53 to 72 years old. About 6 million of them are golfers; that's about 1/4 of all golfers, and they currently play about 1/3 of all rounds.

Golf Course Supply

The correction in golf course supply continued in 2017 at a level comparable with the previous several years, dropping by 1.5% (205.5 18-hole equivalent permanent closures and 15.5 18HEQ new openings). According to NGF data, since the market correction in golf course supply began in 2006, there has been a cumulative net reduction of golf courses equivalent to 7%. For perspective, golf supply grew by 44% in the previous 20 years (1986-2005). Closures continue to be disproportionately high among 'value' priced (peak green + cart fee below \$40) facilities. NGF's outlook for 2018 holds form with recent years, with the expectation for a further balancing of supply and demand in a competitive and oversupplied environment.

Local / Regional Market

To assess potential market opportunities to increase rounds and and/or fees for a potentially reopened Sugar Creek GC, the environment in which the facility will operate must be understood. Therefore, it is helpful to examine local economic and demographic factors that have the potential to impact rounds played and fee tolerances.

Demographic & Economic Analysis

Below, we summarize the population, median age, and median household income trends for the 5- and 10-mile markets around Sugar Creek GC, as well as DeKalb County. The tables in <u>Appendix C</u> summarize key demographic measures and trends that relate to golf participation.

- There are about 76,000 people living within 5 miles of Sugar Creek GC, 894,000 within 10 miles, and 744,000 in DeKalb County. Annual population growth rates in the local markets are projected to be about twice the national rate of growth between 2017 and 2022, with about 84,000 net new residents projected for the 10-mile trade area in the next five years.
- Median Household Incomes in the identified local markets are 16% to 18% lower than the national median of \$59,240. DeKalb County overall, with a median income of \$57,730, is only moderately lower than the nation (and is mitigated by the relatively low cost of living). In general, higher income residents are more likely to participate in golf, and they play more frequently than lower income residents.
- The County's ability to support parks and other amenities has been constrained with continued city incorporations that resulted in the loss of 50% of tax intake between about 2008 and 2014, according to AngelouEconomics.
- ▶ Longer term, according to the Atlanta Regional Commission, DeKalb County is projected to grow along with the rest of the Atlanta metro region, adding 156,000 residents by 2040. The 20-county metro Atlanta area is projected to grow by 2.5 million residents over that time.
- DeKalb County benefits from proximity to downtown Atlanta, excellent transportation infrastructure (i.e., highway, air, MARTA), a logistics cluster, an exceptional medical/healthcare corridor, relatively low cost of living, and good quality of life.

Estimated Local Market Demand

Based on NGF's proprietary golf demand modeling, the following bullets summarize the relative strength of local golf demand (additional support data in <u>Appendix C</u>).

- The permanent population in the local Sugar Creek GC submarket has age and income characteristics that correlate with lower participation in golf than the national benchmark. This is reflected in golf participation indices that are ±30% than the national benchmark in the 5- and 10-mile markets, and 17% lower in DeKalb County. Rounds activity per household is about half that of the US benchmark in the radial markets, and 42% lower in the county.
- NGF estimates about 34,000 golfing households in both the 10-mile market around Sugar Creek GC and for DeKalb County. Population growth is expected to add about 2,700 golfing households to the 10-mile primary market by 2022.
- NGF's Demand Model shows that residents in the 10-mile ring have the potential to demand as many as 635,000 rounds of golf annually. However, the golf courses in this market ring are hosting only about 245,000 rounds annually, indicating that a significant amount of golf demand is being suppressed due to a variety of factors (e.g., lack of quality choices) or being satisfied at golf courses outside the 10-mile market.

Local Golf Supply

NGF observations regarding key golf supply measures for the local market:

- There are 10 total golf facilities (includes 7 public, 6 of which are municipal) in Sugar Creek GC's total 10-mile trade area and in DeKalb County (6 public). The proportion of public courses (70%) in the primary market is similar to the overall U.S., where 75% of all golf courses are open and available to the public. Since 2000, DeKalb County has seen the closure of 72 holes of public golf.
- Of the 7 public golf facilities within 10 miles of Sugar Creek, 6 are operating at the NGF-defined 'value' price point (<\$40 peak riding fee), including Sugar Creek.
- Ratio analysis based on national benchmarks shows that the local submarkets and DeKalb County overall have a low per capita supply of golf courses, relative to the national benchmark.

Sugar Creek GC Competitive Market

Based on the current and expected (post-improvements) market positioning of Sugar Creek GC, NGF identified a subset of primary and secondary competitors for the golf facility. These golf courses were chosen based on factors such as price point, location, type (18-hole or greater public regulation length only) and amenities offered, and include both municipal and privately owned daily fee operations. Primary *current* competitors comprise low-to-mid market facilities within about 10 miles of Sugar Creek.

Primary Competitors	Secondary Competitors
Alfred 'Tup' Holmes Golf Course	Charlie Yates Golf Course
Browns Mill Golf Course	Lake Spivey Golf Club
Mystery Valley Golf Course	Southland Country Club
Panola Mountain Golf Club	

Key Findings – Competitive Market

A summary of general findings regarding the competitive market for Sugar Creek GC:

- The DeKalb County / south Atlanta (esp. south of I-20) public access golf market comprises mostly 'value' or low-fee golf courses that operate with rounds played well below capacity for this climate region. As a result, there is significant competition for market share among the market's golfers. The City of Atlanta's Browns Mill GC, which hosted just under 28,000 rounds in 2017, and daily fee Lake Spivey Golf Club (NGF estimate = 28,000 rounds) appear to be the most active courses among this subset, with Atlanta's Alfred "Tup" Holmes the least active, at fewer than 10,000 rounds in 2017.
- Posted or rack green fee pricing among Sugar Creek and its competitors falls within a relatively compact range, with 18-hole prime time (morning) walking rates available at most clubs in the low-to-mid \$20s, and prime time riding fees in the range of \$35 to \$40.
- Average rounds activity among market public golf courses has declined since its peak around the 1999-2000 period. More recently, rounds played have continued to fall in the DeKalb County market, as well as among the City of Atlanta municipal golf courses, which have seen steady declines over the last 7 to 8 years in the face of negative national golf participation trends and, more important, significant deferred maintenance and capital investment.
- After a land swap deal between the city and the State of Georgia, the state leased the historic Bobby Jones Golf Club to the Bobby Jones Foundation, which is funding a \$23 million reconstruction project begun last fall that includes transforming its 18 tees, greens, and

- fairways into a nine-hole reversible course designed by the late Bob Cupp. The project also includes a driving range, indoor instruction building, short game practice area, and a new maintenance facility. Opening is expected this fall.
- Several of the competitive golf courses NGF visited, including Tup Holmes, Browns Mill, Panola Mountain, Southland Country Club and the County's Mystery Valley Golf Course, have smaller clubhouses with minimal food & beverage service and dining or meeting space. With significant improvements to the golf course and a commitment to a higher standard of maintenance going forward, Sugar Creek should be able to take advantage of its full-service clubhouse to gain market share for both daily fee play and golf outings.

Golf Market / External Factors Summary

The public golf market in DeKalb County / south Atlanta is characterized by low green fees and low rounds activity levels, and a lot of competition among value-oriented golf courses. Golf participation rates and rounds played per household in the Sugar Creek market are very low compared to national benchmarks. Still, NGF expects that Sugar Creek GC, which enjoys an advantage in clubhouse facilities, would be positioned to increase market share with the facility improvements recommended in this report, and a higher standard of maintenance going forward.

Nationally, while socio-demographic, financial and cultural headwinds certainly persist for golf, the game remains popular and has a deep well of interested prospects. Golf's chief challenge remains getting more of those non-golfers who express interest in playing ('latent demand') to actually give golf a try, and converting more beginners into committed participants. Finally, all golf facilities face some external factors beyond their control, including unusual weather events and a high fixed expense structure and operating expenses that tend to rise more rapidly than revenues (e.g., ability to raise fees is constrained).

RECOMMENDED IMPROVEMENT PLAN FOR SUGAR CREEK GC

Below we present NGF Consulting's findings and recommendations relative to DeKalb County reopening Sugar Creek Golf Course for play, with a target date of September 1, 2018. In this section, we discuss two levels of recommended improvements for Sugar Creek:

- 1. **Mission-Critical + Other Short-Term** Highest priority improvements required to reopen the golf course for play, plus additional improvements needed in very short term (based on age and condition of assets see <u>Appendix A</u> for ASGCA Lifecycle Chart) so that Sugar Creek GC can continue to be viable as a low-fee public golf course.
- 2. **Longer Term Capital Needs** Other capital items that will likely need to be addressed in the next 3 to 10 years, based on current age and condition of assets and the need to remain competitive in the market.

As NGF reported in its June 5, 2018 memo to the Township, several of the action steps necessary to implement the "mission-critical" improvements needed to reopen the golf course late this summer have significant time-urgency and looming milestones. Following is the NGF team's recommended improvement plan for Sugar Creek Golf Course, including a range of preliminary cost estimates (all estimates are in 2018 dollars).

- 1. **Mission-Critical + Other Short-Term** Highest priority improvements required to reopen the golf course for play, plus additional improvements needed in very short term (based on age and condition of assets see <u>Appendix A</u> for ASGCA Lifecycle Chart) so that Sugar Creek GC can continue to be viable as a low-fee public golf course.
- 2. **Longer Term Capital Needs** Other capital items that will likely need to be addressed in the next 3 to 10 years, based on current age and condition of assets and the need to remain competitive in the market.

"Mission-Critical" + Other Short-Term Improvement Needs

There are two distinct phases that need to occur for Sugar Creek GC to be operational. The first phase is a reclamation project, as the course is currently not in playable condition. The second phase is normal maintenance operations and addressing other capital needs that may not be critical to getting the course into minimally playable conditions this year, but which will need to be completed in the short-term. Based on our observations of the course and our understanding of the playing conditions that will be acceptable to the course's customers (at least for 2018), NGF and GMS have identified what needs to be done to rehabilitate and open the golf course for play. We are defining the basic improvements that need to be done to open the golf course as 'mission-critical' repairs, a description of which follows below.

Irrigation System - Summary Condition and Recommendations

 $\{For \ full \ description \ of \ current \ irrigation \ system \ set \ up, \ condition \ and \ protocols, \ see \ \underline{Appendix \ D}\}.$

Mission-critical needs at Sugar Creek begin with establishing reliable water source for the greens. Ensuring that there is a reliable, clean source of water will be critical to grow the turf – especially the greens - back into playable condition. Below is a summary of the NGF team's assessment of the current irrigation system at SCGC, as well as recommendations for improving the system.

A thorough inspection of the irrigation system should be completed as soon as possible to ensure that all sprinklers are working, and that the system does not have any leaks. (The system was charged in the fall and the full entire system pressure tested by the County; no leaks were detected). During the planned rehabilitation of the golf course this summer, as well as subsequent to that, a reliable system will be needed to irrigate all areas to force the growth of the bermudagrass to take over where the weeds had been. The greens, at the very least, will need irrigation to grow them back and have sufficient playable turf coverage.

NGF Recommendations:

- Irrigation Inspection/Audit to determine the condition and make needed repairs to the system:
 - This can be done while work is beginning on greens and other areas (more below).
 - At a minimum, all greens irrigation needs to be functioning properly.
- Drill a well and eliminate the transfer line from the river:
 - This will allow a clean and consistent flow of water
 - A minimum of 300 gallons per minute would be needed to keep up with potential demand
 - Currently the pond can store approximately 8 feet of usable water; this is storage of 1.95 million gallons of water or 6 acre-feet.

Greens-Summary Condition and Recommendation

As detailed in the report, the County is in a time critical scenario as it pertains to the recovery or replanting of the greens at Sugar Creek if it is to open late this summer. Currently, the greens are very thin and in poor condition. Decisions need to be made to allow enough time for greens to fill in. At this writing in mid-June, it is nearing the time where it will be too late to sprig before next spring, especially given the recent hot weather in Atlanta.

Summary:

- Greens have very thin turf coverage and are weed-infested; there are heavy organic layers under the surface.
 - A period of 60 to 90 days will be needed to grow in the greens.
 - Work needs to be completed prior to September 15th
 - Greens have shrunk 20% 30% from their original size.
 - Soil testing needs to be done:
 - Fertility
 - Physical properties ISTRC Labs
 - Nematode Assay
 - Determine if greens are USGA construction

NGF Recommendations:

- We believe there is a good chance greens can be grown back with a minimum of sod needed. However, if the water situation is not rectified and we experience dry weather the greens could worsen, and more sod may be needed.
 - Will take 60 to 90 days.
 - Grow-in should be completed not later than September 15 to allow time for turf to prepare for winter.
 - The greens need to have weed controls applied ASAP.
- Recommended protocol:
 - Multiple applications of fertilizer to encourage growth.
 - Followed by being aerified at least twice and possibly more to correct soil issues.
 - Topdress and fertilize weekly to force them to grow back.

Tees, Fairways and Roughs

There appears there to be a reasonable stand of bermudagrass growing underneath all the weeds. The weeds need to be controlled and mowing done to allow the bermudagrass to grow and spread. Tees overall appear to be reasonably level and of decent size.

NGF Recommendations:

- Due to the density of the weeds and size we recommend applying post-emergent herbicides now to begin killing the weeds and reducing their competition with the bermudagrass.
- As the weeds begin to die we recommend mowing them with a bush hog at 6" to remove the taller dying weeds without creating excessive clippings for removal.
- Once these items are completed, mow again at 4-5 inches based on producing the smallest volume of clippings to deal with.
 - Since there are at least 60 days to grow in the greens this lowering of these areas can be done in this manner.
 - If the County needs to move faster, a turf sweeper, tractors and trailers will be needed to deal with the excessive clippings.

• This should continue until the height of cut is at 2 inches. At this point normal golf equipment can begin being used and the heights of cut lowered for each individual playing area.

Ditch Cleaning and Trimming

The course is located along the South River and is in the 100-year flood plain. The Sugar Creek is a tributary of the South River and flows through the course as well. Over the years, ditches have been dug with the soil used to raise fairways and to build mounds around greens complexes to serve as dikes. These ditches have not been maintained and are grown over with Willows and other growth. The purpose of the ditches was to help the water return to the river quicker. Sediment is rendering them less effective.

NGF Recommendations:

- Ditches should be cleaned of excess growth and excavated to help the water move more effectively.
- Excavated materials can be stockpiled and used to fill stump holes or other repairs within the flood plain.

Bridges Repair

There are six bridges at Sugar Creek GC. While NGF did not do structural inspections of the bridges, it appears that at least two are in need of having boards replaced.

Recommendations:

- **Boards** on two of the cart traffic bridges should be replaced.
- ▶ Bridges look secure structurally, but we recommend a visual examination by an engineer.

Bunkers - Minimal Preparation (needed just to reopen for play)

Bunkers are an important component contributing to overall golf course strategy, interest and aesthetics. At Sugar Creek GC, it will take about 30 days to kill the weeds in the bunkers, edge them and rake them enough to prepare for play. The County's plans of the original design show that the bunkers have drainage in them. To confirm the presence of drainage and do short-term fixes, the old sand must be removed and the drains located to see if they are still working. After any repairs, a decision could be made to just put back the old sand or replace/supplement with new sand. If it is determined that the bunker drainage problem is not easily fixable, the County may prioritize a full bunker renovation on its short-term CIP list for next year.

NGF Recommendations:

- To bring bunkers to the condition they were reportedly in prior to closing:
 - Treat bunkers with round up to kill the weeds
 - Edge the bunkers to better define the edge
 - Cultivate and rake the bunkers to bring them to a more playable condition
 - Remove as much contaminated sand as possible and add new
 - Investigate to find drainage, flush and do any repairs

Cart Paths

The asphalt cart paths are very uneven from tree root invasion, as well as areas where they have sunk. They have also suffered from the periodic flood events. For the short term, it should be sufficient to repair should only the worst areas, though it would make more sense for wall-to-wall replacement if funding was available.

Maintenance Compound

The building and compound are an appropriate size and can meet the needs of an ongoing maintenance operation. However, the building is a mess and needs a thorough cleaning and organization; also, NGF was told that the roof leaks.

NGF Recommendations:

- Repair the roof and ensure all electrical is in working order
- Install a 60-gallon, 5 Horsepower Air Compressor
- Thoroughly clean the building and take inventory of equipment, supplies, etc.
- Clean-up and mow the compound
- Repair gates
- Pesticide building opened and inspected
- Fuel tanks pumped out in case of water from condensation
- Install shelving, ensure all doors operational, change locks

Cart Barn

While the NGF team did not do a formal inspection of the cart barn/shed structure, it appears to need significant work, including roof repair, to be made safe and functional. The County should have the building formally inspected at the beginning of work this summer to determine the extent of repairs needed. Depending on cost and estimated timing of repairs, the County may opt to allow only walking rounds until the building is repaired and a cart fleet secured via lease agreement.

