

To: Members of Public Services Committee
From: Dana L. McDaniel, City Manager
Date: August 3, 2022
Initiated By: Robert E. Ranc, Jr., Deputy City Manager/Chief Operating Officer
Emily Goliver, Management Analyst
Re: Golf Club of Dublin

Background

At the June 27, 2022 City Council meeting, Council referred discussions with staff relative to the Golf Club of Dublin, its operational and potential capital needs, as well as, certain resident concerns that may result in additional funding from the City and/or implications for future budgets to the Public Services Committee.

The attached memo and supporting materials provide background and a discussion of potential solutions regarding the on-going issues at Hole 5.

Recommendation

Staff requests feedback from the Committee on the following options to mitigate errant shots on the Hole 5 fairway:

1. Temporarily shorten Hole 5 to a Par 4 and analyze the effect on golf shot dispersion.
2. Permanently shorten Hole 5 to a Par 4.
 - a. This option will likely decrease the number of errant shots currently being experienced by some properties, but may increase the amount of errant shots landing on properties that are not currently experiencing a significant problem.
3. Increase natural screening (large trees, bushes, etc.) near the tee and/or along the fairway.
 - a. Some residents have expressed concerns regarding the effect of large trees on both line of sight to the golf course as well as increased errant shots landing in their yard as a result of tree installation.

This is not a fully inclusive list of potential options to remediate the homeowner's existing concerns on Hole 5, and additional options can be discussed with the Public Services Committee.

To: Members of Dublin City Council

From: Dana L. McDaniel, City Manager

Date: June 21, 2022

Initiated By: Robert E. Ranc, Jr., Deputy City Manager/Chief Operating Officer
Emily Goliver, Management Analyst

Re: Public Services Committee Referral – Golf Club of Dublin

Background

The Golf Club of Dublin (GCD) is a significant public recreational amenity in the City of Dublin, and specifically the Ballantrae neighborhood. New Era Golf Ohio GCD, Inc. (New Era) acquired the Golf Club of Dublin (excluding the land, which is owned by the City of Dublin) from General Electric Credit Equities, Inc. in 2014. New Era GCD also assumed the Ground Lease and Operating Agreement with the City, which was also renewed with a new 50-year term and the option for two five-year extensions. Under the lease arrangement, in general terms, New Era GCD is responsible for maintaining and operating the GCD (including the grounds and all facilities). Dublin staff maintains frequent, as needed, contact with New Era management.

Over the years, a homeowner on the east side of GCD's Hole 5 fairway has expressed concern regarding the amount of errant shots that result in golf balls entering their property. It should be noted that in August 2010 this home was granted an encroachment agreement that allowed a portion of the patio to be built in a City easement, which resulted in a portion of the patio being moved closer to the course at the homeowner's request (the encroachment agreement is attached to this memo for reference). The homeowner has been seeking a solution to reduce the number of golf balls landing on their property with both GCD management and the City of Dublin (City).

New Era has attempted several remedies to the homeowner's concerns, including shifting the fairway as far to the west as possible, extending the tall grass to the east, redirecting the tee boxes, installing two new bunkers, and planting trees to provide screening. Although the resident acknowledged, "overall, we saw a significant reduction in balls landing over 70' from the GCD property line," the resident is still not satisfied with the outcome of the efforts that have been made to date. Over the past two years, the City and New Era have continued to make substantial efforts to resolve this homeowner's concern, as outlined below.

2021 Re-Configuration of Hole 5

In September 2020, the homeowner provided the City a detailed background and explanation of frustrations and concerns with the amount of errant shots entering their property. The report pointed out that Hole 5 was originally designed as a Par 4 rather than its current state as a Par 5. However, the pond was later extended, and the hole was lengthened to make it a Par 5. According to Dr. Michael J. Hurdzan (the course designer), the extension of the pond and lengthening the hole to a Par 5 likely cause golfers to aim further left than originally planned to

avoid hitting balls into the pond, as well as hitting the ball harder to gain additional distance. Amateur golfers hitting the ball harder reduces the accuracy of their shots.

Following the communication from the resident in September 2020, the City worked to find a solution to the concerns on the left side of Hole 5. City staff contracted with Dr. Hurdzan to analyze the golf shot dispersion and recommend a solution to reduce the number of balls landing in residential properties along Hole 5. It should be noted that it is impossible to completely eliminate golf balls landing in residential properties on the left side of Hole 5. The residential properties along the left side of the fairway are directly adjacent to the golf course, meaning that any errant shots left of the fairway have a high likelihood of landing in a residential property. According to Dr. Hurdzan, an appropriate goal is for 92 percent of shots to land within 15 degrees on either side of the intended aiming point.

The result of Dr. Hurzan's analysis was to provide a re-configuration plan for Hole 5. Specifically, the tee boxes were re-aligned to point golfers more towards the center of the fairway and the new tee boxes were installed at lower elevation to cause a reduction in force with which golfers were hitting their tee shots. The golf cart path was realigned to accommodate the new tee boxes, and new irrigation and drainage was necessary as well. The plan also called for the fairway to be shifted slightly to the right to provide additional landing space for tee shots. The cost of the re-configuration plan was estimated at \$50,000.

In March 2021, the City and New Era agreed to a Memorandum of Understanding (MOU) regarding the implementation of Dr. Hurdzan's re-configuration plan, with the City agreeing to contribute labor and materials toward the implementation of the plan in an amount not to exceed \$31,150. Further, the MOU stated, "in the event these efforts do not sufficiently mitigate errant balls at Hole #5, New Era will contract with Hurdzan Golf, LLC to prepare a plan for re-grading the fairway and will implement the plan at their sole cost." (A copy of the March 2021 MOU is attached to this memo for reference). City staff met several times with New Era staff as well as residents along Hole 5 regarding the re-configuration of Hole 5, and construction of the re-configuration began in March 2021.

Continuing Issues on Hole 5

According to Dr. Hurdzan,

The implementation of the tee rebuilding, golf car shift, tree planting and fairway adjustments began in March 2021 but were severely delayed by weather and the amount of golfer activity that disrupted the flow of work. The tees were not put into play until well into May 2021, and then a combination of bad weather, heavy golfer use, and poor construction techniques rendered some tees unusable by July 2021.

Dr. Hurdzan also noted, "A few Spruce trees were also planted along the left side but their location became contentious with some neighbors because they believed they shifted the aiming point too far to the right." The execution of the re-configuration plan resulted in the re-aligned tees not being used during the 2021 season, particularly the back tee which most golfers use. For a time, New Era re-located the back tee to the "championship tee," which likely resulted in additional golf balls landing in residential properties to the left of the fairway due to the force with which golfers

had to hit their tee shots to account for the additional yardage. New Era then relocated the back tee to the forward tee boxes to reduce the likelihood of tee shots landing out of bounds. The point being the mitigation measures were not in place long enough to determine their efficacy. Since that time, these issues have been addressed and Dr. Hurdzan ultimately approved the implementation of the re-configuration.

In late 2021, the same homeowner contacted the City stating the re-configuration of the tee boxes did not have the intended effect, and there were still an inordinate amount of golf balls landing in their property. City staff met with the resident to discuss the concerns. City staff also met with New Era and Dr. Hurdzan to discuss the issue and assess why the re-configuration of the hole was not having its intended effect. City staff informed the resident of the problems with the implementation of the hole re-configuration, resulting in the continued occurrence of many golf balls landing in their property. Staff expressed the opinion that since the re-configuration would be completed for the 2022 season, the resident could expect to see a significant reduction in the number of golf balls landing in their property as expected. The resident expressed dissatisfaction with this response. The resident stated that the re-configuration of the hole would not adequately reduce the number of golf balls landing in their property and demanded the hole be changed substantially to resolve the issue. Since a significant investment of money and time was made to implement the re-configuration of the hole, City staff determined that it was appropriate to evaluate the effectiveness of the fully implemented plan before making additional changes to the hole.

In order to obtain an objective evaluation of the effectiveness of the hole re-configuration, City staff determined that it would be necessary to have golf ball spotters comprised of City volunteers and/or City employees observe a sample of tee shots from the re-aligned tees to record the actual shot dispersion. Dr. Hurdzan agreed this would be an appropriate way of evaluating the effectiveness of the fully implemented hole re-configuration. This plan was communicated to both the homeowner and New Era. Additionally, in February 2022 the City contracted with Dr. Hurdzan to create a plan for converting Hole 5 to a par 4 if the results of the ball spotting showed the re-alignment was not having the intended effect (a copy of Dr. Hurdzan's 2022 analysis is attached to this memo).

Evaluation of the Hole Re-Configuration

City staff and volunteers conducted the first round of ball spotting on six days between April 2 and April 15. The spotting was conducted on weekends and weekdays, as well as mornings and afternoons to obtain a sample of different times and days of play. The spotters observed 435 shots, with 72 percent of the shots (315 shots) landing in play, 10 percent of shots (43 shots) landing out of bounds right or in the water, and 18 percent of the shots (77 shots) landing out of bounds left (putting the shots in residential property). It should be noted that not all of the shots that landed out of bounds left landed in the property of the concerned homeowner. The observed ball dispersion fell short of the 92 percent of balls that would be expected to land in course boundaries, assuming golfers were aiming for the center of the fairway.

