Wildcat Creek Golf Park
Comprehensive Project

*Wildcat Creek Golf Park*
Lafayette, Indiana

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Professor George Young, advisor
Without the assistance of numerous people I would not have successfully completed this comprehensive project. Many thanks go to my advisor, George Young for his help in the design of Wildcat Creek Golf Park and to the other professors who have given unselfishly of their time and abilities during the past five years to help me arrive at this point.

Mostly I would like to thank my wife, Debbie, for her unending support and love.
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Introduction

Wildcat Creek Golf Park
is a multi-use recreational facility
designed to accommodate numerous
activities and functions simultaneously in
natural surroundings which promote
enjoyment and the well being of the
individuals who use the park.
The park is structured to be family-oriented,
providing activities for all members of a family.
Additionally,
Wildcat Creek Golf Park
is located near the residential area of
Lafayette, Indiana, allowing for extended use
by the people of the community.

The idea for the golf park came into mind when I realized that as much as 180 acres could be used for the single purpose of golf. Granted, there are other sports which use large amounts of land, especially when arenas are constructed to accommodate these sports. However, it occurred to me that for a few more acres of land more people would benefit from the land presently used only for the game of golf. I am as enthusiastic about the sport of golf as anyone, and would never consider quitting golf because it is a 'waste of land' or an 'elitist sport', of which neither view I support. I feel that golf courses are a great natural habitat for wildlife and while chemicals are used to maintain a quality playing surface for the golfer, the amounts used are not sufficient enough to damage the soil or groundwater environments. (Arthur Hills, (GCSAA News Newsletter insert, no date).
Goals and Objectives

The goal I had for this project was to see the development of a site which integrated a golf course with a more natural and useful land use, in essence creating a park—a *golf park*. Within the confines of the design I had the goal of creating an area which allows many people to use the land simultaneously without interference or risk of injury. The area was to be comfortable, natural, and practical. Mostly it needed to be used. In the future, I would like to see this project used as an example for golf course developers and golf course owners/managers to show what can be achieved with some imagination. I will also gladly open this project for study by students, professors, professionals, or any interested parties because I feel that this project has merit and would be beneficial to anyone who would like to act upon the ideas presented in this project.

Personal goals for the terminal project included obtaining further knowledge of golf course design. The additional knowledge I have gained from this comprehensive project aided me in securing a job in a golf course design firm and helped me to realize a goal of becoming a golf course architect.

Maintaining the belief that golf courses which are built today are single-purpose facilities which do not utilize the most efficient use of land, I have studied the possibilities for the creation of a golf course built within a park setting. The argument that golf courses are a waste of valuable land for such a limited range of uses does not sit well with the millions of men, women, and children who love to play the game so I suggest that golf courses be integrated with other recreational facilities to create a 'golf park.'

My objective for this terminal project has been to study the relationships between golf and other sports or leisure activities which I feel will integrate well with the game of golf. The sports or activities I have chosen relate to golf because of some of the inherent or historical aspects of golf: space, trails (paths), and water. Wildcat Creek Golf Park's amenities share the 'inherent' or
"historical" aspects of golf and are thus integrated into the park. Because I feel that golf courses need not only cater to golfers, I wanted to study the possibilities of the union between golf and these other activities. While I realize that this union will probably never become a staple in the golf course design field, I wish to show that the union between golf and other activities should not be ignored, that it is possible to create a safe and exciting atmosphere for all of the activities involved.

A secondary objective I had for this project was to become as informed as possible about the design, construction, and philosophy of golf courses which aided me not only during this comprehensive project but also after graduation.