Tree & Stump Removal / Clean-up of Understory Overgrowth

Tree and limb debris exists throughout the course and should be removed. Trees also interfere with sightlines in parts of the golf course. Finally, there is also excessive underbrush throughout the course.

NGF Recommendation:

- Remove dead trees, limbs and stumps.
- Remove trees that are interfering with the line of play and narrowing hole corridors.
- Clean up areas of excessive brush (understory).

Driving Range Netting

The driving range currently lacks netting – both on the sides and in back. While not necessarily a safety issue at Sugar Creek due to the lack of adjacent housing or fairways (some balls in flight could reach the maintenance compound), the netting will improve the picking of range balls and mitigate loss.

Preliminary Cost Estimates – Mission Critical + Other Short-Term Improvements

Following are NGF's preliminary estimates of costs for what we've identified as 'mission-critical' and 'other short-term' high priority needs at Sugar Creek, as discussed above. These deferred maintenance and capital items negatively affect the overall product offering and golfer experience, contribute to maintenance inefficiencies, and constrain demand and revenues.

Sugar Creek Golf Course Preliminary Cost Estimates Mission-Critical + Other Short-Term Improvements

Improvement	Key Tasks & Variables	Estimated Range	
Project Management and Labor ¹	Scope of improvements & bids	\$100K - \$150K	
Install Well & Transfer Line (Bid)	Depth; pump size; upgrades to electric	\$80K - \$150K	
Irrigation Audit & Repairs (Bid)	Extent of any leaks; repair/replace	\$15K - \$75K	
Greens Grow-in Materials	Fert., chem., topdress; sprigs	\$20K - \$35K	
Tees, Fairways, Roughs Prep. Mtls.	Fertilizers, chemicals, growth regulators	\$30K - \$50K	
Ditch Cleaning & Trimming		\$15K - \$30K	
Bridge Repairs (Bid)	Extent of re-decking	\$10K - \$20K	
Bunker Clean-up & Prep Mtls.	Herbicide trtmnt & edging; new sand; drainage?	\$10K - \$25K	
Maint. Comp. Clean-up & Repair	Clean; repair roof, gate; FF&E	\$20K - \$45K	
Cart Paths (Bid)	Repair only worst areas; square footage	\$20K - \$50K	
Cart Shed Repairs	Upgrade, repair	\$25K - \$30K	
Tree/Stump/Brush Rmvl/Clean-up	Number of trees (bid?), stumps	\$25K - \$50K	
Driving Range Netting (Bid)	Height and extent	\$30K - \$50K	
Total Project s		\$400K - \$785K	

Understandably, with a significant number of variables and the uncertainty about which projects could possibly be done in-house as opposed to being submitted for bid, the preliminary cost estimate range is fairly wide, from $\pm \$400,000$ on the low end to just under $\pm \$800,000$ on the high end. The actual cost will be come much clearer once a project manager is retained, completes a thorough facility-wide inspection, and identifies the projects that will have to go to bid.

Longer-Term Capital Needs

The NGF team has identified other capital improvement projects that can probably be put off, but which are likely to be needed in the 3 to 10-year time frame, based on current age and condition, and expected useful life (see Appendix A for ASGCA Lifecycle Chart). A summary of these follows (preliminary cost figures presented reflect a "reasonable estimate", including soft cost but excluding contingency, and are presented in 2018 dollars):

Full Bunker Renovation

Earlier, we identified a short-term fix that may be feasible to get SCGC's bunkers into minimally acceptable playing condition. Depending on the drainage situation, the County may prioritize a full bunker renovation on its short-term list of priorities for 2018 or 2019, funding considerations notwithstanding. Full bunker renovation would involve upgrading the bunkers with one of the new bunker lining systems, such as capillary concrete or 'Better Billy Bunker'. To install these new systems the old sand would need to be removed, drainage fixed/installed, the new system installed over the drainage and bottom of the bunker, and then new sand installed. This work could be accomplished concurrent with the green grow-in. (Est. Cost = ±\$190K).

Irrigation Source and System - Long-Term Solution

Though the NGF team has prescribed a solution that should work for the intermediate term, at some point the County will have to replace the entire irrigation system. If the County can continue to get by with watering only greens, this project could be put off for a significant amount if the current system, modified to eliminate the transfer line and with a new well to feed the retention pond. (Est. Cost = \pm \$1.2 MM - \$1.5 MM).

Cart Path System – Full Replacement

As noted earlier, if not for funding constraints the NGF team would recommend full cart path system (full course, tee to green) replacement as a shorter term project, rather than repairing only the worst areas now. (Est. $Cost = \pm \$200K - assumes asphalt$).

New Cart Barn

For the short term, repairs to the existing cart shed have been prescribed. The structure appears to be in very poor condition, though with repairs it may be serviceable for the short term. Ultimately, Sugar Creek will need a new, modern, safe structure. (**Est. Cost** = \pm \$500**K**).

Greens Reconstruction

Though well past their expected useful life and significantly reduced from their original size, the greens at Sugar Creek GC may remain serviceable for many more years, especially given the golf course's market position. However, the need to completely reconstruct greens should be a part of the County's long-term planning and capital funding process. (Est. Cost = \pm \$1.2 MM - \$1.5 MM).

BUSINESS RECOMMENDATIONS

Because there was little information about how Sugar Creek Golf Course was operated when open, NGF has focused its operational recommendations on industry 'best practices' that should be able to help minimize the annual operating deficit at Sugar Creek. Summary recommendations follow, with more detail in the body of the report.

Management Structure

As of this writing, the County's options for managing SCGC are limited due to the urgency of getting the course open for play by late summer, which necessitates the quick hiring of a private golf course maintenance company. As noted earlier, the County already has contracted with private vendors for the tennis and food & beverage operation. Therefore, the County has the option of either hiring a Director of Golf / Head Golf Professional as a County employee that would oversee golf operations, or contracting for the same position and hiring other part-time workers to help out in the pro shop and with outside services. NGF was told that a golf professional that is a County employee would not be able to earn ancillary compensation (e.g., lesson revenue), so the County will be going the route of a private contract.

Marketing & Programming

NGF was told that little marketing of Sugar Creek GC was being done by the operator or the County, which is understandable when a golf course has fallen into disrepair and it can compete only on offering very low rates. However, below NGF offers some 'best practice' marketing and programming recommendations that the County should consider once facility improvements have taken hold.

- ▶ Direct Sales Direct selling to recruit and facilitate leagues, golf outings and non-golf events such as corporate meetings, small banquets/ receptions, and events is an important tool for today's proactive golf operator. These events can provide a supplemental income source, and result from active outreach to local organizations, such as churches, businesses and civic organizations.
- ▶ Themed Programming & Events Creative golf-themed events, on both the golf course and the driving range, are becoming more and more popular with operators looking to make golf more fun for less committed golfers, including many young adults who want their recreation to be 'experiential'. Examples of events that NGF has observed include:

- A weekly **9-Hole Scramble** that had 13 teams (52 participants) and generated about \$2,500 in direct revenue, plus bar/grill revenue before and after the event.
- 'Balls & Beers' at the driving range. Participants pay a small fee for the event, which can feature a keg (or craft beers from local brewers) and unlimited range balls for an hour, with a golf pro walking the range giving quick lessons and tips.
- '9 & Wine' golf training programs for women's groups are a particularly popular and effective way to engage beginning women golfers and non-golfers.
- ▶ **Website** NGF recommends that municipal golf courses have dedicated websites, separate from the link that typically appears on the municipality's site. Recommended features for a quality public access facility include electronic tee time booking capability, up-to-date fees, outing / tournament information, calendar of events, and restaurant and banquet information.
- ▶ Email Database Building, maintaining, and actively utilizing an email platform to practice yield management and advertise events, specials, etc. is an effective "best industry practice" for public golf in 2018. E-mail marketing, with the exception of word-of-mouth and free advertising, is the most cost-effective advertising possible.

Utilization of Technology

Comprehensive utilization of a quality, golf-oriented point-of-sale (POS) system helps management understand its customer profile segments, while also providing assistance in marketing and customer tracking. Technology is one of the most important tools available to a golf course management team to build a larger customer database, create customer loyalty and boost revenue. The efficiency of software for tee time reservations, operations / accounting reporting, retail point-of-purchase reporting, and overall management information systems has advanced dramatically in recent years and can help improve overall performance.

Customer Service

Strong customer service can be a key differentiator in building customer loyalty. High level service at a golf course begins the moment the golfer sets foot on the property, beginning with a friendly welcome (especially for faces that staff may not have seen before). NGF generally recommends strategies such as staff training and establishment of customer service standards & measurable metrics – monitored through periodic customer surveys and occasional secret shoppers - to make sure that the standards are being consistently met or exceeded.

Food & Beverage

Due to its attractive full-service clubhouse, the private vendor at SCGC appears to have a market opportunity to grow business among both golf and non-golf clientele. Examples of industry best practices with respect to golf course F&B service include:

- Employ a dedicated salesperson (at least part-time) to solicit meetings, banquets and other events from the community.
- Have consistent hours of operation for clubhouse and on-course service (beverage cart), including, at a minimum, coffee, juice, Danish, for early morning golfers.
- Feature grab and go items, such as fresh premade sandwiches, as well as hot dogs, etc.
- Run a barbecue grill, especially during busier times, with items such as hamburgers, hot dogs, and grilled chicken at the ready. This can also improve the pace of golfers making the turn.

Create and promote themed events; examples NGF has seen include Sunday Brunch, 50-cent Wing Night; Monday Night Football/college football Saturday/NFL Sunday events; Trivia Night (buffet menu); Pub Night, with light fare menu

Clubhouse

Though its programming from a golf perspective is not ideal, the clubhouse at Sugar Creek GC offers one of the few event venues in this part of greater Atlanta. NGF believes that there are potential modifications that may add flexibility to the space and make it even more attractive to several different constituencies. For example, there appear to be spaces on each side of the front entrance to create a semi-private members' area, as well as a sports pub type area that could potentially feature a golf simulator.

Also, we found that the overall space, including the bar area, had an "institutional" feel to it. Modernizing the bar area – for example, with maple or walnut– could make the space more appealing for golfers wanting to enjoy some beverages after a round, and for neighborhood residents perhaps looking for an inviting place to watch a sporting event. Of course, these potential improvements will cost money and the County, under its current deal, receives only 1% of food & beverage gross revenues, so the payback/ ROI of money invested by the County may preclude such investment unless the private vendor is willing to split the cost or fund some improvements themselves (perhaps in exchange for temporary rent abatements or some other concession).

Volunteer / Comp Policy

NGF was told that a volunteer corps at Sugar Creek comprising about 36 individuals worked 2 hours per week and received unlimited free golf in exchange for their service. For a variety of reasons, many municipal golf courses have gotten away from having large volunteer bases and are instead compensating part-time employees to help with course marshaling, starter services, outside services, etc. While we are not recommending the County do away with the volunteer program at SCGC, we do believe that the facility's tenuous financial situation requires a higher degree of cost recovery. Therefore, the County should create a policy that establishes parameters such as a higher minimum number of hours volunteered in order to earn free golf, as well as a limit to the number of free rounds that a volunteer can earn.

Green Fee Pricing

Posted walking 18-hole green fees provided to NGF were generally in the \$20 to \$30 range, depending on residency status and time of the week. Time of day discounts also applied, and there were price breaks for juniors and seniors. NGF was told that the County does not permit discounting of green fees off of approved rates, but this practice had evidently become common – especially when the golf course deteriorated. The quality and overall golf experience that Sugar Creek GC will offer next year and in subsequent years after facility improvements are implemented is an unknown at this time, so NGF cannot recommend specific pricing for the golf course. However, we offer some general recommendations given our understanding of Sugar Creek GC:

- In consideration of market dynamics and variable course conditions, the County should consider officially amending its policy on charging less than the posted rate, but only as part of a disciplined yield management strategy that includes parameters and protocols on how, when, and to what extent tee times are offered at less than rack rate.
- ▶ Before setting fees each year, the County should monitor competitive market pricing and the quality of the golf experience offered at Sugar Creek in this context. If possible, modest biannual increases should be enacted simply to keep up with the cost of inflation.

FINANCIAL PROJECTIONS

In this section NGF provides a basic cash flow model to estimate the financial performance and potential annual operating subsidy that will be required of the County at Sugar Creek GC. We feel that these projections represent a "fair estimate" of performance for the golf course based on the expected quality of the golf experience, our market analysis, and the expected management structure for Sugar Creek GC.

Basis for Projections

NGF Consulting projections for the 2019 – 2023 period are based on the primary assumptions of the reclamation of the golf course (i.e., addressing critical need improvements), continued capital investment over the five-year period, and a higher standard of golf course maintenance going forward. Key assumptions and factors that were utilized in crafting the model are presented in the report. NGF provides projections of performance based on a set of assumptions that may or may not become reality.

Cash Flow Model for Redeveloped Sugar Creek GC

NGF has created a five-year pro forma for an improved Sugar Creek Golf Course. In preparing our estimates of future performance, the NGF team has made several assumptions for input variables and external market conditions. *These, along with the financial mode, are presented in the body of the report.* The NGF rounds, revenue and expense estimates have been crafted in consideration of the current and expected (e.g., population growth, golf supply-demand balance) market conditions over the course of the five-year subject period.

Cash Flow Projections – 2019 - 2023

NGF financial projections for Sugar Creek GC, assuming successful completion of high-priority facility improvements and a higher standard of maintenance, show total gross operating revenue (County perspective) of about \$336,000 in 2019. Based on operating expense assumptions, 2019 net operating income (NOI) is projected to reflect a large loss of about (\$734,000). When projected stabilized play of 24,000 total paid rounds is reached in 2023, gross revenues are expected to reach \sim \$671,000, with net operating losses reaching a stabilized level of \pm (\$500,000).

As we have noted previously, projections have been crafted in the face of quite a few unknowns, not the least of which is the quality of the golf experience Sugar Creek GC will offer after enhancements. Also, the lack of accurate and/or complete recent historical records regarding activity levels and revenue center performance makes projecting the revenue side of the financial model difficult. However, inputs for the expense side are based on more knowns, such as the size of the maintenance contract, the compensation of the contract golf professional, and the golf cart lease.

Finally, NGF projections are intended to be conservative so that County officials and staff are not caught unawares and can plan the future of SCGC with the appropriate information before them. It is certainly possible that a significantly improved Sugar Creek can outperform projections. However, we believe it is prudent for planning purposes to assume that the County will be funding large-scale operating deficits – as well as additional capital needs – at SCGC for the foreseeable future.

Situation Analysis

In this section, NGF provides a summary overview of Sugar Creek GC, based on NGF's review in the spring of 2018, which included: facility tour and inspection; meetings with County staff; and review of historical records. This summary situation analysis comprises:

- Summary overview of the subject Sugar Creek GC
- Overview of Sugar Creek GC history and operating program prior to closure
- Analysis of recent activity levels and financial results
- Evaluation of current conditions and preliminary findings related to capital improvement needs, based on NGF's facility tour, and meetings/ conversations with County staff

FACILITY OVERVIEW

The subject property is Sugar Creek Golf Course, an 18-hole municipal golf course owned by DeKalb County, Georgia. The golf course opened in 1977 and has been a City-owned municipal golf course since its inception. The course has been closed since October 2017 when its lessee, "Georgia Golf Partners, LLC" vacated its agreement with the County. Georgia Golf Partners still operates Sugar Creek's sister course, Mystery Valley Golf Course in Lithonia. At the time of this report in June 2018, the County is exploring the steps it must take to improve, reopen and manage Sugar Creek Golf Course. Below we present a summary overview of the facility.

Site Overview

The Sugar Creek GC is located in south Atlanta and is bisected by Interstate-285. It is about 7 miles northeast of Hartsfield-Jackson Atlanta International Airport, in the southwestern portion of DeKalb County, Georgia. The entrance to the facility is on Bouldercrest Road SE. Surrounding land uses are primarily residential to the north and south, with some commercial/industrial, along with residential, to the east and west.

<u>Sugar Creek GC is located within a floodplain</u>, and NGF was told that there are significant flood events –affecting roughs, cart path areas, and 14 of 18 fairways – about one time per year on average. Depending on the severity of the event, the course typically takes between one and two days to drain. More significant, however, is that NGF was told by a previous superintendent that these flood events leave behind a large volume of silt/ sediment that must be removed from the fairways, which are at a lower level than the edges of the drainage ditches. The process of removing sediment can take weeks.