As a result of the first round of ball spotting, New Era installed a tree at the front of the back tee to further force golfers to aim towards the center of the fairway rather than down the left side. The tree was installed in early May, and City staff again observed golf shots to evaluate the

effectiveness of the tree installation. The second round of spotting was conducted on six days from May 17 through May 29. Staff observed 472 shots during the second round of spotting. The installation of the tree did seem to increase the amount of shots landing in play and reduce the amount of shots landing to the left of the fairway. However, it did not obtain the hoped for standard of 92 percent of shots in course boundaries, with 79 percent of shots (375 shots) landing in play, 11 percent of shots (50 shots) landing out of bounds left, and 10 percent of shots (47 shots) landing out of bounds right or in the water. The full results of the ball spotting are attached to this memo.

It should also be noted that over the past year, City staff has only heard from one additional homeowner regarding concerns of errant shots entering their property on the left side of Hole 5. This homeowner acknowledged that it was rare for errant shots to enter their property given their proximity near the tee box, but they were concerned that the few errant shots entering their property were dangerous. The City staff and New Era met with this homeowner and resolved the issue by planting an additional tree to provide screening for their yard.

Steps Moving Forward

As outlined in this report, New Era, in coordination with City staff, has taken several steps to remediate this issue over the years. To date, the City has followed a philosophy of making incremental steps to improve the situation, followed by observing the effectiveness of the incremental improvements. The remaining available options to address this issue may result in either a significant change to Hole 5 or screening options that have been met with some resistance from other residents on the course. Remaining options to address concerns regarding errant shots include:

1. Temporarily shorten Hole 5 to a Par 4 and analyze the effect on golf shot dispersion.
2. Permanently shorten Hole 5 to a Par 4.
 - a. This option will likely decrease the number of errant shots currently being experienced by some properties, but may increase the amount of errant shots landing on properties that are not currently experiencing a significant problem.
3. Increase natural screening (large trees, bushes, etc.) near the tee and/or along the fairway.
 - a. Some residents have expressed concerns regarding the effect of large trees on both line of sight to the golf course as well as increased errant shots landing in their yard as a result of tree installation.

This is not a fully inclusive list of potential options to remediate the homeowner's existing concerns on Hole 5, and additional options can be discussed with the Public Services Committee. Further, as stated above the March 2021 MOU between New Era and the City states that New Era is responsible for the cost of implementing a re-grading plan for the fairway in the event the 2021 re-configuration did not sufficiently mitigate errant balls at Hole 5. City staff has had on-going discussions with New Era regarding this issue, and it is New Era's preference that Hole 5 remain a Par 5 while taking steps to mitigate the homeowner's concern. City staff and New Era have not

had specific conversations regarding which party would take the lead on future mitigation plans or any cost sharing arrangement outside of the language of the March 2021 MOU.

Other Golf Club of Dublin Issues

Staff has worked over time with the GCD on other maintenance issues in the course of administering the Agreement between the City and New Era. Such issues include coordinating various resident concerns, maintenance of storm water ponds, and ongoing maintenance of the historic property on Shier Rings Road used as a maintenance facility. The City has contributed to certain of these improvements, as Council has been made aware via operating and capital budgets. Future maintenance needs and issues relative to the maintenance facility will be ongoing and potentially growing. Staff has established a good working relationship with a committee of Ballentrae residents addressing issues specifically related to the GCD. This effort has been most helpful and staff is grateful to both residents and New Era for their participation.

Recommendation

Staff recommends City Council refer discussions with staff relative to the Golf Club of Dublin, its operational and potential capital needs, as well as, certain resident concerns that may result in additional funding from the City and/or implications for future budgets to the Public Services Committee. This is a significant Agreement and increasing Council's awareness of relative issues will be beneficial to Council and staff, as well as, the residents and operator. Most pressing for discussion with the Public Services Committee and City Council will be the Hole 5 issue discussed in this memo.

GOLF COURSE ARCHITECT'S ANALYSIS

OF

HOLE NUMBER FIVE
GOLF CLUB OF DUBLIN (OHIO)

Prepared by
Michael Hurdzan, Ph.D., ASGCA
Hurdzan Golf Design, LLC
Columbus, Ohio 43220

February 2021



Overview:

Even the most skilled golfers occasionally hit a wildly errant golf shot, despite their intense training and practice. Logically then, it is reasonable to assume the casual or recreational golfer would also hit stray shots, but with greater frequency. In both cases the golf shots are mishits, with the golf ball not going where it was aimed or intended which makes it impossible to accurately measure and predict when those shots will occur, and where the golf balls will land. Therefore, by necessity, the dispersion of golf shots is an exercise in probabilities based on reasonable, compiled data.

Accurately predicting where golf shots will land is further complicated because of influencing factors beyond just the skill of the golfer. Examples of possible physical influences are effects of wind, topography, alignment of the teeing ground, vegetation, altitude, temperature, and even humidity. Additional human factors influencing golf shot dispersion on a given hole are the skill of the golfer, the design of the golf hole, and the psychological influence of golf penalty or golf hazards on the golfer. Taken together all of these influences determine where the golfer will want to aim their shot, called an aiming point. The actual line that the golfer chooses to play towards that aiming point, is called their line of play, and where the ball lands is the probable landing area.

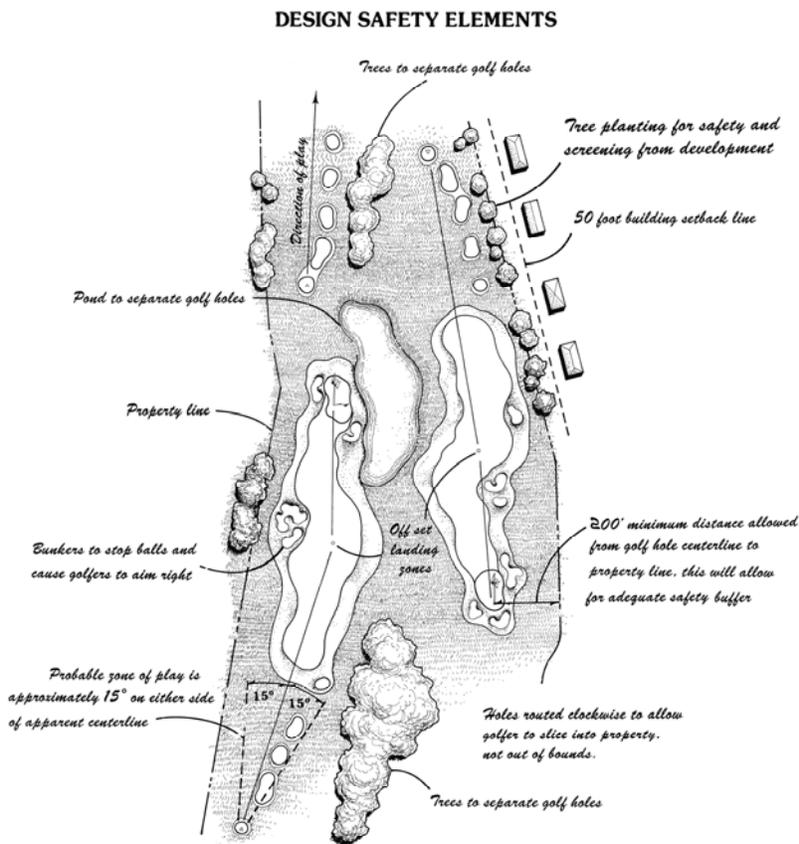
Because golfers rarely hit a perfectly straight shot, they usually allow for their normal or usual ball flights, be that curving from left to right called a “slice” or “fade”(for right handed golfers), or right to left called a “hook” or “draw”(for right handed golfers). Golfers also consider what the ball might do when it lands, which could be to go straight ahead or deflect to the right or left based on ground contours. Most right handed golfers of average skill tend to hit the ball with left to right ball flight, while better golfers tend to make swing errors that result in more right to left ball flight. Since there are more right handed than left handed golfers, it would be expected for the more common shot is a slice.

Some or all of these factors combine to cause golfers to choose their aiming point and preferred line of play, and it is that point that should be the center of measurements for golf shot dispersion.

Research on golf shot dispersion:

Until recently, how far off line that golfers hit the ball had largely been ignored, for there were only a small number of people in the golf industry that really cared, and most of those were golf course designers. Because of fear of potential legal liability for expressing something that could be misconstrued as a design standard, no significant research was done on golf shot dispersion.

For research on golf shot dispersion to be the most valid it should minimize the outside influences listed above, which means that such research cannot be easily done on a golf course. Thus the research could best be done on a driving range or an open test area devoid of those influences, with all golfers playing from the same general tee location towards the same aiming point. Fortuitously in the mid-1970s, there was a charity event that offered prizes for shots finishing closest to the aiming point on a driving range. After each day's event I was able to determine the golf ball dispersion, by measuring the distance from the aiming point and counting the number of balls found there. This allowed me to develop a golf course design guideline based on a reasonable probability. After repeating these measures multiple times I concluded that 92 percent of golf shots will finish with 15 degrees either side of the line of play towards the aiming point(see drawing #1). So within a 30 degree arc would account for 92% of the shots, while the other 8 percent was so wildly unpredictable or fluke as not to be worthy of inclusion. However in general there were always a few more of those badly struck shots found to the right of the arc than to the left, which would be expected of right handed golfers.



Drawing #1 – Plan illustrating safety guideline of 15 degrees either side of line of play

Then in 2006 – 2008, the Royal and Ancient Golf Association which regulates golf everywhere in the world except the United States conducted much more intensive and scientific based research on golf ball dispersion. They found that 90% of golf shots fell within a 28 degree arc. I believe this research corroborates the guideline that I developed even though my arc was slightly

larger but also accounted for a greater percentage of golf shots. Subsequently the United States Golf Association entered into an agreement with the R & A to co-sponsor this research.

These probability guidelines help establish the starting point for designing a golf hole by being able to select the probable aiming point, and hence the resulting line of play. But then the designer must consider the outside influences found on the golf course, as well as individual golfer's psychological factors discussed above, and make the appropriate adjustment to that aiming point and resulting potential shot dispersion. It cannot be assumed that the preferred aiming point will always be the center of the fairway. Shifting the apparent aiming point for a golf shot will generally shift the dispersion pattern with it.

These guidelines are based on probabilities which are independent of frequencies that reflect the number of golfers. For example if one assumes a probability that 5 percent of golf shots will be left of the probable play area, and 250 golfers per day play the hole, then about 12 balls per day will outside the 30 degree arc of predicted play pattern.

Design of the 5th hole at Golf Club of Dublin:

The original plan for the 5th hole at Golf Club of Dublin was a long par-4 hole of 465 yards (see figure #2 below), and followed the design guidelines described above. But in construction the hole was lengthened to a short par 5 of 500 yards (see aerial photo figure #3) by moving the tees and green back.

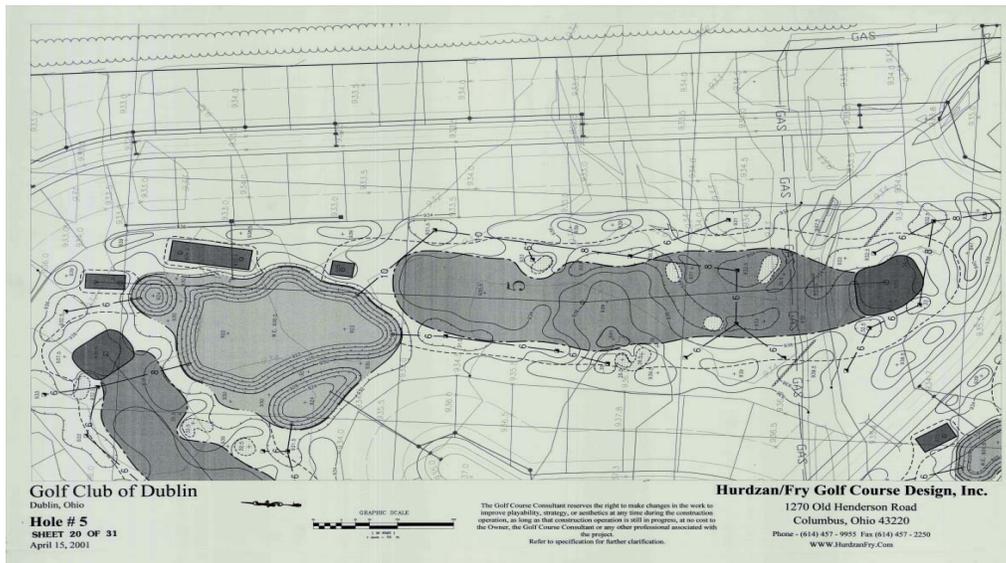


Figure #2- Original plan for Hole #5 at Golf Club of Dublin as a par 4

In addition to the relocation of the tees and green, the most significant difference between the drawing and aerial photo is that the pond was extended to the south along the right property line. The physical effect of the pond extension was to narrow the fairway landing and shift it to the left by 22 feet, and closer to the residential properties along the left

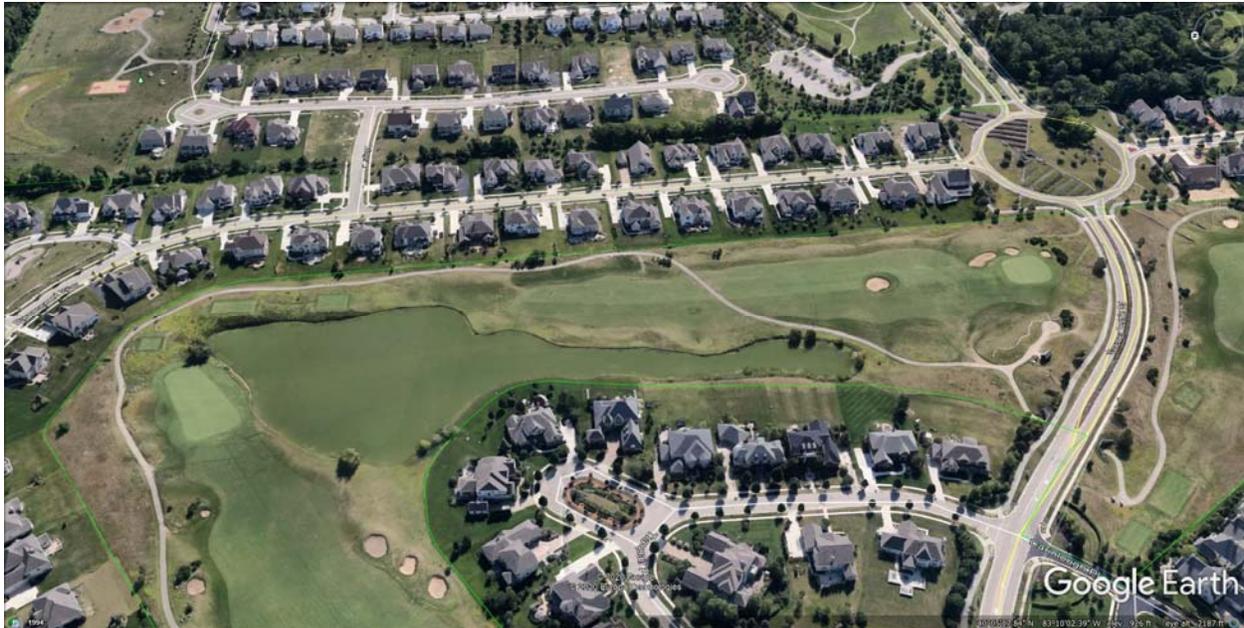


Figure #3 - Aerial view of Hole #5 at Golf Club of Dublin as a par 5

property line which would cause more golf balls to land further left, even if the pond was not there. But the added psychological effect of the pond was to cause golfers to aim further left as well to avoid the penalty of the water. Both of these effects resulted in more golf balls landing left of the intended and designed impact and closer to properties along the left of the hole.

The elevation and alignment of the tees on this hole are also contributing factors to more than expected golf balls going left of the intended landing area. The main two tees are elevated about 8 feet above the adjacent pond level and the third tee is 6 feet above the water. In addition the tees are aimed or aligned to the left so subconsciously golfers might aim further left than if the tees aligned more to the right. Elevated tees also allow golfers to feel like they can swing a bit harder for greater distance, thereby lessening concern about control of their ball flight. There is some penalty for hitting too far left, especially when there are longer grasses in that area around the bunkers, and there is the danger of hitting out-of-bounds. Hitting too far to the right also has some penalty, because of the narrow fairway and wide bordering rough, and even further right is the water hazard. The fairway and rough can be adjusted but unfortunately there is no practical way to remove that water.

Possible mitigation measures:

The most significant contributing factor to explain why golf balls are landing further left than the original design intended, is because the existing tees cause golfers to aim too far to the left and closer to the left property line. To mitigate that factor means shifting the apparent aiming point to the right by lowering and shifting the tees to the left. The intent is to get golfers looking further to the right off the tee than they do now. In order to maximize this effect means raising the forward tee as high as practical to act as both a physical and visual barrier to balls and the sightline. This then necessitates that the golf car path must move to the other side of the tees towards the pond. Lastly the right side edge of the fairway should be shifted to the right out to the original line as shown on the original plans. The mowing pattern for this hole should limit mowing to once in the fall in the left outer rough near the bunkers, and leaving a 5 foot buffer in right outer rough above the water to encourage native grass growth. Weeds can be chemically controlled as needed. I feel comfortable that these changes should sufficiently mitigate the problem. In the unlikely event that it does not, then I can look at re-grading the fairway, but this could be a major earthmoving operation, and might not add much additional incentive for golfers to aim to the right.