The subject property location and its surroundings and configuration are displayed in the map and aerial images on the following pages:

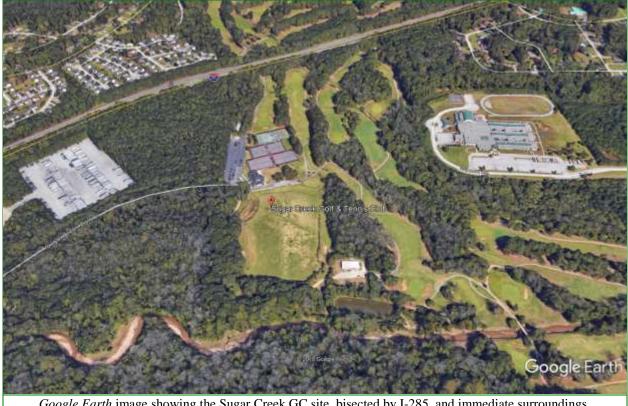
Location – Regional Context



Location – Local Context



Aerial Image



Google Earth image showing the Sugar Creek GC site, bisected by I-285, and immediate surroundings.

Inventory of Facilities

Sugar Creek GC includes the following basic amenities:

- ▶ Golf course 18 holes, par 71, four sets of tees ranging from 5,017 yards to 6,318 yards
- ► Clubhouse includes pro shop, restaurant, meeting room and offices
- ▶ Driving range lighted for night use
- Tennis courts 16 hard courts
- Golf maintenance facility / cart barn

Golf Course

The subject Sugar Creek GC offers basic golf course design features that are typical for lower-fee public courses in this market area. Tees and fairways are a mix of common and 419 bermudagrass; greens were originally bentgrass, but most are now primarily Tifdwarf bermudagrass. There have been very few upgrades to the golf course features or infrastructure over the years, and the lack of sufficient maintenance and arbor care has resulted in smaller greens, overgrowth and narrowing hole corridors (some holes) in this parkland-style golf course. There are about 22 sand bunkers on the course, and no water features other than the creek. The terrain on the course is generally flat, making it easy to walk. There are four sets of playing tees ranging from just over 5,000 yards to 6,300+ yards. The scorecard for Sugar Creek GC is as follows:

Sugar Creek Golf Course						
Tee	Par	Yards	Slope	Rating		
Blue	71	6,318	124	69.8		
White	71	5,944	121	68.6		
Gold	71	5,403	114	66.3		
Red	71	5,057	120	69.0		

The above scorecard shows the appeal of the par-71 golf course to many golfer segments. The farthest tee shows a USGA slope rating of 124 from the back tee, or modestly more difficult than the USGA national standard of 120. The forward tee is generally accommodating to female players, though NGF typically recommends a tee in the $\pm 4,600$ yard range for ladies.

Practice Amenities

Practice facilities comprise a putting green and a relatively wide grass driving range with room for about 40 hitting stations. The tee area is deep enough to provide sufficient rotation of hitting areas, though this is mitigated by the fact that the depth of the range is only about 250 yards. The range is lighted for night use.

Clubhouse & Structures

Sugar Creek features a relatively large one-story clubhouse of $\pm 10,000$ square feet that compares favorably to those NGF observed among the immediate competitors we visited, several of which lacked any food & beverage service beyond vending. Though the building has an institutional feel, is poorly programmed from a golf perspective, and features a lot of wasted (and expensive to air-condition) space due to its very high ceilings, the Sugar Creek clubhouse features a full service kitchen, sufficient storage, bar area, separate meeting room, and indoor + outdoor patio seating that can accommodate relatively large outings. The building also includes pro shop, restrooms, and offices. Total parking is about 165, including several handicapped spots.

Other structures (more later in the report):

- Maintenance building, chemical strorage, cart shed, and caretaker house
- Starter booth
- There are no on-course restrooms

Overview of Sugar Creek Golf Course Conditions - Spring 2018

Below we provide a high-level summary overview of SCGC conditions based on review of historical materials and inspections of Sugar Creek Golf Course by NGF Director of Consulting Ed Getherall and subcontractor Dave Downing, Vice President/Agronomist for Golf Maintenance Solutions ("GMS"), on May 21-22, 2018. County staff members Paige K. Singer, Division Manager, Park Services, and Ken Roberson, Park Maintenance Superintendent, directed the facility tours for the consultants. Information was also provided by former superintendent Chet Frazier. *A more detailed description of conditions, along with the NGF team's recommendations for improvements, follows later in the report.*

The golf course has been closed since the fall of 2017. Our interviews with Parks staff and online reviews indicate that the maintenance standards prior to the closing were minimal and the course suffered from greens condition issues, excessive weeds, and lack of bunker maintenance and general mowing. As with any living thing, a golf course deteriorates with time (see ASGCA Expected Life Cycle chart in Appendix A). At Sugar Creek, there is a significant number of "mission-critical" deferred maintenance and capital needs that must be addressed immediately to reopen the golf course under even minimally acceptable playing conditions. There are a variety of other improvement needs that also must be addressed in the short term in order for the golf course to be somewhat competitive in the golf market, thus minimizing operating deficits.

During the visit, the NGF team observed the following conditions:

- The Water Source (South River), due to lack of flow and lack of an adequate wet well, pumps sediment into the pump station wet well causing excessive wear to the pumps and system.
 - The system consistently needs to be backwashed and then primed to keep it functioning.
- The Irrigation System has not been maintained or operated correctly.
 - We were told only the greens have been watered and the remainder of the system was not used.
 - At least some of the controllers have been replaced with Homeowner/Landscape controllers, which are more prone to power surges than golf course irrigation controllers.
- Greens have very thin turf coverage and are weed-infested; there are heavy organic layers under the surface.
 - A period of 60 to 90 days will be needed to grow in the greens.
 - Work needs to be completed prior to September 15th
 - Greens have shrunk 20 30% from their original size.
 - Soil testing needs to be done:
 - Fertility
 - Physical properties ISTRC Labs
 - Nematode Assay
 - Determine if greens are USGA construction
- ➤ Tees, Fairways, Driving Range and Roughs are weed-infested. Height at time of consultants' visit was 6-10 inches.
 - Bermudagrass base looked to be in good condition under the weeds.

- Fortunately, the County had mowed the course in the fall; otherwise, the height of grass/weeds would have been double what it currently is.
- Ditches & Creek are overgrown and in need of being cut back and growth controlled. Bottoms must be dug out to allow for efficient movement of water.
- Bridges need to have boards replaced.
- ▶ Bunkers are weed-infested and severely contaminated with soil, preventing drainage.
 - Need to determine if bunkers have drainage.
- Maintenance compound is overgrown and there are piles of trash and debris.
- Maintenance Building is extremely dirty and has a leaking roof.
- There is no golf course equipment.
 - County would need to provide unless private maintenance contract.
- Cart paths are very uneven from tree root invasion as well as areas where they have sunk.
- Tree and limb debris, as well as overgrown brush, exists throughout the course and should be removed.
 - Dead trees and stumps need to be removed.
 - Trees that are interfering with the line of play need to be removed.
 - Understory should be cleaned up.

There are really two distinct phases that need to occur for the golf course to be operational. The first phase is a reclamation project, and the second phase is normal maintenance operations. Based on our observations of the course and understanding of the playing conditions that will be acceptable, we later identify what needs to be done to open the course and operate.

SUGAR CREEK GC OPERATING PROGRAM

As noted, Sugar Creek GC has been owned by DeKalb County and accounted for out of its Parks Department since its opening. It has been operated via various structures, with a mix of public employees and private vendors over the years. The financial history supplied to NGF is incomplete, and little information is available regarding operating practices when it was open. Below is a summary of what we have been able to glean about the history and operation of Sugar Creek GC.

- Management: The golf course was originally operated with County personnel, including about 8 full-time employees and 4 seasonal summer employees as the maintenance crew. Golf operations were outsourced in the 1999-2000 period to SydMar Golf. In 2012, SydMar partnered with Cornerstone Golf (new entity dba *Georgia Golf Partners*), which had previously maintained the golf course under subcontract to SydMar, to lease both SCGC and Mystery Valley GC. When SydMar vacated Sugar Creek in early 2014, Cornerstone continued to lease both facilities before vacating Sugar Creek in the fall of 2017.
 - The 2012 agreement, which excluded tennis operations, included a 5-year initial term for both Mystery Valley and Sugar Creek golf courses, with the County option of five one-year renewals thereafter.
 - The agreement was fairly straightforward, with the County supposed to receive an escalating percentage of gross revenues from both facilities, starting at 1% in year 1 and growing to 3% for year 5 and beyond (if renewals). The City owns all maintenance equipment.

- NGF was told that there were 36 volunteers at SCGC supplementing the paid staff. These were mostly course marshals and starters who volunteered 2 hours per week in exchange for free golf.
- The lease agreement included a requirement of \$100,000 in capital investment (\$50K at each course) during the initial term, with no specific stipulations about how the spending would be allocated.
- The lessee vacated the Sugar Creek lease in October 2017. There was no maintenance equipment left behind, as the vendor reported it stolen. The lessee continues to lease Mystery Valley. At the time of the NGF visit in spring 2018, the MVGC clubhouse had no food & beverage service, minimal merchandise for sale, no operating air conditioning and was in very poor condition.
- Rents received by County (see below under recent operating results).
- ▶ Green Fees: Under the contract terms, the County and the Contractor consulted with each other each year on fee recommendations. The fee schedule provided to NGF dated back to 2012 and showed County resident walking 18-hole rates of \$17 weekdays and \$23 weekends, with per person cart fee of \$13. Corresponding non-resident fees were \$23 and \$29, respectively. Various discounted fees were available for twilight, super twilight, juniors, and seniors. The County told NGF that only a small percentage of tee times were being sold at 'rack' or posted rates, as the vendor was offering discounted rates (e.g., through Golfnow), especially after the golf course had fallen into significant disrepair.
- ▶ **Membership Program:** DeKalb County offered unlimited play annual passes at a cost of \$900 for residents and \$1,000 for non-residents, with cart fee additional. Prices for junior and seniors were \$700 and \$800, respectively.
- ▶ **Customer Base:** No information was provided to NGF regarding the origin of players at Sugar Creek, though we were told that the facility drew a very local customer base, and that a significant amount of play came from the passholders, though no records were kept by the lessee. At its peak when it was in better condition it is likely that the golf course drew from a moderately wider area.
- Marketing: No information provided, but NGF was told by the County that it was minimal.
- Tennis Center Improvements: The County is in the final stages of extensive improvements to the tennis complex at Sugar Creek, including resurfacing all courts at a cost of \$107,000, installing a \$412,000 Musco lighting system, and putting up netting between the courts and adjacent fairway

CURRENT & PENDING CONTRACTUAL AGREEMENTS

The County currently has private food & beverage and tennis vendors under contract at Sugar Creek. The F&B agreement is for one year, with four 1-year options to renew. The County will receive 1% of total gross revenues in year 1. The County is also reviewing a bid from a golf maintenance company that calls for an initial annual fee of \$712,000, but which may be amended to include the initial golf course rehabilitation.

There is currently no contract in place for a contract golf professional/manager, though the County will soon be soliciting one through and Invitation to Bid (ITB). The County has projected, at least preliminarily, a budgeted salary of \$65,000 for the golf professional, who would also receive lesson revenue.

RECENT OPERATING RESULTS

As noted, historical rounds played and financial information for Sugar Creek supplied to NGF was incomplete and sparse. The table below summarizes what the County was able to provide to NGF for the periods of 2008 through 2011 (County operation) and 2012 through partial 2017 (lessee operation).

Summary Observations

- Scant information is available on rounds played at Sugar Creek GC, with 2015 and 2016 showing an average of about 10,600 rounds. Due to the presence of annual passholders, it is likely that not all rounds were recorded. Looking at the trend in facility gross revenues (more below), it is possible that rounds played were as high as the mid 20,000s back in the 2008 and 2009 period.
- Total facility gross revenues at Sugar Creek plummeted under County operation, falling by nearly \$300,000, or 41%, between 2008 and 2011 when only \$435,000 was brought in. Reported revenues continued to decline under the private lessee, bottoming out at only \$192,000 in 2016.
- Operating expenses under County operation were generally in the \$1.1 million to \$1.25 million range over the 2008-2011 period. We were told maintenance staffing included 8 full-time plus 4 seasonal part-time workers. It is unclear if the reported expense numbers included any capital items or other one-time or extraordinary charges.
- Deperating net income to the County ranged from as low as about \$450,000 in 2009 to nearly \$830,000 in 2012. Leasing the golf course "stopped the bleeding", with the County collecting about \$24,000 in total rent payments between 2012 and 2016, but at price that NGF commonly observes in the golf industry the golf course condition severely deteriorated and the County was left with an asset requiring a large capital investment (detailed later in report).

Golf Market Overview

Below, NGF Consulting provides a summary of key "external" factors that characterize the trade area in which Sugar Creek GC operates, including NGF's macro perspective of the U.S. golf industry. On a local/regional basis, the overview includes basic demographic measures that have the potential to affect the economic performance of the golf facility, as well as an analysis of supply and demand indicators in the public golf market.

NATIONAL GOLF INDUSTRY OVERVIEW

While socio-demographic, financial and cultural headwinds certainly persist for golf, the industry continued its macro trend toward stabilization in 2015-2017. The game remains popular and is fortunate to have a deep well of interested prospects. While golf's pay-for-play green fee revenues and other spending will always be vulnerable to outside forces such as weather and the economy, its chief challenge remains getting more of those non-golfers who express interest in playing ('latent demand') to actually give golf a try, and converting more beginners into committed participants.

Still, some socioeconomic and demographic trends continue to present challenges for golf operators. For instance, golf is having trouble attracting and retaining young adults (i.e., Millennials); though this segment continues to account for a large percentage of annual play and spending, factors such as debt and competing recreational activities have suppressed golf demand from this segment.

Key Trends in Demand

- Participation The national golfer number (participation) showed net attrition since 2012, declining by about ±1.2 million to 23.8 million people in both 2016 and 2017 that played at least one round of golf in the prior year. Research shows that this attrition was primarily among occasional/less committed golfers. However, the vast majority of "core" golfers remain in the game. Indeed, the game's most committed golfers − those who account for approximately 95% of all rounds-played and spending − held steady at roughly 20 million last year. This segment, those golfers essential for businesses that make a living in the industry, represents about 82% of those who play.
- ▶ Rounds Played 2016-2017 Nationally, 456 million rounds were played in 2017, representing a 2.7% decrease year-over-year. For Georgia, rounds were down 7.1%, with the Atlanta submarket down 5.9%. YTD 2018 is off to a very rough start nationally and in Atlanta, with year-over-year rounds down by 8.9% and 15.2%, respectively, through April. (Data source: Golf Datatech see Appendix B).
- ▶ Looking Ahead Baby Boomer Effect As Baby Boomers age and retire over the next 15 years, we expect to see a measurable increase in total rounds played in the U.S. Boomers born between 1946 and 1964 are currently 53 to 72 years old. About 6 million of them are golfers; that's about 1/4 of all golfers, and they currently play about 1/3 of all rounds. Boomers started turning 65 in 2011, and already 1 million+ golfing Boomers have reached retirement age. The Social Security Administration reports that 10,000 or more Boomers retire every day. And ~300,000 Boomer golfers will turn 65 each year for the next 15 years. Retired Boomers (age 65+) play about twice as much as younger, non-retired Boomers (40 rounds vs 21 rounds).

Golf Course Supply

The correction in golf course supply continued in 2017 at a level comparable with the previous several years, dropping by 1.5% (205.5 18-hole equivalent permanent closures and 15.5 18HEQ new openings). According to NGF data, since the market correction in golf course supply began in 2006, there has been a cumulative net reduction of golf courses equivalent to 7%. For perspective, golf supply grew by 44% in the previous 20 years (1986-2005). Closures continue to be disproportionately high among 'value' priced (peak green + cart fee below \$40) facilities. Many golf courses shutter due to competitive dynamics; increasingly, however, golf courses – especially in geographies where developable land is at a premium – are closing because residential or commercial is a much "higher and better use".

NGF's outlook for 2018 holds form with recent years, with the expectation for a further balancing of supply and demand in a competitive and oversupplied environment. The projection is for approximately 15 to 25 new course openings, 75 to 100 major renovation projects, and the additional closure of 1% to 1.5% of the total supply.