The scope of work to move the tees to the left is below:

- Move second and third tee to the left as much as practical
- Lower second and third tee to 18"- 24" above water level in pond
- Build new forward tee (4th tee) as far left at practical
- Raise forward (4th) tee 4 – 6 feet above second and third tees to focus sightlines
- Align all tees to new aiming point 22 feet right of current aiming point
- Adjust golf car path as necessary to allow tee build and realignment
- Encourage longer grasses in left rough to right of golf car path
- Leave the existing bunkers in place
- Shift fairway and rough area to the right by 22 feet (minimum) by mowing
- Mow down some longer grasses at the edge of the pond/canal interface short of landing area so it doesn't seem so intimidating
- Limit mowing to once in the fall for native grass areas in the outer rough on both left and right of the mowed rough area.
- Install warning signs that inform golfers that they are responsible for any damage or injuries caused by their golf balls

Scope of work

The lowering and shifting of tees to the left will involve earthmoving, new irrigation, new drainage, new golf car path, seeding/sodding, and grow-in. Ideally this work should be done in the very early spring so there is minimum disruption to the work by golfers. If this work is done when the golf hole is open for play, then a temporary golf car path will have to be installed to allow golfers to pass by the construction. Once there is access for golfers around the work area then the 5th hole could temporarily play as a par 4 from temporary tees at the start of the fairway.

The sequential construction steps would be to cap and isolate the irrigation, strip off the existing sod and vegetation from the work area, strip and store the topsoil, re-grade and re-topsoil the tees, install irrigation, replant the tees and work area, and pave the new golf car path. It is assumed that the golf course management would do the construction and that the maintenance staff would assume responsibility for grow-in and maturation.

This work could take around 2 weeks in good, dry working weather and 4 weeks or more in winter or wet weather. This does not include "grow-in" time which usually requires 8 -10 weeks when soil temperatures are above 50 degrees F. Although not an ideal time to work, the golf course builder could complete the work before the golf course reopens the following spring, although the tees will not be ready to play until early summer. Sodding the tee tops and walk-ups would accelerate re-opening by reducing grow-in time by one half, but would add additional costs to the construction.

Cost to implement: Estimated cost to reconfigure tees and golf car path:

<u>Line</u>	<u>Item of work required</u>	<u>Quantity</u>	<u>Cost (\$)</u>
<u>1.</u>	Erosion and sediment controls	1 ls.	500
<u>2.</u>	Isolate and remove irrigation	7 ea.	750
<u>3.</u>	Strip and remove existing vegetation	1.6 ac.	4,000
<u>4.</u>	Strip and store topsoil	1,500 cy.	4,500
<u>5.</u>	Earthmoving, shaping, compaction	24 hr.	3,600
<u>6.</u>	Install and test irrigation	7 ea.	10,500
<u>7.</u>	Install new golf car path	2,800 sf.	16,800
<u>8.</u>	Re-topsoil, seedbed prep and planting	1.6 ac.	8,000
<u>9.</u>	Grow-in and maturation	1 ls.	1,500
<u>10.</u>	<u>Remove erosion and sediment controls</u>	<u>1 ls.</u>	<u>200</u>
TOTAL COST =			\$ 50,350

NOTES: 1) These prices do not reflect current prevailing wages which could add an additional 35% to all of the estimated costs given above.

2) These estimate do not reflect any soft costs for design, engineering, and project management (if required).

Summary - Shifting and lowering the tees should sufficiently shift the aiming points and play patterns to the right to achieve a realistic goal of 95% effectiveness. The key is to get golfers to aim to the right as much as practical.

Respectfully submitted,



Michael J. Hurdzan, Ph.D., ASLA, ASGCA Fellow

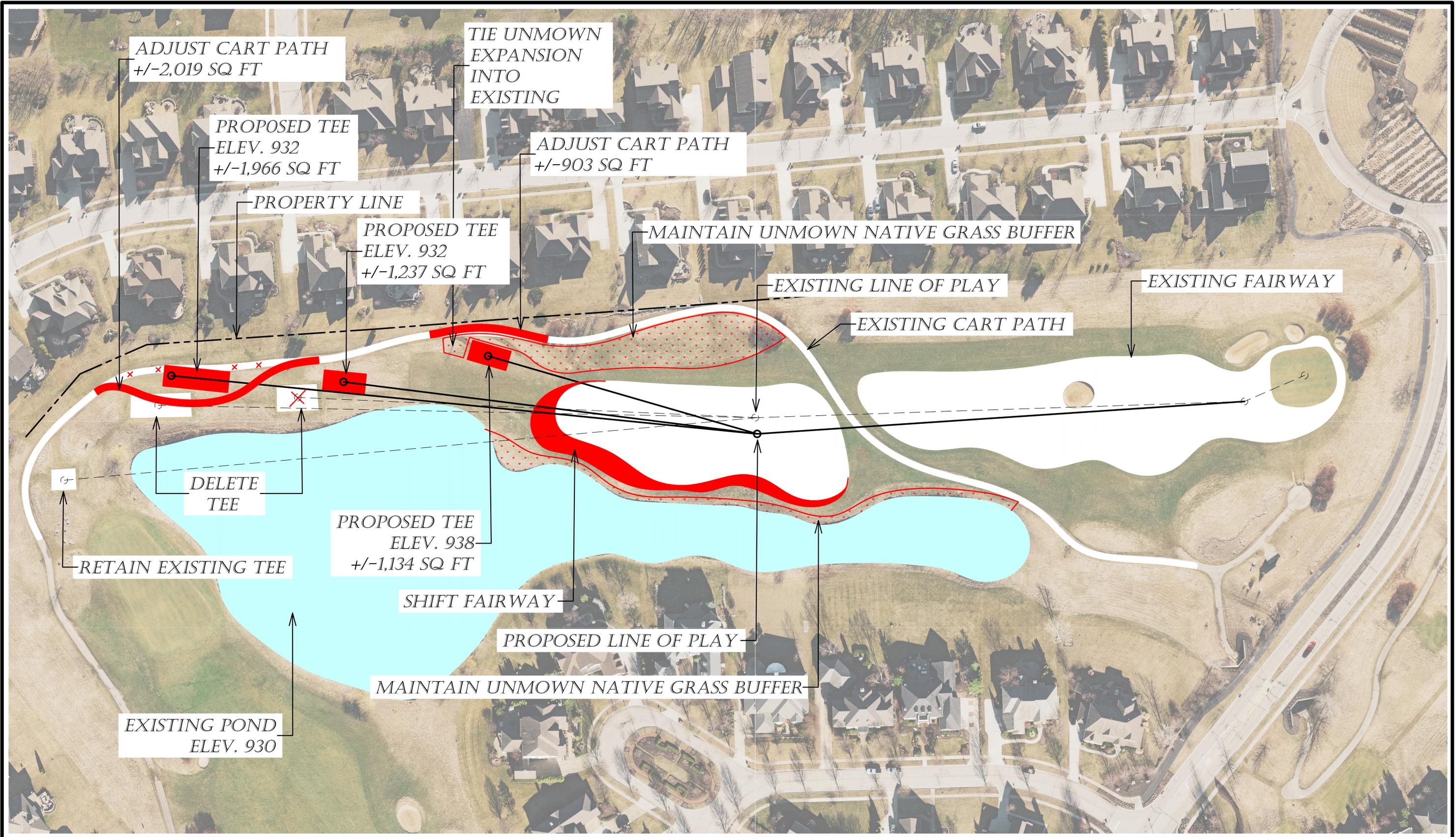
Hurdzan Golf Course Design, LLC

1270 Old Henderson Road | Columbus, OH 43220

614.457.9955 | www.hurdzangolf.com | [@HurdzanGolf](https://www.instagram.com/HurdzanGolf)

Attachments-

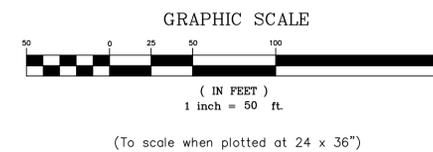
Map Showing Modifications to Hole #5 Golf Club of Dublin



HURDZAN GOLF
COURSE DESIGN



HOLE 5 RECONFIGURATION PLAN



2021.03.04

GOLF COURSE ARCHITECT'S ANALYSIS

OF

HOLE NUMBER FIVE
GOLF CLUB OF DUBLIN (OHIO)
As a Par-4

Prepared by
Michael Hurdzan, Ph.D., ASGCA
Hurdzan Golf Design, LLC
Columbus, Ohio 43220

May 2022



Overview:

In December 2020, a study was presented to the City of Dublin on a golf course architect's analysis of hole number five at the Golf Club of Dublin. The purpose of the study was to analyze golf shot dispersion from the tees that were leaving the golf hole corridor, and impacting neighboring properties. Some errant shots were anticipated by the neighboring residents, as a function of living on a golf course. However, what was not anticipated was the frequency of the errant shots and how they seemed to be concentrated to a few properties along the left side of the golf corridor and only on the tee shots.

The December 2020 analysis determined that there were several contributing causes for the above situation. Chief among them was that golfers were purposely aiming further to the left side of the golf hole and fairway, thereby reducing the spatial separation between the aiming point and the left (east) property lines. Further analysis found the reason why golfers were aiming further left than expected by the original envisioned design, was an extension of a pond to the south along the right side of the corridor that shifted the fairway to the left. This problem was compounded by the teeing grounds being misaligned and faced golfers even further to the left. Lastly, because the hole was originally designed as a par-4, and was subsequently made a par-5, golfers were swinging with more force to gain distance, and committing more swing errors that caused mishits to the left.

The possible mitigation measures suggested by the analysis were to lower and move the tees slightly forward and to the left of their current location, move the golf car path to the right side of the tees, and plant a few selected trees along the left side of the hole. The intent was to get golfers to aim further to the right and to encourage this behavior, the fairway was also shifted to the right and longer grasses were allowed to grow in the left rough as a form of hazard to be avoided.

Results of the Mitigation Measures:

Implementation of the tee rebuilding, golf car shift, tree planting and fairway adjustments began in March 2021 but were severely delayed by weather, and the amount of golfer activity that disrupted the flow of work. The tees were not put into play until well into May 2021, and then a combination of bad weather, heavy golfer use, and poor construction techniques rendered some tees unusable by July 2021. The point being the mitigation measures were not in place long enough to determine their efficacy. Since then the construction defects appear to be repaired, and the tee is healthy and being heavily used.

A few Spruce trees were also planted along the left side but their location became contentious with some neighbors because they believed they shifted the aiming point too far to the right. The trees were moved a time or two and never really had a chance to become healthy enough to be evaluated for their ball barrier qualities. Similarly there seemed to be

some miscommunication about the longer grasses in the left rough, and they were mistakenly mowed too short. Consequently the total package of mitigation measures never got fully evaluated, and neighbor concerns persisted. As a result, this follow-on study was initiated.

Study Concept:

The concept is now to study the 2022 golf season to more fully and statistically evaluate the mitigation measures as finally and fully implemented in mid to late 2021. This includes using the newly reconstructed tees, planting additional or replacement trees, and growing the left rough up.

The intent is first to quantify the number of errant golf shots played from the tees on hole 5, by placing an observer on-site to mark the landing location of all tee shots, played on two weekday and two weekend days. Then those charted impact points can be analyzed to determine areas of concentration as well as exact percentages of shots played. These results will be compared to the expected shot dispersion guideline of having 92% of the golf shots, land within 15° (fifteen degrees) either side of the intended aiming point.

Implications of the Shot Dispersion Pattern:

If the shot dispersion pattern is within or close to the expected guidelines, then no changes to the golf hole may be needed. This presumes that if the golf hole is acceptable in the 2022 golf season, that as the trees planted on the left side of the hole continue to grow and get larger, that they will more strongly encourage golfers to aim even further to the right. If and when the trees grow to the point of shifting the aiming point too far to the right, the trees can be trimmed, or selectively removed. In other words the trees should help direct golfer's aiming overtime, and 2022 is the worst case scenario for errant shots to the left.

If, however, the shot dispersion analysis shows that an unexpected number of golf balls are landing outside the acceptable guideline, then there are at least two distinct courses of action to consider: 1) shorten the golf hole from a par-5 to become a par-4, and moving the landing area for tee shots further down the corridor, or 2) failing that, convert a portion of the extended water body on the right of the hole to dry land to lessen the right side hazard area, or both.

To shorten the hole requires moving up all of the tees forward by at least 50-yards to make the hole play as a par-4. The reason for shortening the hole is because the entire corridor for the golf hole gets wider as it goes south, or toward the green. This then begs the question of how much should the hole be shortened without diminishing the challenge or character of the Golf Club of Dublin. That rationale will be discussed later in this report.

Reducing the right side water may lessen the current intimidation factor of the right side enough to encourage golfers to feel more comfortable aiming further right. If that happens, and as the trees grow, perhaps the hole could again become a par-5.

Hole Length Evaluation:

In 2001, the original hole was designed as a 466 yard, long par-4 that was made into a par-5 of 500 yards by adding the back tees. Simplistically, it would seem that shortening the hole to 466 yards as planned, would solve the errant ball problem, except that the original hole did not have the pond extension that effectively narrowed and shifted the fairway to the left. To further compound the problem of a narrow fairway, is that the pond extension is not built on the corridor boundary, but rather 30' – 40' to the inside it. In addition over the past 20 years advances in golf equipment and swing technique have allowed golfers to hit the ball farther, that in turn requires wider golf hole corridors than when the golf course was first planned. So even if the pond extension was not there, the existing golf hole corridor would be marginal width by today's ball dispersion guidelines.

One might then conclude, that shifting the fairway to the right, would require at least some of the pond extension to be filled in, if not the entire area. Filling in the entire pond extension to create dry golf course is feasible, but expensive, and would require significant construction activities of hauling, dumping and compacting unstable soils. Fortunately, the pond appears to have an average depth of only about 4', and it is reasonably close to road access for hauling vehicles, albeit a residential street. However, the greater the amount of the pond that is filled, then the more fill material that must be imported, and attendant cost. For example, to fill the entire extension area of 43,000 square feet, would require 6,400 cubic yards of fill material. Current cost of suitable fill material is about \$30 per cubic yard, so the material cost alone would be \$192,000. This would also result in traffic issues from 426, 15-yard dump trucks. This would not include cost for compaction, grading, planting and grow in. If the entire pond extension were filled back to the limits shown on the original plan, the estimated cost would be closer to \$250,000 - \$300,000.

Thus, it makes sense to only fill the minimum amount of the pond, and at the south end. This minimum area as shown on the attached drawing, measures 5,310 square feet and would require only 786 cubic yards of fill material. If just this small portion of the pond is filled, there may be sufficient spoils available at the south end of the pond to avoid much hauling. The cost to handle the on-site material is estimated at \$15 per cubic yard, for a cost of approximately \$11,790 dollars, for earthwork alone. Total earthmoving would be \$30,000.

The point of these estimates is to demonstrate the importance of only filling as much of the pond as necessary to achieve the objective. That amount of pond filling will be

determined by how long, or short, the par-4 hole is made. The shorter the total hole length, the less pond extension is removed, and the lower the cost.

Another factor to consider is the location of the golf car path that presently crosses the fairway about 180 yards out from the green, or between the first and second landing area on the current par-5. If the hole is shortened to a par-4, the golf car path becomes more problematic in that it could be in the landing area for some tee shots. This is more of an annoyance than a problem for golfers, because they actually enjoy the added length of a ball bouncing off the pavement and in the direction of the green. However, this is still not a desirable situation and minimizing the annoyance of the path should be considered. To relocate the path means removing the old path, that could become fill material for the pond, and installing a new path. It is estimated that about 3,520 square feet of path (440' long x 8' wide) would be required, at a cost of about \$50,000 for removal and a new path. This path relocation could also be done in another phase, or in another fiscal year.

To test the above alternatives and before making a final decision about modifying the pond, fairway and path, simply move the tees forward to temporarily shorten the hole to a par-4, and see how golfers use it. This would also require mowing down the right rough to fairway height and allowing the left side of the fairway to grow to rough height. If only moving the tees forward and shifting the mowing lines, results in lowering the percentage of errant golf balls to an acceptable range, then there is no reason to modify the pond and/or path. If, however, the problem persists even with forward tees, then the pond and path should be modified so the fairway and playline shifts to the right.

Assuming the ball dispersion study of 2022 indicates the hole should become a par-4, what is the best option to produce the safest golf hole and how much will it cost?

Selecting the Preferred Length for a Par-4:

For the sake of simplicity, making the hole into a par-4, means keeping a hole length of between 400 – 440 yards. Each optional length has certain strengths and weaknesses with regard to speed of play, impact on slope rating, player reaction, amount of reconstruction needed, and shot dispersion both left and right.

To theoretically determine the “preferred option” three different lengths of par-4 were evaluated; 440, 420 and 400 yards long. Assuming a 250 yard drive from the back tee, measurements were made from the center of the green back toward the tee, in lengths of 190, 170, and 150 yards respectively. This then allowed determining the theoretical landing area and aiming point. Each aiming point and landing area within the golf hole corridor is slightly different to most safely allow for centering the dispersion area. These three options are graphically shown and discussed below.

The key difference for the 420 and 440 yards holes is that the landing area for a 250 yard drive from the back tee, at these distances, is short of the existing path, which means there is a lesser requirement to move the path. In addition, those two landing areas do not necessarily necessitate filling in any of the pond, because they are short of the water. On the other hand, the landing area for the 400 yard hole tee shot is on the greenside of the existing path, and would require filling a portion of the water in order to shift the fairway to the right. On the face of it, it would seem that either the 440 or 420 yard length options are better, because only the 400 yard option requires filling some of the pond, and perhaps relocating the path. But this is before the 30° probable play area is overlaid for each of the 250 yard drives.

On that drawing notice the three different color centerlines and dispersion arc, in relationship to the east and west property lines. The intent is to center the aim point for each 250 yard drive from each back tee for each length of hole within the corridor, slightly favoring the right side since most right-handed golfers slice their shots. The intent is to gain maximum shots landing in the corridor, and not on adjacent properties.