Other Measures of Health

Other metrics to consider when measuring the health and trajectory of golf include:

- ▶ Investment in Facilities: Investment in major renovation projects has replaced new construction as the largest source of U.S. golf course development activity. NGF tracked about 1,100 major renovations completed since 2006, representing ~\$3.25 billion in spending.
- ▶ Engagement: Several years ago NGF developed a scale to gauge engagement/ passion for golf. NGF annual golfer survey research indicates that the number of engaged golfers has remained steady at 20 to 21 million for the past four years. But the proportion of engaged golfers has increased from 78% to 85% over this period. These engaged golfers are responsible for ±95% of rounds played and equipment spend. Those more engaged are significantly more likely to continue playing.
- Increasing Diversity: The junior golf population showed modest attrition, dropping from 2.9 million in 2016 to 2.7 million in 2017. Junior golfers continue to show a transformation in diversity. One-third of golfers age 6-17 are females, up from 17% in 1995 (in sum, 24% of all golfers are women). Also, 27% of junior golfers are non-Caucasian, up from only 6% in 1995. A similar trend is observed among young adult (18-34) or Millennial golfers, of which 29% are female and 24% non-Caucasian. The highest diversity is among beginning golfers, at 34% female and 32% non-Caucasian.
- **Beginners**: The number of beginners rose to a record 2.6 million in 2017, surpassing the record set in 2016. The last two years have set records and exceeded the year 2000, when Tiger Woods was in his prime and drawing newcomers to the game in unprecedented numbers. About 35% of beginning golfers are women, and 26% are non-Caucasian. Since 2011, the compound annual growth rate (CAGR) in beginners is about 11%.
- ▶ Off-Course Participation: Driven primarily by the popularity and growth of Topgolf, a non-traditional form of golf entertainment, there were an estimated 21 million off-course (involves only those activities that involve hitting a ball with a golf club) participants in 2017, about 40% of whom did not play on a golf course.
- ▶ Latent Demand: Overall interest in playing golf remains very high. NGF survey research indicates that the number of non-golfers who say they are "very interested" in taking up golf has doubled over the last five years, growing at a CAGR of more than 15% and now totaling 14.2 million people.

LOCAL / REGIONAL MARKET

To assess potential market opportunities to increase rounds and and/or fees for a potentially reopened Sugar Creek GC, the environment in which the facility will operate must be understood. Therefore, it is helpful to examine local economic and demographic factors that have the potential to impact rounds played and fee tolerances. This overview will include an analysis of the area's demographics, as well as a brief discussion of local economic factors that can impact demand for golf. In the second part of this section we provide an overview of key golf market demand and supply indicators, as well as an analysis of the competitive market for Sugar Creek GC.

Defining the Sugar Creek GC Primary Trade Area

A number of factors assist in determining the expected market area for a golf facility. In addition to the quantity, quality, and nature of existing competitive facilities in the area, the availability of highway and major thoroughfare infrastructure, traffic patterns, economic and demographic factors, and the propensity for golfers to travel to play golf all play a role in establishing the primary market area for a golf facility. As a 'value' golf provider, we expect that Sugar Creek GC draws the majority of its to come from the southern and eastern parts of greater Atlanta, generally within a 5 to 10-mile radius of the course.

Demographic Analysis

Below, we summarize the population, median age, and median household income trends for the 5- and 10-mile markets around Sugar Creek GC, as well as DeKalb County. Following these summary points is a brief discussion of the local economy. The tables in <u>Appendix C</u> summarize key demographic measures and trends that relate to golf participation. NGF observations include:

- There are about 76,000 people living within 5 miles of Sugar Creek GC, 894,000 within 10 miles, and 744,000 in DeKalb County. Annual population growth rates in the local markets are projected to be about twice the national rate of growth between 2017 and 2022, with about 84,000 net new residents projected for the 10-mile trade area in the next five years.
- ▶ The Median Ages in the Sugar Creek 5- and 10-mile submarkets at 36.1 and 34.5 years, respectively are lower than the national median of 38.1 years. In general, the propensity to play golf with greater frequency increases with age, making older markets more attractive to golf facilities, all factors being equal.
- Median Household Incomes in the identified local markets are 16% to 18% lower than the national median of \$59,240. DeKalb County overall, with a median income of \$57,730, is only moderately lower than the nation (and is mitigated by the relatively low cost of living). In general, higher income residents are more likely to participate in golf, and they play more frequently than lower income residents.

Key Climate and Economic Factors

Following are some key observations about climatic and economic characteristics of the DeKalb County area that have the potential to affect demand for golf.

Climate

As with any outdoor recreation, golf demand is impacted by weather. NGF data estimates that almost all golf is played with temperatures between 50 and 90 degrees Fahrenheit. Understanding local weather patterns helps determine the number of golf playable days. Golf is a year-round activity in DeKalb County, but peak summer temperatures routinely can 90 degrees in the middle of the day, leaving morning tee times as the preferred window to play. Additionally, the area receives about 50 inches of annual precipitation (spread fairly evenly throughout the year), thus reducing capacity. Though golf is played in the winter, average high temperatures in December, January and February are only in the 50s, thus reducing demand during this time. Overall, NGF estimates there are about ±270 playable days for golf in this market each year.

Climatological Data						
Atlanta, GA						
Month	Te	Temperatures			Average Length of	
	Average	High	Low	Inches	Day (Hours)	
Annual	62.6	71.9	53.2	49.7	12.6	
January	43.3	52.3	34.3	4.2	10.7	
February	47.2	56.6	37.7	4.7	11.4	
March	54.3	64.6	44.1	4.8	12.4	
April	62	72.5	51.5	3.4	13.5	
May	70.1	79.9	60.3	3.7	14.4	
June	77.3	86.4	68.2	4.0	14.8	
July	80.2	89.1	71.3	5.3	14.6	
August	79.4	88.1	70.7	3.9	13.8	
September	73.5	82.2	64.8	4.5	12.8	
October	63.3	72.7	54	3.4	11.7	
November	54	63.6	44.5	4.1	10.8	
December	45.3	54	36.5	3.9	10.4	
Source: Weatherbase.com: Atlanta, GA						

DeKalb County Overview

Sources: Various local and online sources; DeKalb County Market Assessment (AngelouEconomics - 2014); BLS

DeKalb County is Georgia's fourth most populous county. It contains roughly 10% of the city of Atlanta and is the state's most diverse county. DeKalb, originally developed as a bedroom community for Atlanta, is primarily a suburban county and is the second most affluent county with an African-American majority in the United States.

- DeKalb County has more than a dozen highly recognized universities and colleges, including private medical schools, state universities and large online institutions. These institutions, which include the prestigious Emory University, are a strong asset for the County as they offer workforce and business development programs.
- DeKalb has a very robust parks and recreation system, with 115 parks covering 6,590 acres, 124 athletic fields, 11 recreation centers, and 77 tennis courts as of the end of 2016. The ability to support these amenities has been constrained with continued city incorporations that resulted in the loss of 50% of tax intake between about 2008 and 2014, according to AngelouEconomics.
- Longer term, according to the Atlanta Regional Commission, DeKalb County is projected to grow along with the rest of the Atlanta metro region, adding 156,000 residents by 2040. The 20-county metro Atlanta area is projected to grow by 2.5 million residents over that time.
- The vast majority of businesses in the County are small companies with fewer than 10 employees. The largest employers include Emory Healthcare (~16,000 employees), Emory University (~14,000), DeKalb County Schools (~13,500), Childrens Healthcare of Atlanta (~10,500), the CDC (~9,000), and DeKalb County Government (~7,600). Other private employers of note include AT&T (~3,500 employees) and Cox Enterprises (~2,600)...
- DeKalb County benefits from proximity to downtown Atlanta, excellent transportation infrastructure (i.e., highway, air, MARTA), a logistics cluster, an exceptional medical/healthcare corridor, relatively low cost of living, and good quality of life.

- ▶ The County also has high levels of violent and property crime, few well-defined employment centers, a lack of developable land, aging housing stock, and inadequate transportation in the southern portion of the county.
- As of March 2018, DeKalb's unemployment rate was 4.2%, modestly higher than the national rate and lower than Atlanta's 4.5%

Estimated Local Market Demand

The table below details basic golf market data indicating the magnitude of the local golf demand (additional support data in <u>Appendix C)</u>.

Summary of Market Indicators	2-mile	5-mile	10-mile	DeKalb County	U.S.
Golfers					
Number of Golfing Households	787	6,104	33,779	34,063	17,069,440
Seasonal Golfing Households	0	5	201	143	732,421
Rounds Potential (resident golfers)	16,171	126,437	634,795	628,658	468,634,000
Estimated Rounds (in-market supply)	33,256	109,586	244,807	293,683	468,634,000
Latent Demand/Interested Non-Golfers	2,385	21,817	129,290	107,589	40,573,960
Projected Golfing Households (2022)	805	6,339	35,504	35,306	17,934,830
Golf Indices					
Golf Participation Index	71	68	68	83	100
Golf Rounds Activity Index	55	53	48	58	100
Source: Tactician, Inc. and NGF Consulting.					

The permanent population in the local Sugar Creek GC submarket has age and income characteristics that correlate with lower participation in golf than the national benchmark. This is reflected in golf participation indices that are ±30% than the national benchmark in the 5- and 10-mile markets, and 17% lower in DeKalb County. Rounds activity per household is about half that of the US benchmark in the radial markets, and 42% lower in the county.

NGF estimates about 34,000 golfing households in both the 10-mile market around Sugar Creek GC and for DeKalb County. Population growth is expected to add about 2,700 golfing households to the 10-mile primary market by 2022. NGF's Demand Model shows that residents in the 10-mile ring have the potential to demand as many as 635,000 rounds of golf annually. However, the golf courses in this market ring are hosting only about 245,000 rounds annually, indicating that a significant amount of golf demand is being suppressed due to a variety of factors (e.g., lack of quality choices) or being satisfied at golf courses outside the 10-mile market.

Local Golf Supply

In <u>Appendix C</u>, NGF summarizes golf course supply by type in the local markets, including demand/supply indices that act as a proxy for measuring oversupply or undersupply of golf, relative to the US benchmark (US = 100). NGF observations regarding key golf supply measures for the local market:

- There are 10 total golf facilities (includes 7 public, 6 of which are municipal) in Sugar Creek GC's total 10-mile trade area and in DeKalb County (6 public). The proportion of public courses (70%) in the primary market is similar to the overall U.S., where 75% of all golf courses are open and available to the public.
- Of the 7 public golf facilities within 10 miles of Sugar Creek, 6 are operating at the NGF-defined 'value' price point (<\$40 peak riding fee), including Sugar Creek.
- Ratio analysis based on national benchmarks shows that the local submarkets and DeKalb County overall have a low per capita supply of golf courses, relative to the national benchmark. For example, in the 10-mile market, there are nearly 4 times as many golfing households available to support each 18 holes of public golf compared to the national benchmark.
- ➤ Since 2000, DeKalb County has seen the closure of 72 holes of public golf, including 18-holes Hidden Hills Golf & Country Club, 18-hole Metropolitan Club of Atlanta, and 27-hole Metropolitan International Golf & Country Club. The NGF database shows no new golf course projects under development within 10 miles of Sugar Creek GC.

SUGAR CREEK GC COMPETITIVE MARKET

Based on the current and expected (post-improvements) market positioning of Sugar Creek GC, NGF identified a subset of primary and secondary competitors for the golf facility. These golf courses were chosen based on factors such as price point, location, type (18-hole or greater public regulation length only) and amenities offered, and include both municipal and privately owned daily fee operations. Primary *current* competitors comprise low-to-mid market facilities within about 10 miles of Sugar Creek. This list was not meant to be exhaustive or to account for all of the potential public golf competition to Sugar Creek GC. For example, due to its low price point (especially with the reported spate of discounting prior to closing), SCGC likely gets some level of competition from the City of Atlanta 9-hole courses, Candler Park (executive length) and John A. White.

Primary Competitors	Secondary Competitors
Alfred 'Tup' Holmes Golf Course	Charlie Yates Golf Course
Browns Mill Golf Course	Lake Spivey Golf Club
Mystery Valley Golf Course	Southland Country Club
Panola Mountain Golf Club	

Competitive Facility Location Map

The map below shows the relative locations of Sugar Creek GC and the chosen subsets of competitive public access competitive golf facilities. Following the map, NGF shows summary operating information for key competitors as well as key findings regarding the competitive market.



Competitor Subset – Pricing Comparison & Activity Levels

The following tables provide summary information for Sugar Creek GC and the identified subset of competitive golf facilities.

Sugar Creek GC Primary & Secondary Competitors – Summary Information									
Golf Facility	Location	Туре	Year Open	Par / Slope	Front Tee / Back Tee	Location Relative to Sugar Creek GC			
Primary/Current Competitors:									
Sugar Creek Golf Course	Atlanta	18H-MU	1977	71 / 124	5,403 / 6,318				
Alfred 'Tup' Holmes Golf Course	Atlanta	18H-MU	1926	73 / 116	5,161 / 6,159	9 miles N/NW			
Browns Mill Golf Course	Atlanta	18H-MU	1970	72 / 123	5,545 / 6,539	3.5 miles W			
Mystery Valley Golf Course	Lithonia	18H-DF	1966	72 /125	5,420 / 6,766	11 miles NE			
Panola Mountain Golf Club	Ellenwood	27H-DF	1969			8 miles SE			
18-hole course				70 / 117	4,647 / 5,737				
9 -hole course				41 / -	2,807 / 3,253				
Charlie Yates Golf Course	Atlanta	9H-DF	1998	29 / 56.2	1,380 / 1,953	4.5 miles N			
College Park Municipal Golf Course	College Park	9H-MU	1929	36 / 116	2,147 / 2,987	9 miles NW			
Lake Spivey Golf Club	Jonesboro	18H-DF	1962	73 / 134	4,855 / 6,807	10.5 miles S			
Southland Country Club	Stone Mountain	18H-DF	1990	72 / 134	4,811 / 6,643	11 miles NE			
1. Air miles from subject site, roun	ded to half-mile;	actual drivin	g distances	will likely b	e greater.				
Key: Slope noted is from back tee	Type: DF _ I	Daily Fee: M	II – Munici	nal					

	Summary P	ricing and Rou	nds Played – Primaı	ry and Secondary	Competitors		
Golf Facility	18-H Green Fees Weekdays/Weekends	18H Cart Fee WD/WE	18-H Twilight Green Fee (Weekdays/Weekends)	18-H Senior Green Fee (Weekdays/ Weekends)	18-H Juniors Green Only (Weekdays/ Weekends)	Membership / Annual Pass Fees	Estimated 2017 Rounds
Sugar Creek Golf Course	R \$17/\$23 NR \$23/\$29	\$13	R \$17/\$20 NR \$17/\$20	DNA	R \$11/\$13 NR \$11/DNA	R \$900 R Sr./Jr. \$700/\$700 NR \$1,000 NR Sr./Jr. \$800/\$800	2,691 partial year
Alfred 'Tup' Holmes Golf Course	Mon-Th \$15 Fr-Sun \$22.50	\$7.50/\$7 Twi \$4.25/\$4.25	Mon-Th \$15 Fri-Sun \$15	DNA	DNA	Fore Pass - Monthly rate of \$30	9,843
Browns Mill Golf Course	Mon-Th R \$23.50/\$26.50 Mon-Th NR \$28/\$32	\$13.50	Twi R \$10/\$14.50 Twi NR \$16.50/\$18 Super Twi \$6/\$6	R \$9.40/\$15 NR \$11/\$16	R \$13.50/\$15.50 NR \$14.50/\$17	to receive discounted and free green fees	27,665
Mystery Valley Golf Course ²	R \$32/\$39 NR \$38/\$45	Included	Afternoon R \$28/\$35 Afternoon NR \$34/\$41 Twi R \$24/\$31 Twi NR \$28/\$35	\$27/DNA	Pay your age/DNA	R & NR rate \$1,000 ³ Sr./Jr. \$800 ³ + \$13 per player to ride	25,000
Panola Mountain Golf Club ²	\$28/\$30	Included	DNA	DNA	DNA	\$750 + cart fee	18,000
Charlie Yates Golf Course	NR \$20/\$25 R \$15/\$22 ¹	\$12.00	DNA	\$15/\$22 ¹	\$15/\$18	\$800 Special Rate ¹ \$700	15,000
Lake Spivey Golf Club ²	\$34.99/\$40.50	Included	\$27/DNA	DNA	DNA	Initiation Fees \$99 \$825 Indiv. \$935 Family Sr./Jr \$770 Senior Family \$858 + Cart Fees \$19 WD/ \$20 WE	28,000
Southland Country Club ²	Early Bird \$20/\$39 Wkdays 8am-2pm \$29 Wkends 11am \$34/12pm \$27	Included	2pm \$20/3pm \$22 4:30pm \$17/\$17	Early Bird \$20/\$35 8am \$25/11am \$30; 12am \$27/DNA 2pm \$20/3pm \$22 \$4:30pm \$17/\$17	DNA	\$750 +\$15 cart fee Weekday after 1pm \$29 per month + \$15 cart fee Team Building (4 players) \$1,500 play anytime \$20 per person	18,000
1. Special discount rate for Seniors, College	e students (25 years and under).	, active duty policeme	en/firemen/military, East Lak	e Residents (30316 & 303	17)	N/A – Information not available	
East Lake Partners (Members of ELGC						DNA – Does not apply	
2. Rates include green fee and cart - no sep3. Mystery Valley GC members pay an add		on weekends and half	dave			WD - Weekday; WE - Weekend; T	wi - Twilight
3. Mystery variety OC members pay an add	mionai \$13 piay ice pei iouliu (on weekends and fion	uays.			R-Resident; NR – Non-Resident	