The red color represents a 440 yard hole. A 250 yard long drive centered within 30° probable play area puts the edge of arc over the property line both on the right and left sides. This means that a small percentage of additional shots should be expected to land out of bounds. With the blue line of play (420 yard hole), fewer 250 yard shots land out of bounds, and fewer yet for the green line of play (400 yard hole). Much of this is due to the widening corridor closer to the green and hence more room for the landing area.

Therefore, if the only goal is to minimize shots leaving the golf course, the best compromise is to make the hole 400 yards long, filling part of the pond, shifting the fairway, but leaving the path where it is for now. The path can always be moved at a later time if it is a real and not imagined issue. The pond filling and fairway shift are mandatory.

Further Considerations:

All of the above conclusions presuppose that golfers will play the hole as laid out and will not try to “cut the corner,” or aim left even after the fairway is shifted. This is a big assumption. If better golfers do try to play down the left fairway edge they effectively shift their aiming point to the left which brings more left side properties into the probable play area. Therefore, to discourage this behavior, it is recommended a planting of shrubs, like others already found on the golf course in the left rough. In addition, the fescue rough should be enlarged on the left and only mowed once in the fall to further discourage playing down the left. If these measures are not as effective as desired, then a cross bunker complex could be built starting at about 230 yards out from the back tee, along the left side, out to a distance of 270 yards.

Summary of Recommended Modifications:

1. Whether the hole is shortened to a par-4 should be based on the on-site shot dispersion data gathered during the 2022 golf season.
2. If it is to be done, then the 400 yard length hole option would seem the most prudent because it moves the aiming point and landing area into the widest part of the golf hole corridor, thereby tolerating the greatest shot dispersion.
3. New teeing areas will also have to be constructed to permit all skill levels of golfers and opportunity to reach the prime landing area.
4. Shifting the fairway to the right from the existing golf car path up to the green, which mean filling a small portion of the right side pond is mandatory.
5. Moving the golf car path is desirable but not necessary.
6. Additional planting of shrubs in the left rough is recommended to discourage golfers from cutting the corner.
7. Allowing the fescue grass in the left rough to grow is also recommended to further discourage left side play.

Estimated Cost to Convert Hole #5 to a Par-4:

Estimating construction cost in this economy is nearly impossible because unit prices are so variable. However the quantity of the work required should not materially change, and is offered below.

ESTIMATED COST TO CONVERT HOLE #5 TO A Par-4			
<u>Line</u>	<u>Item of Work Required</u>	<u>Quantity</u>	<u>Cost</u>
1.	Erosion and sediment control	1 l.s.	\$ 500
2.	Strip and remove existing vegetation	1.1 ac	6,200
3.	Strip and store topsoil	500 c.y.	2,500
4.	Earthmoving, hauling, shaping, compaction	786 c.y.	30,000
5.	Adjust and test irrigation	10 heads	10,000
6.	Re-topsoil, seedbed prep and planting	1.1 ac	10,500
7.	Grow-in and maturation	l.s.	5,000
8.	Remove E & S and cleanup	l.s.	500
9.	Plant spruce trees	3	<u>6,000</u>
	TOTAL		\$71,200

Note:

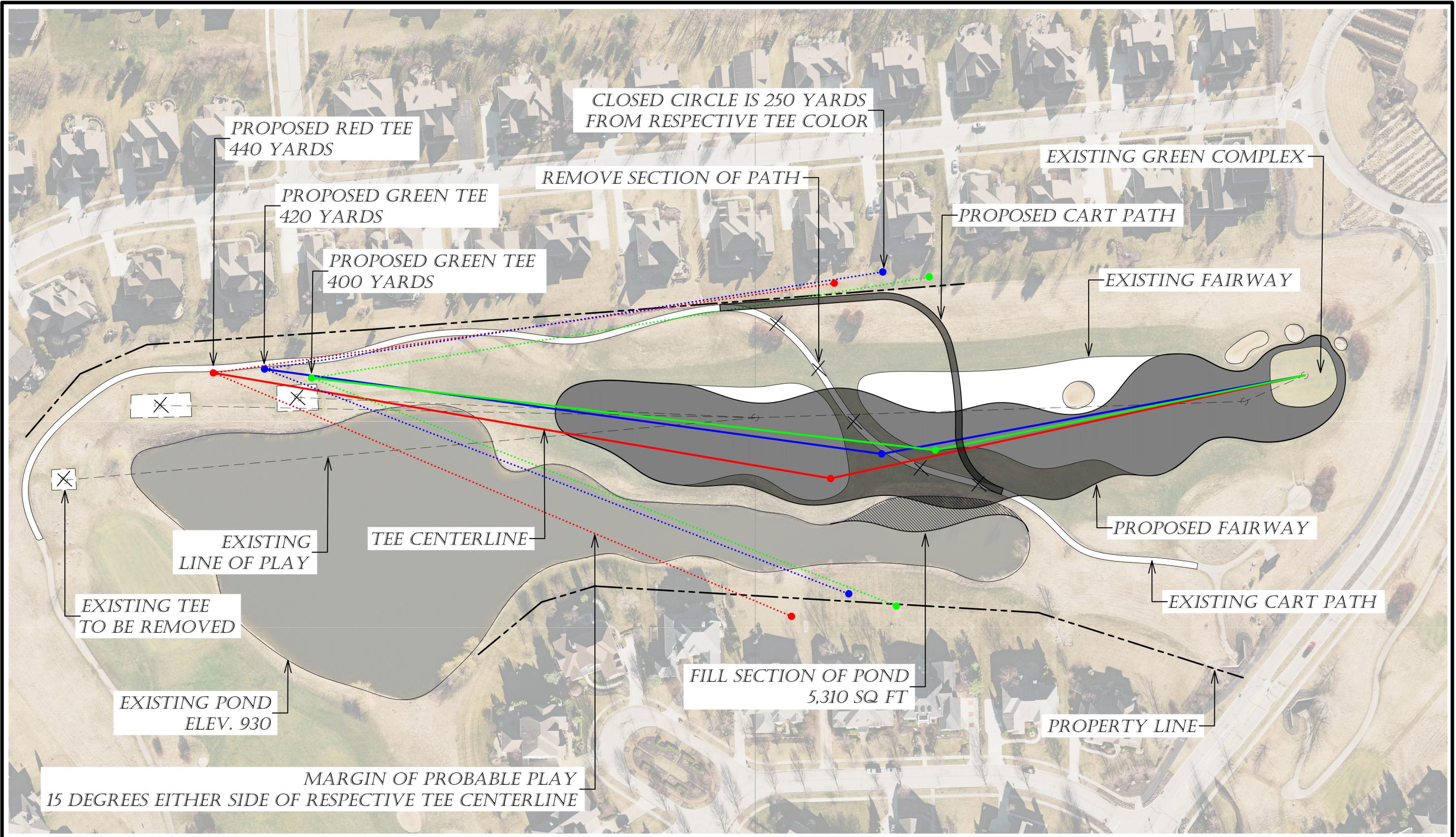
1. No path or paving modification
2. Pond fill is only 5,310 ft²
3. Pond assumed to be 4' deep
4. All seeding no sod estimated
5. Does not include soft costs

6. Assumes buying no fill
7. Doesn't include prevailing wage provision
8. Assumes adjusting existing irrigation not new

Respectfully submitted,



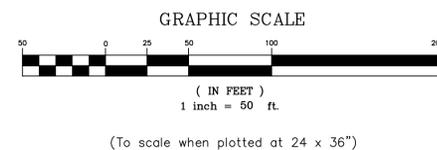
Michael J. Hurdzan, Ph.D., ASLA, ASGCA Fellow



HURDZAN GOLF DESIGN
1270 Old Henderson Road
Cols. OH 43220

GOLF CLUB OF DUBLIN
5805 Eiterman Road
Dublin, OH 43016

HOLE **5**
CONVERT TO PAR 4



DATE: **2022-04-30**

GOLF CLUB OF DUBLIN - HOLE 5 BALL SPOTTING DATA

Total Shots Observed by Day

Date	Shots	Date	Shots
Saturday, April 2	88	Tuesday, May 17	94
Sunday, April 3	81	Thursday, May 19	90
Thursday, April 7	37	Friday, May 20	65
Sunday, April 10	69	Saturday, May 21	90
Tuesday, April 12	69	Sunday, May 22	35
Friday, April 15	91	Sunday, May 29	98
Total	435	Total	472

Total Shot Dispersion

	First Round (April 2 – April 15)	Second Round (May 17 – May 29)
Shots in Play	72% (315 shots)	79% (375 shots)
Out of Bounds Left	18% (77 shots)	11% (50 shots)
Out of Bounds Right (right of the water)	2% (10 shots)	3% (12 shots)
In the Water	8% (33 shots)	7% (35 shots)

Data by Tee Location

Touring Level Tee

	First Round (22 total shots)	Second Round (5 total shots)
Shots in Play	73% (16 shots)	80% (4 shots)
Out of Bounds Left	9% (2 shots)	20% (1 shot)
Out of Bounds Right (right of the water)	5% (1 shot)	0% (0 shots)
In the Water	14% (3 shots)	0% (0 shots)

Back Tee

	First Round (265 total shots)	Second Round (270 total shots)
Shots in Play	69% (184 shots)	74% (200 shots)
Out of Bounds Left	20% (54 shots)	13% (36 shots)
Out of Bounds Right (right of the water)	2% (6 shots)	3% (9 shots)
In the Water	8% (21 shots)	9% (25 shots)



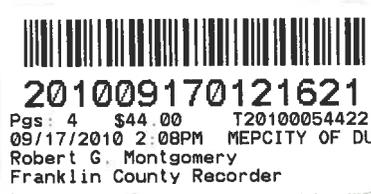
Middle Tee

	First Round (121 total shots)	Second Round (160 total shots)
Shots in Play	76% (92 shots)	84% (135 shots)
Out of Bounds Left	14% (17 shots)	8% (13 shots)
Out of Bounds Right (right of the water)	2% (3 shots)	1% (2 shots)
In the Water	7% (9 shots)	6% (10 shots)

Front Tee

	First Round (27 total shots)	Second Round (37 total shots)
Shots in Play	85% (23 shots)	97% (36 shots)
Out of Bounds Left	15% (4 shots)	0% (0 shots)
Out of Bounds Right (right of the water)	0% (0 shots)	3% (1 shot)
In the Water	0% (0 shots)	0% (0 shots)





TRANSFER
NOT NECESSARY
SEP 17 2010
CLARENCE E. MINGO II
AUDITOR
FRANKLIN COUNTY, OHIO

ENCROACHMENT AGREEMENT

This Encroachment Agreement (the "Agreement") is executed, delivered and made effective as of this 24 day of August, 2010, by and between the **City of Dublin**, an Ohio municipal corporation, with an address of 5200 Emerald Parkway, Dublin, Ohio 43017 (the "City") and **Fischer Single Family Homes, LTD.**, a Kentucky Limited Partnership, whose tax mailing address is 2670 Chancellor Drive, Crestview Hills, Kentucky 41017 ("Property Owner").

WITNESSETH:

A. Property Owner Property. Property Owner is the owner of a certain parcel of real property located at **5835 Baronscourt Way, Dublin, Ohio 43017**, which real property is legally described in Instrument No. 200907150103540, filed with the Franklin County Recorder's Office ("Property Owner Property").

B. City Easement Area. The City has a ten foot easement ("Easement") which runs along the Western property line of lot 336 of Ballantrae Section 3, on the Property Owner Property as is legally described and depicted in Plat Book 102, Pages 47, with the Franklin County Recorder's Office (the "City Easement Area").

C. Encroachment. Property Owner Property has a **Patio** (the "Patio") that encroaches into the City Easement Area. A Detailed drawing of the **Patio** is depicted on the attached Exhibit "A".

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. Permission to Remain in City Easement Area. The City, its successors and assigns, agree that the portion of the **Patio** depicted in Exhibit A shall be permitted to remain in City Easement Area provided that Property Owner, their successors and assigns, acknowledge that the City may utilize the City Easement Area consistent with the terms of the Easement and this Agreement. In the event it is necessary to gain access to the City Easement Area (or use it in any other manner contemplated by the terms of the Easement or this Agreement) at the location of the encroachment by the **Patio**, the Property Owner acknowledges that the City may take any and all necessary action (including, but not limited to, temporarily, permanently, or partially removing the portion of the **Patio** located within the City Easement Area) necessary for its use and enjoyment of its unfettered rights under said Easement. In such event, the City shall not be liable for any expenses, damages to, or reconstruction or replacement costs of the **Patio**, which encroach upon the City Easement Area, regardless of what materials are used by Property Owner to construct the **Patio**. The City may restrict access to the **Patio**, as long as deemed necessary by the City, in the event it is necessary to gain access to the City Easement Area pursuant to the terms of the Easement or this Agreement.

2. Extension. Property Owner, their successors and assigns, agree not to extend the **Patio**, any further into the City Easement Area than is shown on the attached Exhibit "A."

3. Assumption of Liabilities. Property Owner, their successors and assigns, agree to be financially responsible to the City for any and all costs, expenses or liabilities (including reasonable fees of attorneys, paralegals, experts, court reporters and others) incurred to remove or bypass the **Patio** as directed by the City.

4. **Indemnity.** Property Owner shall indemnify, protect, defend, and hold harmless the City from and against all loss, liability, damage, actions, causes of action, or claims for injury, death, loss or damage of whatever nature to any person, property or business interest caused by or resulting from an act or omission of Property Owner or their agents, employees, customers, servants, licensees, tenants, subtenants, guests or invitees in respect to the matters set forth in this Agreement and their use of the City Easement Area, and from and against any and all costs, expenses or liabilities (including reasonable fees of attorneys, paralegals, experts, court reporters and others) incurred or anticipated by the City in connection with any claim, action or proceeding in respect of any such loss, liability, damage, action, cause of action, or claim.

5. **Termination.** This Agreement shall automatically terminate when the encroachment contemplated herein no longer continues to exist for any reason whatsoever or alternatively at the option of the City.

6. **Insurance.** Property Owner will maintain standard homeowner's liability, property, and casualty insurance of appropriate value for property of similar nature and valuation.

7. **Miscellaneous Provisions.**

(a) **Successors and Assigns.** This Agreement shall run with the land and be binding upon and inure to the benefit of the respective heirs, personal representatives, successors, transferees, and assigns of the parties hereto.

(b) **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be a duplicate original, but all of which, taken together, shall constitute a single instrument.

(c) **Captions.** The captions contained in this Agreement are included only for convenience of reference and do not define, limit, explain or modify this Agreement or its interpretation, construction or meaning and are in no way to be construed as a part of this Agreement.

(d) **Severability.** If any provision of this Agreement or the application of any provision or any circumstance shall be determined to be invalid or unenforceable, then such determination shall not affect any other provision of this Agreement or the application of said provision to any other person or circumstance, all of which other provisions shall remain in full force and effect.

(e) **Amendments in Writing.** No change, amendment, termination or attempted waiver of any of the provisions of this Agreement shall be binding upon any party unless in writing and signed by both of the parties hereto.

(f) **Covenants Run With the Land.** It is intended that the covenants, easements, agreements, promises and duties set forth in this Agreement shall be construed as covenants which run with the land.

(g) **Termination of Liability Upon Transfer.** If Property Owner should transfer their fee simple interest in and ownership of their Property, then the liability of the transferor for the breach of any covenant or provision contained in this Agreement, occurring after the date of such transfer, shall automatically be terminated only upon City's approved written notice.

(h) **Restoration.** If, as a result of the exercise of any easement rights created under this Agreement, Property Owner shall damage or disturb the improvements of the City or City Easement Area, then Property Owner shall promptly repair or restore the property of the City to, as near as possible, the condition existing prior to such damage or disturbance.

(i) **Conformance with Dublin Right-of-Way Code sections.** Property Owner must be in full compliance with regulations pertaining to right-of-way as outlined in Dublin Code, including but not limited to, Chapter 98.

(j) **Venue.** The parties hereto hereby consent to the exclusive jurisdiction of the courts of the State of Ohio in Franklin County, and the United States District Court for the Southern District of Ohio, and waive any contention that any such court is an improper venue for enforcement of this Agreement.

(k) **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives, to be effective as of the date first above written.

CITY OF DUBLIN, OHIO:

PROPERTY OWNERS:

By: [Signature]
Ferry-Foegler, City Manager Marsha I Conroy
APPROVED AS TO FORM: Interim City Manager
[Signature]
City of Dublin Law Director

By: [Signature]
Fischer Single Family Homes, LTD.

STATE OF OHIO,
COUNTY OF FRANKLIN, ss:

BE IT REMEMBERED, that on this 15 day of September, 2010, before me, the subscriber, a Notary Public in and for said County, personally came the above named **City of Dublin, Ohio**, by **Terry Foegler**, its **City Manager**, and acknowledged the signing of the same to be his voluntary act and deed, and the voluntary act and deed, for the uses and purposes therein mentioned.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day and year last aforesaid.

[Signature]
Notary Public
my commission expired 4.25.11

STATE OF OHIO,
COUNTY OF FRANKLIN, ss:

BE IT REMEMBERED, that on this 24 day of August, 2010, before me, the subscriber, a Notary Public in and for said County, personally came Greg Fischer in his/her capacity as Vice President for the above named **Fischer Single Family Homes, LTD.**, and acknowledged the signing of the same to be their voluntary act and deed for the uses and purposes therein mentioned.