Key Findings – Competitive Market

A summary of general findings regarding the competitive market for Sugar Creek GC:

- The DeKalb County / south Atlanta (esp. south of I-20) public access golf market comprises mostly 'value' or low-fee golf courses that operate with rounds played well below capacity for this climate region. As a result, there is significant competition for market share among the market's golfers. The City of Atlanta's Browns Mill GC, which hosted just under 28,000 rounds in 2017, and daily fee Lake Spivey Golf Club (NGF estimate = 28,000 rounds) appear to be the most active courses among this subset, with Atlanta's Alfred "Tup" Holmes the least active, at fewer than 10,000 rounds in 2017.
- Posted or rack green fee pricing among Sugar Creek and its competitors falls within a relatively compact range, with 18-hole prime time (morning) walking rates available at most clubs in the low-to-mid \$20s, and prime time riding fees in the range of \$35 to \$40. Several clubs, including Panola Mountain, Lake Spivey Golf Club and Southland Country Club, advertise only cartinclusive green fees.
- ▶ In addition to Sugar Creek (when open), several other competitors, including Mystery Valley, Panola Mountain, Lake Spivey Golf Club and Southland Country Club, offer annual passes/ memberships that offer unlimited green fees (cart fee not included). Pricing was similar to that offered at Sugar Creek, generally ranging from \$750 to \$1,000.
- ▶ Average rounds activity among market public golf courses has declined since its peak around the 1999-2000 period. More recently, rounds played have continued to fall in the DeKalb County market, as well as among the City of Atlanta municipal golf courses, which have seen steady declines over the last 7 to 8 years in the face of negative national golf participation trends and, more important, significant deferred maintenance and capital investment. The city now self-operates four municipal golf facilities − Alfred "Tup" Holmes GC, Browns Mill GC, North Fulton GC (Chastain Memorial Park, and Candler Park GC − after many years of leasing the facilities to American Golf Corporation.
- After a land swap deal between the city and the State of Georgia, the state leased the historic Bobby Jones Golf Club to the Bobby Jones Foundation, which is funding a \$23 million reconstruction project begun last fall that includes transforming its 18 tees, greens, and fairways into a nine-hole reversible course designed by the late Bob Cupp. The project also includes a driving range, indoor instruction building, short game practice area, and a new maintenance facility. Opening is expected this fall.
 - The Foundation is partnering with the Georgia State Golf Association and the Georgia Section of the PGA of America in the second phase of the project to create the "Georgia Golf House," a new facility that will become the center of golf in Georgia. Those organizations, as well the Georgia Golf Hall of Fame, the Atlanta Junior Golf Association, and others will call the Georgia Golf House home and use it for their headquarters.
- Several of the competitive golf courses NGF visited, including Tup Holmes, Browns Mill, Panola Mountain, Southland Country Club and the County's Mystery Valley Golf Course, have smaller clubhouses with minimal food & beverage service and dining or meeting space. With significant improvements to the golf course and a commitment to a higher standard of maintenance going forward, Sugar Creek should be able to take advantage of its full-service clubhouse to gain market share for both daily fee play and golf outings.

GOLF MARKET / EXTERNAL FACTORS SUMMARY

The public golf market in DeKalb County / south Atlanta is characterized by low green fees and low rounds activity levels, and a lot of competition among value-oriented golf courses. Golf participation rates and rounds played per household in the Sugar Creek market are very low compared to national benchmarks. Still, NGF expects that Sugar Creek GC, which enjoys an advantage in clubhouse facilities, would be positioned to increase market share with the facility improvements recommended in this report, and a higher standard of maintenance going forward. Other NGF observations about the local market:

- The permanent population in the local Sugar Creek GC submarket has age and income characteristics that correlate with lower participation in golf than the national benchmark. This is reflected in golf participation indices that are ±30% than the national benchmark in the 5- and 10-mile markets, and 17% lower in DeKalb County. Rounds activity per household is about half that of the US benchmark in the radial markets, and 42% lower in the county.
- NGF's Demand Model shows that residents in the 10-mile ring have the potential to demand as many as 635,000 rounds of golf annually. However, the golf courses in this market ring are hosting only about 245,000 rounds annually, indicating that a significant amount of golf demand is being suppressed due to a variety of factors (e.g., lack of quality choices) or being satisfied at golf courses outside the 10-mile market.
- ➤ Since 2000, DeKalb County has seen the closure of 72 holes of public golf, including 18-holes Hidden Hills Golf & Country Club, 18-hole Metropolitan Club of Atlanta, and 27-hole Metropolitan International Golf & Country Club. The NGF database shows no new golf course projects under development within 10 miles of Sugar Creek.
- All golf facilities face some external factors beyond their control, including a high fixed expense structure and operating expenses that tend to rise more rapidly than revenues (e.g., ability to raise fees is constrained). Also, golf economics will always be at the mercy of unforeseen yearly weather variations and events (e.g., flooding events at Sugar Creek) that act to reduce capacity, rounds and revenues.
- While socio-demographic, financial and cultural headwinds certainly persist for golf, the game remains popular and has a deep well of interested prospects. Golf's chief challenge remains getting more of those non-golfers who express interest in playing ('latent demand') to actually give golf a try, and converting more beginners into committed participants.

Recommended Improvement Plan for Sugar Creek Golf Course

Below we present NGF Consulting's findings and recommendations relative to DeKalb County reopening Sugar Creek Golf Course for play, with a target date of September 1, 2018. In this section, we discuss two levels of recommended improvements for Sugar Creek:

- 3. **Mission-Critical** + **Other Short-Term** Highest priority improvements required to reopen the golf course for play, plus additional improvements needed in very short term (based on age and condition of assets see <u>Appendix A</u> for ASGCA Lifecycle Chart) so that Sugar Creek GC can continue to be viable as a low-fee public golf course.
- 4. Longer Term Capital Needs Other capital items that will likely need to be addressed in the next 3 to 10 years, based on current age and condition of assets and the need to remain competitive in the market.

As NGF reported in its June 5, 2018 memo to the Township, several of the action steps necessary to implement the "mission-critical" improvements needed to reopen the golf course late this summer have significant time-urgency and looming milestones.

IDENTIFYING APPROPRIATE IMPROVEMENTS

NGF Consulting evaluated potential capital improvements for Sugar Creek GC in the context that proposed changes should logically demonstrate the ability to rehabilitate the golf course and improve economic results by some combination of:

- Preparing the golf course for play and making it marketable as a quality value-oriented golf course in the south Atlanta area.
- Improving the ease and efficiency of golf course maintenance, especially with improvements to the irrigation system and the clearing of drainage ditches.
- Addressing "mission-critical" deferred maintenance and capital items
- Enhancing the golfer experience at Sugar Creek GC

Assuming rational customer behavior, whereby golfers respond positively to a better, higher value product offering, a quality improvement plan should increase demand, market factors aside. A well thought out plan properly allocates funds where they meet the general goals of adding revenue and/or decreasing operations cost. In general:

- Surface changes golfers see tend to raise revenues, as golfers typically seek the most aesthetically pleasing, well-conditioned and interesting challenges and experiences.
- Subsurface or infrastructure improvements make maintenance easier and better, stabilizing operation costs. Because conditioning is usually the number one customer satisfaction driver in golfer surveys, these types of improvements can also result in increased play and revenues.

LONG RANGE MASTER PLAN APPROACH TO CAPITAL IMPROVEMENTS

NGF believes that DeKalb County should give strong consideration to developing a Long-Range Master Plan for improvements at Sugar Creek GC, if it intends to stay in the golf business despite likely operational deficits. Such an approach could allow the County to most efficiently "steer the ship" in terms of prioritizing and implementing future improvements (those beyond the steps being taken to reopen the course this summer). The Long Range Master Plan to be developed by a qualified team should include the following:

- (i) Overall consultant to manage the master plan process.
- (ii) Qualified golf course architect (consultant) to take the general directions and recommendations provided here and integrate them into a Long Range Master Plan exhibit.
- (iii) Financial analysis (consultant) to develop specific pro formas based on more refined plan for improvements.

RECOMMENDED IMPROVEMENT PLAN FOR SUGAR CREEK GC

Following is the NGF team's recommended improvement plan for Sugar Creek Golf Course, including a range of preliminary cost estimates (all estimates are in 2018 dollars).

- 3. **Mission-Critical + Other Short-Term** Highest priority improvements required to reopen the golf course for play, plus additional improvements needed in very short term (based on age and condition of assets see <u>Appendix A</u> for ASGCA Lifecycle Chart) so that Sugar Creek GC can continue to be viable as a low-fee public golf course.
- 4. **Longer Term Capital Needs** Other capital items that will likely need to be addressed in the next 3 to 10 years, based on current age and condition of assets and the need to remain competitive in the market.

"Mission-Critical" + Other Short-Term Improvement Needs

There are two distinct phases that need to occur for Sugar Creek GC to be operational. The first phase is a reclamation project, as the course is currently not in playable condition. The second phase is normal maintenance operations and addressing other capital needs that may not be critical to getting the course into minimally playable conditions this year, but which will need to be completed in the short-term. Based on our observations of the course and our understanding of the playing conditions that will be acceptable to the course's customers (at least for 2018), NGF and GMS have identified what needs to be done to rehabilitate and open the golf course for play. We are defining the basic improvements that need to be done to open the golf course as 'mission-critical' repairs, a description of which follows below.

Irrigation System – Summary Condition and Recommendations

{For full description of current irrigation system set up, condition and protocols, see Appendix D}.

Mission-critical needs at Sugar Creek begin with establishing reliable water source for the greens. Ensuring that there is a reliable, clean source of water will be critical to grow the turf – especially the greens - back into playable condition. Below is a summary of the NGF team's assessment of the current irrigation system at SCGC, as well as recommendations for improving the system.

- The Water Source (South River), due to lack of flow and lack of an adequate wet well, pumps sediment into the pump station wet well causing excessive wear to the pumps and system.
 - The system consistently needs to be backwashed and then primed to keep it functioning.
- The Irrigation System has not been maintained or operated correctly.
 - We were told only the greens have been watered and the remainder of the system was not used.
 - At least some of the controllers have been replaced with Homeowner/Landscape controllers, which are more prone to power surges than golf course irrigation controllers.

The irrigation system is the 1974 design and is very inefficient. The County had a system designed, and when the pump station was replaced in 1994 it was updated to be able to handle the newer design. The current system runs water through the pump station wet well rather than through the original piping. Because the transfer of the water is done through the wet well and the sediment settles out in this wet well, it needs to be backwashed to prevent damage to the irrigation system pumps and their motors. This set up is labor intensive and not reliable.

A thorough inspection of the irrigation system should be completed as soon as possible to ensure that all sprinklers are working, and that the system does not have any leaks. (The system was charged in the fall and the full entire system pressure tested by the County; no leaks were detected). During the planned rehabilitation of the golf course this summer, as well as subsequent to that, a reliable system will be needed to irrigate all areas to force the growth of the bermudagrass to take over where the weeds had been. The greens, at the very least, will need irrigation to grow them back and have sufficient playable turf coverage.

NGF Recommendations:

- Irrigation Inspection/Audit to determine the condition and make needed repairs to the system:
 - This can be done while work is beginning on greens and other areas (more below).
 - At a minimum, all greens irrigation needs to be functioning properly.
- **Drill** a well and eliminate the transfer line from the river:
 - This will allow a clean and consistent flow of water
 - A minimum of 300 gallons per minute would be needed to keep up with potential demand
 - Currently the pond can store approximately 8 feet of usable water; this is storage of 1.95 million gallons of water or 6 acre-feet.

Greens- Summary Condition and Recommendation

The County is in a time critical scenario as it pertains to the recovery or replanting of the greens at Sugar Creek if it is to open late this summer. Currently, the greens are very thin and in poor condition (picture of representative green shown below). Decisions need to be made to allow enough time for greens to fill in. At this writing in mid-June, it is nearing the time where it will be too late to sprig before next spring, especially given the recent hot weather in Atlanta.



If the process is delayed until the beginning of July (i.e., after maintenance contract amended, signed, and approved), this would delay the beginning of the grow-in until the 3rd week of July. The same work needs to be accomplished to ensure the irrigation system is functional and reliable. The 90-day period would end in early October. The risk of waiting to start the process until July is that if the weather turns dry, the greens will lose turf and the grow-in may need to be supplemented with sod. There is also the chance that the irrigation system may need more work than anticipated and the beginning of the grow-in could be delayed. Sprigs can be added to supplement the turf coverage but the greens would need to be aerified at least twice and verticut to better prepare the surface for sprigs to improve soil contact.

Finally, the option of killing the greens and growing in from all new sprigs starting the 3rd week of July can also be done. The risk is that the greens would likely have issues in the spring, especially if overseeded. If it is a frigid winter like this past year there is more of a possibility of winter kill. The greens have a very thick organic layer and can create even more variability to this scenario.

The reality is there are many variables to this equation, weather, irrigation system reliability, water source/reliability, condition of the greens at what becomes the starting point. No matter what is decided the testing of the soil for needed fertility, ISTRC testing of the Physical Properties and a Nematode Assay should be done to provide the best information for final planning.

Summary:

- Greens have very thin turf coverage and are weed-infested; there are heavy organic layers under the surface.
 - A period of 60 to 90 days will be needed to grow in the greens.
 - Work needs to be completed prior to September 15th
 - Greens have shrunk 20% 30% from their original size.
 - Soil testing needs to be done:
 - Fertility
 - Physical properties ISTRC Labs
 - Nematode Assay
 - Determine if greens are USGA construction

NGF Recommendations:

We believe there is a good chance greens can be grown back with a minimum of sod needed. However, if the water situation is not rectified and we experience dry weather the greens could worsen, and more sod may be needed.

- Will take 60 to 90 days.
- Grow-in should be completed not later than September 15 to allow time for turf to prepare for winter.
- The greens need to have weed controls applied ASAP.
- Recommended protocol (separate attachment for recommended greens rehabilitation timeline submitted with interim report):
 - Multiple applications of fertilizer to encourage growth.
 - Followed by being aerified at least twice and possibly more to correct soil issues.
 - Topdress and fertilize weekly to force them to grow back.

In addition to the irrigation system and the greens, the NGF team has identified other items of deferred maintenance and/or capital items that will need to be addressed to achieve even minimally acceptable playing conditions later this summer. These items, with the possible exception of the cart barn and maintenance yard cleanup, are expected to be within the overall project management purview or scope of the maintenance contract and are summarized below.

Tees, Fairways and Roughs

There appears there to be a reasonable stand of bermudagrass growing underneath all the weeds. The weeds need to be controlled and mowing done to allow the bermudagrass to grow and spread. Tees overall appear to be reasonably level and of decent size.

NGF Recommendations:

- Due to the density of the weeds and size we recommend applying post-emergent herbicides now to begin killing the weeds and reducing their competition with the bermudagrass.
- As the weeds begin to die we recommend mowing them with a bush hog at 6" to remove the taller dying weeds without creating excessive clippings for removal.
- Once these items are completed, mow again at 4-5 inches based on producing the smallest volume of clippings to deal with.
 - Since there are at least 60 days to grow in the greens this lowering of these areas can be done in this manner.
 - If the County needs to move faster, a turf sweeper, tractors and trailers will be needed to deal with the excessive clippings.
 - This should continue until the height of cut is at 2 inches. At this point normal golf equipment can begin being used and the heights of cut lowered for each individual playing area.

Ditch Cleaning and Trimming

The course is located along the South River and is in the 100-year flood plain. The Sugar Creek is a tributary of the South River and flows through the course as well. Over the years, ditches have been dug with the soil used to raise fairways and to build mounds around greens complexes to serve as dikes. These ditches have not been maintained and are grown over with Willows and other growth. The purpose of the ditches was to help the water return to the river quicker. Sediment is rendering them less effective.

NGF Recommendations:

Ditches should be cleaned of excess growth and excavated to help the water move more effectively. Excavated materials can be stockpiled and used to fill stump holes or other repairs within the flood plain.

Bridges Repair

There are six bridges at Sugar Creek GC. While NGF did not do structural inspections of the bridges, it appears that at least two are in need of having boards replaced.

Recommendations:

- ▶ Boards on two of the cart traffic bridges should be replaced.
- **b** Bridges look secure structurally, but we recommend a visual examination by an engineer.