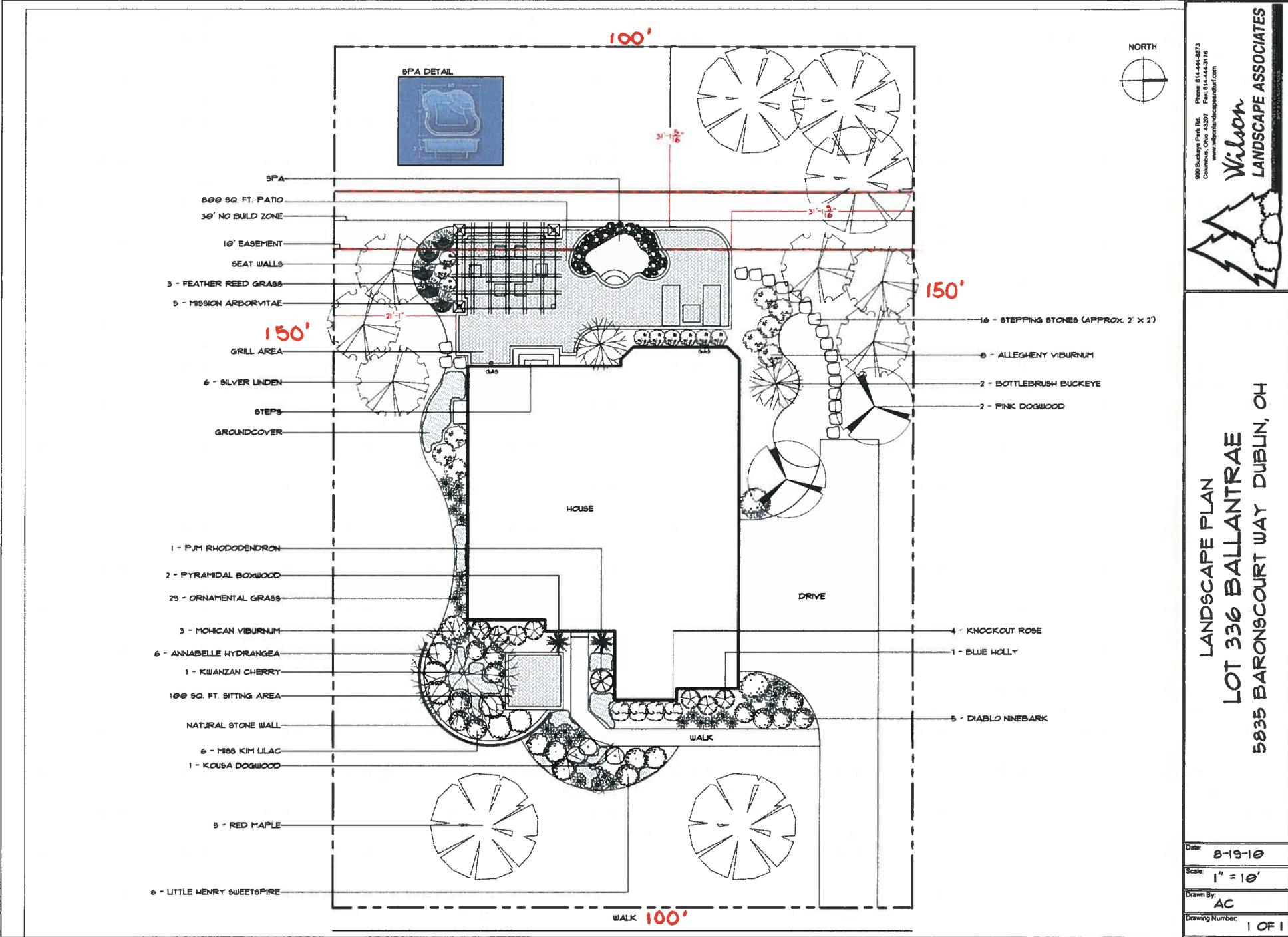
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day and year last aforesaid.


Ryan Amos
Notary Public, State of Ohio
My Commission Expires 04-22-2015

[Signature]
Notary Public

This Instrument Prepared By:

SCHOTTENSTEIN, ZOY & DUNN
A Legal Professional Association
250 West Street
Columbus, Ohio 43215



Wilson
LANDSCAPE ASSOCIATES

900 Buckeye Park Rd.
Columbus, Ohio 43207
Phone: 614-444-8873
Fax: 614-444-3178
www.wilsonlandscape.com

LANDSCAPE PLAN
LOT 336 BALLANTRAE
5835 BARONSCOURT WAY DUBLIN, OH

Date: 8-19-10
Scale: 1" = 10'
Drawn By: AC
Drawing Number: 1 OF 1

**MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF DUBLIN AND
NEW ERA GOLF OHIO GCD INC.**

This Memorandum of Understanding Between the City of Dublin and New Era Golf Ohio GCD Inc. (the "Agreement") is executed, delivered and made effective as of this 1 day of MARCH, 2021 by and between the **City of Dublin**, an Ohio municipal corporation, with an address of 5555 Perimeter Drive, Dublin, Ohio 43017 ("Dublin") and **New Era Golf Ohio GCD Inc.**, with an address of _____, Dublin, Ohio 43017 ("New Era").

WHEREAS, Dublin contracted for the design and construction of a golf course known as the Golf Club of Dublin; and

WHEREAS, New Era is now the lessee and operator of the Golf Club of Dublin; and

WHEREAS, there have been some issues with the operation of Hole #5 of the course; and

WHEREAS, the City engaged Michael J. Hurdzan, Hurdzan Golf Design, LLC to evaluate the design of Hole #5 and provide recommendations; and

WHEREAS, Dr. Hurdzan prepared the attached Golf Course Architect's Analysis of Hole Number Five – Golf Club of Dublin (Ohio) and reconfiguration plan; and

WHEREAS, the City and New Era now desire to enter into an Agreement to implement Dr. Hurdzan's recommendations.

NOW, THEREFORE, the parties agree as follows:

1. New Era will provide the following services in order to implement the Golf Course Architect's Analysis of Hole #5:
 - Implement the changes to Hole #5 to be compliant with the attached "Hole 5 Reconfiguration Plan" prepared by Hurdzan Golf Design;
 - Perform such work to the satisfaction of Hurdzan Golf Design;
 - Provide all labor and equipment to implement the reconfiguration, except for any cart path modifications, which shall be the responsibility of Dublin.
 - Complete all work associated with the reconfiguration in the spring/early summer 2021.
 - Maintain Hole #5 for the remaining duration of the lease consistent with all elements of the attached "Hole 5 Reconfiguration Plan".

2. Dublin will provide the following services in order to implement the Golf Course Architect's Analysis of Hole #5:

- Provide New Era with materials that are required for the implementation that are not otherwise available onsite at the Golf Club of Dublin;
- Provide the labor and equipment to resurface the modified sections of cart path and up to 1000 ft. of existing cart path;
- Contract with Hurdzan Golf Design, LLC to oversee New Era's work, and fund that contract;
- Contribute the aforementioned labor and materials in an amount not to exceed \$31,150 toward the performance of these commitments.

3. Inspection and Acceptance of Work. Hurdzan Golf Design will inspect New Era's work upon completion of the improvements. Once the work is completed to Dr. Hurdzan's satisfaction, Dr. Hurdzan will provide written approval of New Era's completed reconfiguration of Hole #5.

4. Sufficient Mitigation. The parties agree that in the event these efforts do not sufficiently mitigate errant balls at Hole #5, New Era will contract with Hurdzan Golf Design, LLC to prepare a plan for re-grading the fairway and will implement the plan at their sole cost.

5. **Miscellaneous Provisions.**

- Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the respective heirs, personal representatives, successors, transferees, and assigns of the parties hereto.
- Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be a duplicate original, but all of which, taken together, shall constitute a single instrument.
- Captions. The captions contained in this Agreement are included only for convenience of reference and do not define, limit, explain or modify this Agreement or its interpretation, construction or meaning and are in no way to be construed as a part of this Agreement.
- Severability. If any provision of this Agreement or the application of any provision or any circumstance shall be determined to be invalid or unenforceable, then such determination shall not affect any other provision of this Agreement or the application of said provision to any

other person or circumstance, all of which other provisions shall remain in full force and effect.

- Amendments in Writing. No change, amendment, termination or attempted waiver of any of the provisions of this Agreement shall be binding upon any party unless in writing and signed by both of the parties hereto.
- Venue. The parties hereto hereby consent to the exclusive jurisdiction of the courts of the State of Ohio in Franklin County, and the United States District Court for the Southern District of Ohio, and waive any contention that any such court is an improper venue for enforcement of this Agreement.
- Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

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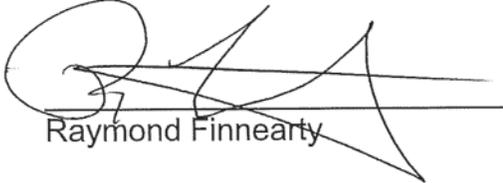
IN TESTIMONY WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives, to be effective as of the date first above written.

Signed and acknowledged
in the presence of:

CITY OF DUBLIN, OHIO

NEW ERA GOLF OHIO GCD INC.

DocuSigned by:
Dana McDaniel
B4BD4E76DB2F489...
Dana L. McDaniel, City Manager



Raymond Finnearty

APPROVED AS TO FORM:

DocuSigned by:
Jennifer Readler
15A8899E473A474...
Jennifer D. Readler, Law Director

0127206.0607934 4828-1079-9581v1