Bunkers -Minimal Preparation (needed just to reopen for play)

Bunkers are an important component contributing to overall golf course strategy, interest and aesthetics. At Sugar Creek GC, it will take about 30 days to kill the weeds in the bunkers, edge them and rake them enough to prepare for play. The County's plans of the original design show that the bunkers have drainage in them. To confirm the presence of drainage and do short-term fixes, the old sand must be removed and the drains located to see if they are still working. After any repairs, a decision could be made to just put back the old sand or replace/supplement with new sand. If it is determined that the bunker drainage problem is not easily fixable, the County may prioritize a full bunker renovation on its short-term CIP list for next year (more later in this section).

NGF Recommendations:

- To bring bunkers to the condition they were reportedly in prior to closing:
 - Treat bunkers with round up to kill the weeds
 - Edge the bunkers to better define the edge
 - Cultivate and rake the bunkers to bring them to a more playable condition
 - Remove as much contaminated sand as possible and add new
 - Investigate to find drainage, flush and do any repairs

Cart Paths

The asphalt cart paths are very uneven from tree root invasion, as well as areas where they have sunk. They have also suffered from the periodic flood events.

NGF Recommendation:

For the short term, it should be sufficient to repair should only the worst areas, though it would make more sense for wall-to-wall replacement if funding was available.

Maintenance Compound

The building and compound are an appropriate size and can meet the needs of an ongoing maintenance operation. However, the building is a mess and needs a thorough cleaning and organization; also, NGF was told that the roof leaks. Light fixtures need repairing or replacing. The only viable piece of shop equipment is the equipment lift. We could not get into the Pesticide Storage area to see its condition or if any inventory that may be in it. The compound is overgrown, and trash and debris have been placed here. There are some construction dumpsters that are full and need to be hauled away and then returned to allow for the remaining trash and debris to be placed in them.

NGF Recommendations:

- Repair the roof and ensure all electrical is in working order
- Install a 60-gallon, 5 Horsepower Air Compressor
- Thoroughly clean the building and take inventory of equipment, supplies, etc.
- Clean-up and mow the compound
- Repair gates
- Pesticide building opened and inspected
- Fuel tanks pumped out in case of water from condensation
- Install shelving, ensure all doors operational, change locks

Cart Barn

While the NGF team did not do a formal inspection of the cart barn/shed structure, it appears to need significant work, including roof repair, to be made safe and functional.

NGF Recommendation:

The County should have the building formally inspected at the beginning of work this summer to determine the extent of repairs needed. Depending on cost and estimated timing of repairs, the County may opt to allow only walking rounds until the building is repaired and a cart fleet secured via lease agreement.

Tree & Stump Removal / Clean-up of Understory Overgrowth

Tree and limb debris exists throughout the course and should be removed. Trees also interfere with sightlines in parts of the golf course. Finally, there is also excessive underbrush throughout the course.

NGF Recommendation:

- Remove dead trees, limbs and stumps.
- Remove trees that are interfering with the line of play and narrowing hole corridors.
- Clean up areas of excessive brush (understory).

Driving Range Netting

The driving range currently lacks netting – both on the sides and in back. While not necessarily a safety issue at Sugar Creek due to the lack of adjacent housing or fairways (some balls in flight could reach the maintenance compound), the netting will improve the picking of range balls and mitigate loss.

Preliminary Cost Estimates – Mission Critical + Other Short-Term Improvements

Following are NGF's preliminary estimates of costs for what we've identified as 'mission-critical' and 'other short-term' high priority needs at Sugar Creek, as discussed above. These deferred maintenance and capital items negatively affect the overall product offering and golfer experience, contribute to maintenance inefficiencies, and constrain demand and revenues. NGF Consulting views addressing these deficiencies as directly related to the marketability of Sugar Creek Golf Course.

We have not included cost estimates for equipment, as we assume the vendor will be able to supply all equipment to do the in-house projects related to course rehabilitation (in addition to supplying all regular maintenance equipment as part of the contract). In reality, it is very possible that rentals of some specialty equipment will be required. For purposes of presenting these preliminary cost estimates, we have assumed that soft costs (engineering, permits, etc.) are included. Finally, we have not included a contingency line item, since not all of these projects will be undertaken, and only some of them will be done outside of the maintenance contract.

Sugar Creek Golf Course Preliminary Cost Estimates Mission-Critical + Other Short-Term Improvements

Improvement	Key Tasks & Variables	Estimated Range
Project Management and Labor ¹	Scope of improvements & bids	\$100K - \$150K
Install Well & Transfer Line (Bid)	Depth; pump size; upgrades to electric	\$80K - \$150K
Irrigation Audit & Repairs (Bid)	Extent of any leaks; repair/replace	\$15K - \$75K
Greens Grow-in Materials	Fert., chem., topdress; sprigs	\$20K - \$35K
Tees, Fairways, Roughs Prep. Mtls.	Fertilizers, chemicals, growth regulators	\$30K - \$50K
Ditch Cleaning & Trimming		\$15K - \$30K
Bridge Repairs (Bid)	Extent of re-decking	\$10K - \$20K
Bunker Clean-up & Prep Mtls.	Herbicide trtmnt & edging; new sand; drainage?	\$10K - \$25K
Maint. Comp. Clean-up & Repair	Clean; repair roof, gate; FF&E	\$20K - \$45K
Cart Paths (Bid)	Repair only worst areas; square footage	\$20K - \$50K
Cart Shed Repairs	Upgrade, repair	\$25K - \$30K
Tree/Stump/Brush Rmvl/Clean-up	Number of trees (bid?), stumps	\$25K - \$50K
Driving Range Netting (Bid)	Height and extent	\$30K - \$50K
Total Project s		\$400K - \$785K
Source: NGF Consulting & GMS, 2018. 1 Labor is for course rehabilitation only; assumed	to exclude specialty projects such as irrigation repairs, cart paths, bridge	repairs, tree removal

Understandably, with a significant number of variables and the uncertainty about which projects could possibly be done in-house as opposed to being submitted for bid, the preliminary cost estimate range is fairly wide, from $\pm \$400,000$ on the low end to just under $\pm \$800,000$ on the high end. The actual cost will be come much clearer once a project manager is retained, completes a thorough facility-wide inspection, and identifies the projects that will have to go to bid. Depending on funding availability, some of these short-term needs (those **not** identified as "mission critical" earlier in this section) could probably be deferred, but will still need to be addressed in the short term.

Longer-Term Capital Needs

The NGF team has identified other capital improvement projects that can probably be put off, but which are likely to be needed in the 3 to 10-year time frame, based on current age and condition, and expected useful life (see Appendix A for ASGCA Lifecycle Chart). A summary of these follows (preliminary cost figures presented reflect a "reasonable estimate", including soft cost but excluding contingency, and are presented in 2018 dollars):

Full Bunker Renovation

Earlier, we identified a short-term fix that may be feasible to get SCGC's bunkers into minimally acceptable playing condition. Depending on the drainage situation, the County may prioritize a full bunker renovation on its short-term list of priorities for 2018 or 2019, funding considerations notwithstanding. Full bunker renovation would involve upgrading the bunkers with one of the new bunker lining systems, such as capillary concrete or 'Better Billy Bunker'. (The County, with input from stakeholders, may also opt to eliminate some of the bunkers at Sugar Creek). To install these new systems the old sand would need to be removed, drainage fixed/installed, the new system installed over the drainage and bottom of the bunker, and then new sand installed. This work could be accomplished concurrent with the green grow-in. (Est. Cost = \pm \$190K).

Irrigation Source and System - Long-Term Solution

Though the NGF team has prescribed a solution that should work for the intermediate term, at some point the County will have to replace the entire irrigation system. If the County can continue to get by with

watering only greens, this project could be put off for a significant amount if the current system, modified to eliminate the transfer line and with a new well to feed the retention pond. (**Est. Cost** = \pm \$1.2 MM - \$1.5 MM).

Cart Path System – Full Replacement

As noted earlier, if not for funding constraints the NGF team would recommend full cart path system (full course, tee to green) replacement as a shorter term project, rather than repairing only the worst areas now. (Est. $Cost = \pm \$200K - assumes asphalt$).

New Cart Barn

For the short term, repairs to the existing cart shed have been prescribed. The structure appears to be in very poor condition, though with repairs it may be serviceable for short term. Ultimately, Sugar Creek will need a new, modern, safe structure. (Est. Cost = \pm \$500K).

Greens Reconstruction

Though well past their expected useful life and significantly reduced from their original size, the greens at Sugar Creek GC may remain serviceable for many more years, especially given the golf course's market position. However, the need to completely reconstruct greens should be a part of the County's long-term planning and capital funding process. (Est. Cost = \pm \$1.2 MM - \$1.5 MM).

NGF Business Recommendations

Because there was little information about how Sugar Creek Golf Course was operated when open, NGF has focused its operational recommendations on industry 'best practices' that should be able to help minimize the annual operating deficit at Sugar Creek. These are presented below for consideration by the County and/or its private vendors.

MANAGEMENT STRUCTURE

As of this writing, the County's options for managing SCGC are limited due to the urgency of getting the course open for play by late summer, which necessitates the quick hiring of a private golf course maintenance company. As noted earlier, the County already has contracted with private vendors for the tennis and food & beverage operation. Therefore, the County has the option of either hiring a Director of Golf / Head Golf Professional as a County employee that would oversee golf operations, or contracting for the same position and hiring other part-time workers to help out in the pro shop and with outside services. NGF was told that a golf professional that is a County employee would not be able to earn ancillary compensation (e.g., lesson revenue), so the County will be going the route of a private contract.

While multiple private contracts can be difficult and inefficient for a municipality (several entities have to earn a profit, potential for misalignment of interest, goals, etc.) to manage for a golf operation, the County's choices for Sugar Creek are few. It is neither likely, desirable nor even feasible to find another lessee to take over a property that has very little chance of turning a profit. Also, the County has a one-year deal (with options to renew) with its food & beverage contractor. NGF recommends similar short-term deals for maintenance and the golf professional. Doing this will allow the County to appropriately evaluate performance and contract compliance, and also assess how the overall structure of multiple vendors is working for the parties involved. If SCGC ends up being rehabilitated to the point where it is exceeding expectations from a gross revenue perspective, the County should consider full-service fee-for-service management – which would allow the County to keep all revenues minus any incentive compensation - at some point down the road. Even without full service management, we recommend the County reevaluate the F&B contract after a year or two to see if it is overly favorable for either party.

MARKETING & PROGRAMMING

NGF was told that little marketing of Sugar Creek GC was being done by the operator or the County, which is understandable when a golf course has fallen into disrepair and it can compete only on offering very low rates. However, below NGF offers some 'best practice' marketing and programming recommendations that the County should consider once facility improvements have taken hold (depending on the ultimate scale of improvements, the County may consider press releases and/or holding a Grand Reopening event some time in 2019 or 2020).

Direct Sales – Direct selling to recruit and facilitate leagues, golf outings and non-golf events such as corporate meetings, small banquets/ receptions, and events is an important tool for today's proactive golf operator. These events can provide a supplemental income source, and result from active outreach to local organizations, such as churches, businesses and civic organizations. Selling package deals (and placing quality rack cards) with area hotels can also be an effective tool in generating supplemental demand, including small groups. Down the road, depending on the level of success the County and contract operators have building golf outing and non-golf event business, the County should study the feasibility of adding an event pavilion in the lawn area behind the clubhouse so that larger − or concurrent − events can be facilitated.

- ▶ Themed Programming & Events Creative golf-themed events, on both the golf course and the driving range, are becoming more and more popular with operators looking to make golf more fun for less committed golfers, including many young adults who want their recreation to be 'experiential'. Examples of events that NGF has observed include:
 - A weekly **9-Hole Scramble** that had 13 teams (52 participants) and generated about \$2,500 in direct revenue, plus bar/grill revenue before and after the event.
 - 'Balls & Beers' at the driving range. Participants pay a small fee for the event, which can feature a keg (or craft beers from local brewers) and unlimited range balls for an hour, with a golf pro walking the range giving quick lessons and tips.
 - '9 & Wine' golf training programs for women's groups are a particularly popular and effective way to engage beginning women golfers and non-golfers.
- ▶ Website NGF recommends that municipal golf courses have dedicated websites, separate from the link that typically appears on the municipality's site. Recommended features for a quality public access facility include electronic tee time booking capability, up-to-date fees, outing / tournament information, calendar of events, and restaurant and banquet information. For facilities like Sugar Creek that provide a much needed venue for events, we also recommend that the website include a lot of pictures of successful events.
- ▶ Email Database Building, maintaining, and actively utilizing an email platform to practice yield management and advertise events, specials, etc. is an effective "best industry practice" for public golf in 2018. E-mail marketing, with the exception of word-of-mouth and free advertising, is the most cost-effective advertising possible. NGF recommends that SCGC management actively build its current customer email database when golfers come into the shop, when they book tee times via phone, and on the website. NGF recommendations for building the email database:
 - Emails should routinely be collected during golfer check-in for walk-in golfers. (We have seen placement of an iPad in the golf shop to capture customer emails as an effective tool).
 - Create an 'eClub' with simple registration to include only the most essential fields
 - Promote periodic green fee and combination specials (e.g., discounted golf + food & beverage) contingent on having an email address on file, or providing one.

UTILIZATION OF TECHNOLOGY

Comprehensive utilization of a quality, golf-oriented point-of-sale (POS) system helps management understand its customer profile segments, while also providing assistance in marketing and customer tracking. Technology is one of the most important tools available to a golf course management team to build a larger customer database, create customer loyalty and boost revenue. The efficiency of software for tee time reservations, operations / accounting reporting, retail point-of-purchase reporting, and overall management information systems has advanced dramatically in recent years and can help improve overall performance. Some of the key features of industry leading POS systems - often underutilized by operators – are summarized in the bullets below.

- Loyalty program modules
- Creation of customer profile segments, including play and spending patterns
- Enhanced target marketing, messaging and yield management utilizing the customer database segmentation

Integration with social media forums such as Facebook, Twitter, Instagram, etc.

There are also vendors that do not provide POS but offer comprehensive services that manage all aspects of online marketing efforts. For example, they may provide software that integrates information collected from the POS, tee sheet, website, mobile applications, booking engine and social media networks to help golf course managers better understand and market to their customers.

CUSTOMER SERVICE

Strong customer service can be a key differentiator in building customer loyalty. High level service at a golf course begins the moment the golfer sets foot on the property, beginning with a friendly welcome (especially for faces that staff may not have seen before). NGF generally recommends strategies such as staff training and establishment of customer service standards & measurable metrics – monitored through periodic customer surveys and occasional secret shoppers - to make sure that the standards are being consistently met or exceeded.

FOOD & BEVERAGE

Due to its attractive full-service clubhouse, the private vendor at SCGC appears to have a market opportunity to grow business among both golf and non-golf clientele. Examples of industry best practices with respect to golf course F&B service include:

- Employ a dedicated salesperson (at least part-time) to solicit meetings, banquets and other events from the community.
- Have consistent hours of operation for clubhouse and on-course service (beverage cart), including, at a minimum, coffee, juice, Danish, for early morning golfers.
- Feature grab and go items, such as fresh premade sandwiches, as well as hot dogs, etc.
- Run a barbecue grill, especially during busier times, with items such as hamburgers, hot dogs, and grilled chicken at the ready. This can also improve the pace of golfers making the turn.
- Create and promote themed events; examples NGF has seen include Sunday Brunch, 50-cent Wing Night; Monday Night Football/college football Saturday/NFL Sunday events; Trivia Night (buffet menu); Pub Night, with light fare menu

CLUBHOUSE

Though its programming from a golf perspective is not ideal, the clubhouse at Sugar Creek GC offers one of the few event venues in this part of greater Atlanta. NGF believes that there are potential modifications that may add flexibility to the space and make it even more attractive to several different constituencies. For example, there appear to be spaces on each side of the front entrance to create a semi-private members' area, as well as a sports pub type area that could potentially feature a golf simulator.

Also, we found that the overall space, including the bar area, had an "institutional" feel to it. Modernizing the bar area – for example, with maple or walnut– could make the space more appealing for golfers wanting to enjoy some beverages after a round, and for neighborhood residents perhaps looking for an inviting place to watch a sporting event. Of course, these potential improvements will cost money and the County, under its current deal, receives only 1% of food & beverage gross revenues, so the payback/ ROI of money invested by the County may preclude such investment unless the private vendor is willing to split the cost or fund some improvements themselves (perhaps in exchange for temporary rent abatements or some other concession).

VOLUNTEER / COMP POLICY

NGF was told that a volunteer corps at Sugar Creek comprising about 36 individuals worked 2 hours per week and received unlimited free golf in exchange for their service. For a variety of reasons, many municipal golf courses have gotten away from having large volunteer bases and are instead compensating part-time employees to help with course marshaling, starter services, outside services, etc. While we are not recommending the County do away with the volunteer program at SCGC, we do believe that the facility's tenuous financial situation requires a higher degree of cost recovery. Therefore, the County should create a policy that establishes parameters such as a higher minimum number of hours volunteered in order to earn free golf, as well as a limit to the number of free rounds that a volunteer can earn.

GREEN FEE PRICING

The pricing schedule presented to NGF for SCGC dates back to 2012, though it reportedly did not change much in the subsequent years. Posted walking 18-hole green fees were generally in the \$20 to \$30 range, depending on residency status and time of the week. Time of day discounts also applied, and there were price breaks for juniors and seniors. NGF was told that the County does not permit discounting of green fees off of approved rates, but this practice had evidently become common – especially when the golf course deteriorated.

In addition to daily fees, the County and operator offered unlimited play (cart fee additional) annual passes at SCGC. The pricing presented to NGF showed annual fees of \$900 for residents (\$700 for resident juniors and seniors) and \$1,000 for non-residents (\$800 for juniors and seniors). Pass pricing reflected a 'multiple' of 39 times the weekend morning daily fee rate for residents, and a multiple of about 35 times the weekend morning rate for non-residents. Multiples - which are essentially an expression of the number of break-even rounds one would have to play to make the pass worth purchasing - are even lower for juniors and seniors.

The quality and overall golf experience that Sugar Creek GC will offer next year and in subsequent years after facility improvements are implements is an unknown at this time, so NGF cannot recommend specific pricing for the golf course. However, we offer some general recommendations given our understanding of Sugar Creek GC:

- In consideration of market dynamics and variable course conditions, the County should consider officially amending its policy on charging less than the posted rate, but only as part of a disciplined yield management strategy that includes parameters and protocols on how, when, and to what extent tee times are offered at less than rack rate.
- ▶ The annual pass multiples last offered at Sugar Creek are in the range of what NGF typically observes at low fee municipal golf courses. Also, it is not possible to evaluate the pricing without knowing the frequency of play of the passholders. If they are playing twice per week over the course of a year (~100 times per year), the County should consider raising these pass fees to represent a more equitable multiple of the daily fee rate.
- ▶ Before setting fees each year, the County should monitor competitive market pricing and the quality of the golf experience offered at Sugar Creek in this context. If possible, modest biannual increases should be enacted simply to keep up with the cost of inflation.

Financial Projections

In this section NGF provides a basic cash flow model to estimate the financial performance and potential annual operating subsidy that will be required of the County at Sugar Creek GC. Specifically, the model projects rounds played, average rate, revenues, and expenses, assuming a significant level of facility improvements, the multi-private vendor operating model, and site factors. We feel that these projections represent a "fair estimate" of performance for the golf course based on the expected quality of the golf experience, our market analysis, and the expected management structure for Sugar Creek GC.

BASIS FOR PROJECTIONS

Below, NGF Consulting provides financial projections for the 2019 – 2023 period, based on the primary assumptions of the reclamation of the golf course (i.e., addressing critical need improvements), continued capital investment over the five-year period, and a higher standard of golf course maintenance going forward. The following bullets summarize what NGF views as the key justifications for our projections based on our understanding of the DeKalb County public golf market and the demand drivers for Sugar Creek GC.

Potential Mitigating Factors / Variables

In this section, we provide projections of performance based on a set of assumptions that may or may not become reality. The following are examples of some unknown and/or uncontrollable variables that have the potential to materially affect (positively or negatively) the ultimate demand for, and performance of, Sugar Creek Golf Course:

Positive

- ► Favorable location Sugar Creek GC enjoys relatively easy accessibility for much of the south and east Atlanta area due to the proximity of I-20, I-285 and other major arterials. With a significantly improved product, the golf course should be able to draw from a wider area than it reportedly has in recent years due to an enhanced price-value proposition.
- The overall golf demand/supply balance in the local Sugar Creek GC market is becoming more favorable to existing public golf operators due to continued population growth, though much of this growth has been, and will continue to be, among groups that do not have a strong culture in golf. Still, with a potential growth in the number of golfers, the possibility of more golf course closures, and the lack of new courses in planning, competitive conditions may become more favorable.
- ▶ The new management team of Sugar Creek GC through creative programming (leagues, outings, events, contests, etc.), strong customer service and an overall improved product is able to quickly build market share and successfully activate some of the significant latent demand for golf in the area among groups that have not traditionally shown strong golf participation.

Negative

- The golf course is improved only marginally and/or the ongoing maintenance standard is insufficient to meet golfer expectations.
- Regional or national economic recession previous recessions have negatively impacted the performance of public golf courses.

- Continued overall decline in golf participation recent trends show declines in golf participation, especially among young adults.
- ▶ Reliable irrigation source the NGF team has documented the inefficient irrigation system as SCGC. If the County cannot establish a reliable, quality efficient water source for the golf course (especially the greens), the facility will have little capability to compete effectively. Irrigation is the "life blood" of a golf course operation, and anything that negatively affects the availability, cost and/or quality of water will be detrimental to the golf facility operation.
- Yearly weather variations for example, an unusually high number of flooding events at SCGC can significantly affect course conditions and constrain capacity and demand).

CASH FLOW MODEL FOR REDEVELOPED SUGAR CREEK GC

NGF has created a five-year pro forma for an improved Sugar Creek Golf Course. In preparing our estimates of future performance, the NGF team has made several assumptions for input variables and external market conditions. We recognize that this estimate is prepared in 2018 and is not necessarily predictive of future conditions. As such, the NGF estimates are made using current (2018) inputs and current market conditions. All financial estimates are prepared in 2018 dollars. A summary of NGF assumptions is presented below.

The NGF rounds, revenue and expense estimates have been crafted in consideration of the current and expected (e.g., population growth, golf supply-demand balance) market conditions over the course of the five-year subject period. Projections for rounds and revenues assume continued improvement of the golf course and the operating structure (multiple private vendors plus some County employees) chosen by DeKalb County. Other basic assumptions:

- The overall economic condition remains stable, without any meaningful downturn in the DeKalb County area economy.
- The County will continue to improve Sugar Creek GC with available SPLOST funding and the golf course will operate with a high standard for customer service and conditions.
- Sugar Creek will continue to operate with a traditional mix of revenue centers common in public-access golf, with the predominance of revenues derived from daily green & cart fees, supplemented by membership income.

Activity, Revenue and Expense Assumptions

The base assumptions in preparing the projected financial performance estimates cover several categories, including: total rounds activity; average green + cart revenue per round; average revenue per round across other revenue centers (range, merchandise, miscellaneous); food & beverage lease payment to the County; cost of sales (merchandise); and golf course maintenance and pro shop/golf operations expenses.

- Absent reliable recent historical operating results to utilize as a base scenario for performance, NGF has relied on reported revenues from the 2008 through 2011 period as a basis for what may be achievable at SCGC under an improved facility scenario.
- NGF assumes that all of the critical-need facility deficiencies are addressed, as well as some of the other short-term needed improvements identified earlier in the report. We also assume that the County will continue to spend available capital funds throughout the five-year period, and that the golf course will henceforth be maintained at much higher quality standard than reportedly was in the last several years under lease operation.

- NGF projects Sugar Creek GC to host a total of 13,000 paid rounds in 2019 as facility improvements (including sprigging of greens) are carried out, growing to stabilized play of 24,000 rounds by 2023. As noted in the report, there is insufficient data on rounds played for Sugar Creek; therefore, NGF's projections are based on our market analysis and the assumed quality of the golf facility after improvements, and with a higher standard of maintenance.
- We have estimated the average daily rate (ADR = green + cart + membership revenue divided by total paid rounds) to be \$22.00 in Year 1, reflecting expected walking green fee pricing in the \$10 (e.g., juniors, specials, yield management pricing) to \$30 range (peak prime time). The average or 'blended' rate is projected to grow by 2% annually through 2023.
- Average 2019 revenue per round in other revenue centers is projected as follows, with annual growth rates of 2% through 2023:
 - Merchandise \$1.00 per round.
 - Driving Range \$2.00 per round, assuming range improvements (e.g., turf, mats, etc.) and some practice-only play.
 - Miscellaneous (includes rentals, etc.) \$0.75 per round.
- Lesson revenue is projected to accrue to the contract golf professional.
- Food & beverage lease payment to the County is projected to be \$1,300 in 2019 (=1% of \$130,000 in gross sales), growing to \$2,400 by 2023 (assume lease terms remain the same).
- ► Cost of Sales: Merchandise 60% of sales, based on industry standard and NGF experience.
- ▶ Golf Course Maintenance Expense Based on the cost of the current maintenance bid as conveyed to NGF, we assume maintenance expense to be \$712,000 in 2019, growing by 2.5% annually through 2023.
- Year 1 Golf Operations Labor Expense (includes contract golf professional salary/benefits plus County operations part-time personnel) is estimated at \$210,000 in 2019, growing at 2.5% annually through 2023.
- Year 1 **Golf Operations** *Non-Labor* **Expense** (includes supplies, utilities, cleaning, etc.) is estimated at \$80,000 in 2019, growing at 2.5% annually through 2023.
- Annual **Golf Cart Lease** is \$60,000 (assumed through 2023), based on information provided by the County.
- NGF has *not* included a Capital Improvement Set-Aside line item in the expense budget. (NGF typically recommends that a public golf course set aside 5% or more of adjusted gross revenue each year for future capital needs).

Cash Flow Projections – 2019 - 2023

Utilizing the above assumptions and activity/revenue/expense estimates, NGF Consulting has prepared a pro forma for the first five years of operation after the rehabilitation and reopening of Sugar Creek Golf Course. The resulting cash flow model is shown in the table on the following page, with summary results presented below. All operating revenue and expense figures have been rounded to the nearest \$100 for simplicity.

Sugar Creek Golf Course							
Year	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>		
Total Paid Rounds	13,000	16,000	20,000	22,000	24,000		
Revenues per Round							
Golf Fees (Green+Cart+Memb.)	\$22.00	\$22.44	\$22.89	\$23.35	\$23.81		
Merchandise Sales	\$1.00	\$1.02	\$1.04	\$1.06	\$1.08		
Driving Range	\$2.00	\$2.04	\$2.08	\$2.12	\$2.16		
Miscellaneous Revenue (rentals, etc.)	\$0.75	\$0.77	\$0.78	\$0.80	\$0.81		
Food & Beverage (gross)	\$130,000	\$160,000	\$200,000	\$220,000	\$240,000		
Operating Revenues							
Golf Fees (Green+Cart+Memb.)	\$286,000	\$359,000	\$457,800	\$513,600	\$571,500		
Merchandise Sales	\$13,000	\$16,300	\$20,800	\$23,300	\$26,000		
Driving Range	\$26,000	\$32,600	\$41,600	\$46,700	\$52,000		
Miscellaneous Revenue (rentals, etc.)	\$9,800	\$12,200	\$15,600	\$17,500	\$19,500		
Food & Beverage (lease payment)	\$1,300	\$1,600	\$2,000	\$2,200	\$2,400		
Total Operating Revenues	\$336,100	\$421,700	\$537,800	\$603,300	\$671,400		
Cost of Sales - Merchandise	\$7,800	\$9,800	\$12,500	\$14,000	\$15,600		
Adjusted Gross Revenue	\$328,300	\$411,900	\$525,300	\$589,300	\$655,800		
Operating Expenses							
Golf Oper Contract Golf Pro + County Labor	\$210,000	\$215,300	\$220,700	\$226,200	\$231,900		
Golf Operations - Non-Labor	\$80,000	\$82,000	\$84,100	\$86,200	\$88,400		
Cart Lease	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000		
Golf Course Maintenance	\$712,000	\$729,800	\$748,000	\$766,700	\$785,900		
Total Operating Expenses	\$1,062,000	\$1,087,100	\$1,112,800	\$1,139,100	\$1,166,200		
Net Operating Income	-\$733,700	-\$675,200	-\$587,500	-\$549,800	-\$510,400		

Financial Model Results & Summary

NGF Consulting financial projections for Sugar Creek GC, assuming successful completion of high-priority facility improvements and a higher standard of maintenance, show total gross operating revenue (County perspective) of about \$336,000 in 2019. Based on operating expense assumptions, 2019 net operating income (NOI) is projected to reflect a large loss of about (\$734,000). When projected stabilized play of 24,000 total paid rounds is reached in 2023, gross revenues are expected to reach \sim \$671,000, with net operating losses reaching a stabilized level of \pm (\$500,000). (We note that the projected expenses have been assumed to include <u>on site</u> County costs, and do not include any applicable "below-the-line" expenses that may be required such as County overhead, administrative oversight costs, depreciation, capital costs, or debt service).

As we have noted previously, projections have been crafted in the face of quite a few unknowns, not the least of which is the quality of the golf experience Sugar Creek GC will offer after enhancements. Also, the lack of accurate and/or complete recent historical records regarding activity levels and revenue center

performance makes projecting the revenue side of the financial model difficult. However, inputs for the expense side are based on more knowns, such as the size of the maintenance contract, the compensation of the contract golf professional, and the golf cart lease.

Finally, NGF projections are intended to be conservative so that County officials and staff are not caught unawares and can plan the future of SCGC with the appropriate information before them. It is certainly possible that a significantly improved Sugar Creek can outperform projections. However, we believe it is prudent for planning purposes to assume that the County will be funding large-scale operating deficits – as well as additional capital needs – at SCGC for the foreseeable future.

Appendices

APPENDIX A – GOLF COURSE ITEMS EXPECTED LIFE CYCLE

APPENDIX B - NATIONAL ROUNDS PLAYED REPORT

APPENDIX C – LOCAL DEMOGRAPHIC, DEMAND, AND SUPPLY

APPENDIX D – WATER SOURCE/IRRIGATION SYSTEM

APPENDIX A – GOLF COURSE EXPECTED LIFE CYCLE

GOLF COURSE ITEMS EXPECTED LIFE CYCLE

HOW LONG SHOULD PARTS OF THE GOLF COURSE LAST?

No two golf courses are alike except for one thing: deferring replacement of key items can lead to greater expense in the future, as well as a drop in conditioning and player enjoyment. The following information represents a realistic timeline for each item's longevity.

Component life spans can vary depending upon location of the golf course, quality of materials, original installation and past maintenance practices. The American Society of Golf Course Architects (ASGCA) encourages golf course leaders to work with an ASGCA member, superintendents and others to assess their course's components.

ITEM	YEARS
Greens (1)	15 – 30 years
Bunker Sand	5 - 7 years
Irrigation System	10 - 30 years
Irrigation Control System	10 - 15 years
Pump Station	15 – 20 years
Cart Paths - asphalt (2)	5 - 10 years (or longer)
Cart Paths - concrete	15 - 30 years (or longer)
Practice Range Tees	5 - 10 years
Tees	15 - 20 years
Corrugated Metal Pipes	15 - 30 years
Bunker Drainage Pipes (3)	5 - 10 years
Mulch	1 - 3 years
Grass (4)	Varies

NOTES: (1) Several factors can weigh into the decision to replace greens: accumulation of layers on the surface of the original construction, the desire to convert to new grasses and response to changes in the game from an architectural standpoint (like the interaction between green speed and hole locations). (2) Assumes on-going maintenance beginning 1 - 2 years after installation (3) Typically replaced because the sand is being changed—while the machinery is there to change sand, it's after a good time to replace the drainage pipes as well. (4) As new grasses enter the marketplace—for example, those that are more drought and disease tolerant—replanting may be appropriate, depending upon the site.

ASGCA thanks those at the USGA Green Section, Golf Course Builders Association of America, Golf Course Superintendents Association of America and various suppliers for their assistance in compiling this information.

The materials presented on this chart have been reviewed by the following Allied Associations of Golf:

















For more information, contact ASGCA at (262) 786-5960 or visit www.ASGCA.org

DATA COMPILED BY ASGCA, 125 NORTH EXECUTIVE DRIVE, SUITE 302, BROOKFIELD, WI 53005

APPENDIX B – NATIONAL ROUNDS PLAYED REPORT – APRIL 2018





Datatech National Golf Rounds Played Report



		APRIL	YTD	APRII	_2018			APRIL	YTD
PACIF	IC	2.6%	11.1%				SOUTH ATLANTIC	-3.3%	-8.3%
				Val.	APRIL	YTD	DE, DC, MD	-22.6%	-28.9%
CA		2.0%	10.1%	UNITED STATES	-13.5%	-8.9%	Washington/Baltimore	-16.5%	-22.1%
	Los Angeles	-4.1%	4.0%	PUBLIC ACCESS	-14.2%	-9.1%	FL	0.0%	-5.1%
	Orange County	3.3%	13.3%	PRIVATE	-10.8%	-7.9%	Jacksonville/Daytona	0.9%	-8.0%
	Palm Springs	0.2%	5.1%	The second second second	AND DEVENOUS	200000000000000000000000000000000000000	Orlando	-0.8%	1.8%
	Sacramento	4.7%	10.2%	EAST NORTH CENTI	RAL -33.3%	-32.2%	Tampa	-2.6%	-4.2%
	San Diego	4.1%	11.4%				Palm Beach	5.7%	3.0%
San F	rancisco/Oakland	11.1%	23.4%	IL	-27.8%	-22.0%	Sarasota	3.1%	5.7%
HI		-2.4%	-0.5%	Chicago	-31.9%	-24.2%	Naples/Pt Myers	9.3%	2.6%
OR		6.7%	11.1%	IN	-28.8%	-32.9%	Miami/Ft.Lauderdale	8.9%	-4.1%
	Portland	6.8%	33.0%	MI	-20.8%	-16.3%	GA	0.5%	-14.7%
WA		5.3%	27.3%	Detroit	-23.7%	-16.9%	Atlanta	-2.7%	-15.2%
	Seattle	4.2%	24.0%	OH	-37.7%	-38.7%	NC	-4.1%	-9.1%
				Cincinnati	-24.4%	-28.7%	Greensboro/Raleigh	-8.5%	-21.8%
MOUN	TAIN	7.1%	3.8%	Cleveland	-50.0%	-51.2%	SC	-3.7%	-9.3%
AZ		4.0%	6.2%	WI	-63.0%	-67.3%	Charleston	-0.3%	-6.1%
	Phoenix	1.4%	5.8%				Hilton Head	-3.5%	-6.0%
CO		1.7%	-6.9%	SOUTH CENTRAL	-7.0%	-12.2%	Myrtle Beach	-0.2%	-4.8%
	Denver	2.6%	-9.8%				VA	-4.4%	-13.1%
ID, WY	, MT, UT	14.8%	0.8%	AL	-6.3%	-5.2%	WV	-12.5%	-15.8%
NM		7.3%	5.9%	AR, LA, MS	-8.6%	-15.4%			
NV		7.1%	7.3%	KY	-19.4%	-19.8%	MID ATLANTIC	-37.6%	-34.1%
	Las Vegas	10.7%	4.9%	OK	-5.8%	-14.3%	NJ	-26.4%	-25.4%
				TN	-25.3%	-28.2%	NY	-43.4%	-37.0%
WEST	NORTH CENTRAL	-29.3%	-26.3%	Nashville	-32.8%	-29.7%	New York City	-31.0%	-26.8%
KS. NE	COMPANDE TO LANGE	-18.2%	-16.9%	TX	1.2%	-8.0%	PA	-39.0%	-36.4%
ND,SD		-59.6%	-67.1%	Dallas/Ft. Wo	orth -4.2%	-16.3%	Philadelphia	-26.5%	-27.7%
MN		-65.8%	-69.1%	Houston	0.2%	-11.5%	Pittsburgh	-52.5%	-51.2%
Minn	neapolis/St.Paul	-67.2%	-71.2%	San Antonio	5.3%	-3.5%	A Marine Service	HE COUNTY HE	25,0000
IA. MO		-11.9%	-11.4%				NEW ENGLAND	-45.6%	-40.3%
	St Louis	-6.7%	-20.3%				CT	-29.9%	-24.3%
	Kansas City	-18.3%	-12.7%				MA. RI	-26.8%	-23.0%
			1000000				Boston	-31.5%	-26.6%
							ME, NH, VT	-86.4%	-86.4%

The percentages represent the differences in number of rounds played comparing April 2018 to April 2017. For more information contact Golf Datatech, golfroundsplayed@golfdatatech.com or call 407-944-4116

APPENDIX C – LOCAL DEMOGRAPHIC, DEMAND AND SUPPLY DATA

Local Demographics and Demand

Sugar Creek Golf Course	2-mile ring	5-mile ring	10- mile ring	<mark>DeKalb</mark> County	U.S.
Summary Demographics					
Population 1990 Census	15,433	159,109	713,262	545,826	248,584,652
Population 2000 Census	17,309	172,169	821,135	665,858	281,399,034
CAGR 1990-2000	1.15%	0.79%	1.42%	2.01%	1.25%
Population 2010 Census	18,863	162,326	809,763	691,893	308,745,538
CAGR 2000-2010	0.86%	-0.59%	-0.14%	0.38%	0.93%
Population Estimate 2017	20,209	175,718	893,691	743,891	324,310,011
Population 2022 Projected	21,701	192,447	977,185	802,242	337,744,388
CAGR 2017-2022	1.43%	1.84%	1.80%	1.52%	0.82%
CAGR 2010-2022	1.17%	1.43%	1.58%	1.24%	0.82%
Median HH Income (2017)	\$55,605	\$48,861	\$49,983	\$57,730	\$59,240
Median Age (2017)	36.9	36.1	34.5	\$36	38.1
Ethnicity					
White	6.8%	14.5%	26.2%	32.7%	70.4%
African American	90.2%	79.5%	63.7%	54.5%	13.3%
Asian	0.5%	1.5%	5.0%	6.4%	5.7%
All Other	2.4%	4.5%	5.1%	6.4%	10.6%
Hispanic Population					
		5.5%	6.2%	8.6%	17.5%
Hispanic	2.1%	3.370			
Hispanic Not Hispanic CAGR = Compound Annual Growth Rate	2.1% 97.9%	94.5%	93.8%	91.4%	82.5%
Not Hispanic CAGR = Compound Annual Growth Rate	97.9% 2-mile	94.5% 5-mile	93.8% 10- mile	91.4% DeKalb	82.5% U.S.
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course	97.9%	94.5%	93.8%	91.4%	
Not Hispanic CAGR = Compound Annual Growth Rate	97.9% 2-mile	94.5% 5-mile	93.8% 10- mile	91.4% DeKalb	
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households	97.9% 2-mile ring 8,004	94.5% 5-mile	93.8% 10- mile	91.4% DeKalb	U.S. 124,506,607
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households	97.9% 2-mile ring 8,004 787	94.5% 5-mile ring	93.8% 10- mile ring	91.4% DeKalb County	U.S.
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022)	97.9% 2-mile ring 8,004 787 805	94.5% 5-mile ring 65,195	93.8% 10- mile ring 360,909 33,779 35,504	91.4% DeKalb County 297,178	U.S. 124,506,607 17,069,440 17,934,830
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate	97.9% 2-mile ring 8,004 787	94.5% 5-mile ring 65,195 6,104	93.8% 10- mile ring 360,909 33,779	91.4% DeKalb County 297,178 34,063	U.S. 124,506,607 17,069,440
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022)	97.9% 2-mile ring 8,004 787 805 0.50% 0	94.5% 5-mile ring 65,195 6,104 6,339	93.8% 10- mile ring 360,909 33,779 35,504	91.4% DeKalb County 297,178 34,063 35,306	U.S. 124,506,607 17,069,440 17,934,830
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers	97.9% 2-mile ring 8,004 787 805 0.50%	94.5% 5-mile ring 65,195 6,104 6,339 0.80%	93.8% 10- mile ring 360,909 33,779 35,504 1.00%	91.4% DeKalb County 297,178 34,063 35,306 0.70%	U.S. 124,506,607 17,069,440 17,934,830 1.00%
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households	97.9% 2-mile ring 8,004 787 805 0.50% 0	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80%	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40%	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40%	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50%	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70%
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate Number of Golfers	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80% 915	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40% 6,785	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40% 36,823	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50% 36,386 628,658	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70% 23,815,640
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate Number of Golfers Rounds Potential (resident golfers)	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80% 915 16,171	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40% 6,785 126,437	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40% 36,823 634,795	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50% 36,386 628,658	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70% 23,815,640 468,634,000
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate Number of Golfers Rounds Potential (resident golfers) Estimated Course Rounds (in-market supply)	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80% 915 16,171	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40% 6,785 126,437	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40% 36,823 634,795	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50% 36,386 628,658	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70% 23,815,640 468,634,000
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate Number of Golfers Rounds Potential (resident golfers) Estimated Course Rounds (in-market supply)	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80% 915 16,171 33,256	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40% 6,785 126,437 109,586	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40% 36,823 634,795 244,807	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50% 36,386 628,658 293,683	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70% 23,815,640 468,634,000 468,634,000
Not Hispanic CAGR = Compound Annual Growth Rate Sugar Creek Golf Course Golf Demand Indicators Total Households Number of Golfing Households Projected Golfing Households (2022) Projected Annual Growth Rate Seasonal Golfing Households Latent Demand/Interested Non-Golfers Household Participation Rate Number of Golfers Rounds Potential (resident golfers) Estimated Course Rounds (in-market supply) Demand Indices Golfing Household Participation Rate	97.9% 2-mile ring 8,004 787 805 0.50% 0 2,385 9.80% 915 16,171 33,256	94.5% 5-mile ring 65,195 6,104 6,339 0.80% 5 21,817 9.40% 6,785 126,437 109,586	93.8% 10- mile ring 360,909 33,779 35,504 1.00% 201 129,290 9.40% 36,823 634,795 244,807	91.4% DeKalb County 297,178 34,063 35,306 0.70% 143 107,589 11.50% 36,386 628,658 293,683	U.S. 124,506,607 17,069,440 17,934,830 1.00% 732,421 40,573,960 13.70% 23,815,640 468,634,000 468,634,000

Golf Supply

Sugar Creek Golf Course	2-mile ring	5-mile ring	10- mile ring	DeKalb County	U.S.
Golf Supply					
Golf Facilities					
Total	1	4	10	10	15,061
Public	1	3	7	6	11,279
Public: Daily Fee	0	1	1	3	8,788
Public: Municipal	1	2	6	3	2,491
Private	0	1	3	4	3,782
Public Golf Facilities by Price Point					
Premium (>\$70)	0	0	0	1	1,384
Standard (\$40-\$70)	0	1	1	1	4,034
Value (<\$40)	1	2	6	4	5,861
Golf Holes					
Total	18	63	135	180	254,610
Public	18	45	90	108	185,778
Public: Daily Fee	0	9	9	63	144,207
Public: Municipal	18	36	81	45	41,571
Private	0	18	45	72	68,832
Non-Regulation (Executive & Par-3)	0	9	18	18	21,006
Net Change					
Net Change in Holes past 5 years	0	-9	-9	-9	-11,628
Percentage Total Holes Past 5 Yrs	0.00%	-12.50%	-6.30%	-4.80%	-4.40%
Net Change in Holes past 10 Years	0	-9	-27	-9	-14,814
Percentage Total Holes Past 10 Yrs	0.00%	-12.50%	-16.70%	-4.80%	-5.50%

Supply-Demand

Sugar Creek Golf Course	2-mile ring	5-mile ring	10- mile ring	DeKalb County	U.S.
Supply-Demand Ratios	illig	ııııg	Tilig	County	
Households per 18 Holes					
Total	8,004	18,627	48,121	29,718	8,802
Public	8,004	26,078	72,182	49,530	12,06
Public: Daily Fee	0,004	0	0	84,908	15,54
Public: Municipal	8,004	32,598	80,202	118,871	53,91
Private	0	65,195	144,364	74,295	32,55
Premium (>\$70)	0	03,133	0	148,589	73,91
Standard (\$40-\$70)	0	65,195	360,909	297,178	28,88
Value (<\$40)	8,004	43,463	90,227	99,059	28,78
Golfing Households per 18 Holes	0,00 .	.5, .55	30,227	33,003	20,70
Total	787	1,744	4,504	3,406	1,20
Public	787	2,442	6,756	5,677	1,65
Public: Daily Fee	0	0	0	9,732	2,13
Public: Municipal	787	3,052	7,506	13,625	7,39
Private	0	6,104	13,512	8,516	4,46
Premium (>\$70)	0	0	0	17,032	10,13
Standard (\$40-\$70)	0	6,104	33,779	34,063	3,96
Value (<\$40)	787	4,069	8,445	11,354	3,94
Household Indices					
Total	89	208	537	332	10
Public	65	211	584	401	10
Private	0	200	442	228	10
Premium (>\$70)	0	0	0	202	10
Standard (\$40-\$70)	0	228	1,262	1,039	10
Value (<\$40)	26	141	293	321	10
Golfing Household Indices					
Total	64	141	364	276	10
Public	46	143	396	333	10
Private	0	136	300	189	10
Premium (>\$70)	0	0	0	167	10
Standard (\$40-\$70)	0	155	856	863	10
Value (<\$40)	19	96	199	267	10
Rounds per 18 Holes					
Rounds Potential (resident golfers)	16,171	36,125	84,639	62,866	33,13
Estimated Course Rounds (in-market supply)	33,256	31,310	32,641	29,368	32,92

APPENDIX D - WATER SOURCE/IRRIGATION SYSTEM

This is the most critical need at the golf course – ensuring that there is a reliable, clean source of water will be critical to grow the turf back into playable conditions, especially the greens. As noted, the water source is currently the South River. The pump station and holding pond are located next to the river and to the rear of the 10th green. Currently there is a transfer pump that is installed to take water from the river and pump it through the wet well into the holding pond. The original design shows that the transfer pump was installed in a separate wet well and piped to the far end of the holding pond and the water was pumped onto a flume of rip rap rock. This wet well extended to the upstream side of the dam that was present in the South River at the time of construction. This design worked due to the dam creating a greater depth of water. This dam was removed after a storm event damaged it and the US Army Corp of Engineers (USACE) had the County remove it.

The removal of the dam forced the county to revise the transfer line structure. We have been told that a smaller dam had been placed along the edge of the river to create a wet well, but USACE forced the removal of this small dam as well. Now the suction line sits in very shallow water and is constantly pumping sediment, with the water, through the wet well into the holding pond. This transfer system yields an estimated 100 to 150 gallons per minute. Due to the sediment and lack of adequate flow in the river, this pump needs to be primed each time it is turned on and loses prime if not carefully observed, resulting in potential damage to the pumps due to overheating and seizing when operating with no water flowing through the bowl of the pump. This can then seize the actual pump portion of the system and cause damage to the motors running the pump – something that has happened at least two times in the last year.

When the original dam was removed, we assume that the transfer pump was moved and the original piping to the far end of the holding pond abandoned. It may have been that the line was damaged when the dam was damaged. For whatever reason, it was decided to run the water through the pump station wet well rather than through the original piping. Because the transfer of the water is done through the wet well and the sediment settles out in this wet well, it needs to be backwashed to prevent damage to the irrigation system pumps and their motors. *This set up is labor intensive and not reliable*. We recommend installing a well that feeds the irrigation holding pond and eliminating the current transfer system. When there was a dam in the river and the water was clean and deeper, the transfer system was an acceptable method. (A second option – which we do not believe is viable - is to remove the transfer line from the wet well and have it relocated to the far end of the holding pond to allow the soil and opportunity to settle out. However, it is likely that due to the small size of the holding pond the soil will not settle out effectively and the irrigation pumps will still pick it up and pump it into the irrigation system).

We believe that the reason that only the greens have been irrigated in recent years is that this soil in the system has caused issues with the electric valves of the sprinklers for the tees and greens. When this soil gets into the system the valves will not close fully and the sprinklers will remain running. The valve needs to be taken apart, cleaned and replaced – procedure that is time consuming, as the system must be shut down to do this work. When the system is shut down and then started up again the task is to refill the lines and ensure that the air can escape and not damage the piping - time consuming and tedious work. Water hammer can occur and shatter water lines if this is not done properly, especially when the system piping is nearly 50 years old.

The irrigation system is the 1974 design and is very inefficient. The County had a system designed, and when the pump station was replaced in 1994 it was updated to be able to handle the newer design. The current pump station has the capability of pumping 1,250+ gallons per minute. This pump station has more capacity than is needed for the current system, a concern since the current system is being controlled by homeowner/landscape controllers. Modern systems are controlled centrally by a computer that will control the number of sprinklers to turn on and not exceed the capacity of the pump station. More important for Sugar Creek, the computer will not allow the capacity of the piping to be exceeded. When the system is operated as it is currently the person

setting up the controllers needs to be aware of the flow that is being created so as not to blow the system out of the ground. We feel this is also one of the reasons the operator has been watering only the greens and not using the remainder of the system. NGF was told that the vendor was not repairing the controllers with comparable controllers as would be expected.

A thorough inspection of the irrigation system should be completed as soon as possible to ensure that all sprinklers are working, and that the system does not have any leaks. The system was charged in the fall and the County reports there were not visible leaks. Only one green was turned on. The County turned over a fully functioning system and should expect that system remains operable. During the planned rehabilitation of the golf course this summer, as well as subsequent to that, a reliable system will be needed to irrigate all areas to force the growth of the bermudagrass to take over where the weeds had been. The greens, at the very least, will need irrigation to grow them back and have sufficient playable turf coverage.