There are at least two things which I have used to help in the completion of this comprehensive project. First, having been a golfer for the last ten years, I feel that I had a basic understanding of the game of golf and what constituted successful golf course design. I played golf in Puerto Rico and Maine and many places in between and feel that I have a fairly broad knowledge of golf in the Midwest and eastern coastal regions of the country. Secondly, my experience in general landscape design obtained through my education for the last five years at Ball State, and many independent design projects I was involved with aided my design of this comprehensive project design.
Program

Construction of Wildcat Creek Golf Park has been completed by a private golf course developer. This developer was an open-minded and adventurous person who saw the development of a golf park such as this not only an exciting prospect, but also a profitable business venture.

The elements which I was given to incorporate into the design of the park were:

1. Clubhouse. The clubhouse was to have at a minimum these items: 
   pro shop-- to include items for joggers and bicyclists.
   dressing rooms-- to allow people to come from work or school and change at the park.
   snack shop
   swimming pool-- because it is a family-oriented park, activities are to be supplied for people who may not want to go outside or may not be able to go outside due to the weather.
   conference room-- for business meetings. Added clientele, added profit.
   restaurant
   maintenance and storage areas
   viewing areas
   outdoor patio space
   putting green
   driving range

2. Golf Course. The golf course was to be a regulation-length course which was routed to form two nine-hole loops. Sand, water, and grass bunkers were to become a part of the strategic value of the course.

3. Trails. A series of trails was to be incorporated into the site for use by joggers and bicyclists. The shortest trail was to be less than one mile in length and remain on a relatively flat plane. Other trails were to be
constructed which would test the endurance and vigor of more experienced athletes.

4. Recreational areas. Recreational areas were to be created to allow for activities other than those which are part of the designated activities within the park. Enough space was to be provided in the recreational areas to allow activities such as softball, football, or frisbee. The trail system was to access all recreational areas.

5. Picnic sites. Designated picnic sites were to be created in the park as part of the recreational areas. Picnic shelters were to be constructed for use by families or by larger groups.

6. Fishing pond. A minimum of one fishing lake was to be created to allow for a fishing area within the park. The fishing lake was to be accessible by the trail system and be near a parking area. The lake was also to be visually accessible to a ticket booth for security reasons.

7. Parking. A 300-car parking lot was to be incorporated into the park. This will provide enough spaces to service the park should all activity areas be utilized simultaneously.

8. Maintenance/Nursery area. A separate maintenance and nursery area was to be a part of the park to allow for major maintenance or repair to be done on site and out of view of the park amenities. The nursery was to supply the plants required on site due to death of the park’s plants over time.

9. Concession buildings. These buildings were to serve three purposes:
   1. Sell tickets or passes for the fishing area.
   2. Sell concessions for the users of the park.
   3. Provide restrooms.

   These concession buildings were to be accessed by the trail system, close to golf holes, and one concession building was to have a clear view of the entire fishing lake.
Assumptions

In researching the elements needed for the design of Wildcat Creek Golf Park I studied the different amenities or facilities which are introduced into the park. Some questions arose which required too much time on my part to research while adhering to the basic program statement which I had for the park. In addition, other areas which were not addressed in this project because they were not part of the program statement, yet to the casual observer may have seemed like they should have been addressed. It may be true that there are some valid arguments for the addition of certain facilities or amenities on this site, but to properly address a feasible problem without solving all of the world's problems required that I limit the scope of my project into a workable unit. In this light, I made some assumptions which clarified why I chose not to address certain issues and perhaps further justified my position for a golf park. My assumptions regarding the design of Wildcat Creek Golf Park were:

Being a public facility this golf park will charge fees for use of its amenities as it does for the use of its golf facilities. Creation and maintenance of additional facilities on the land require additional funds, so it is only logical that fees will be charged for their use. Private clubs work under the same premises. Like golf course memberships, memberships may be purchased at Wildcat Creek Golf Park; individual one-day tickets may also be purchased. The price for memberships (or tickets) will vary depending on the facility to be used or a person/family may purchase memberships/tickets for all of the facilities.

Use of the golf park during winter months was a topic not addressed in this project. However, winter activities could prove to be profitable to the golf course owner provided care is taken not to damage the golf course or other primary recreational amenity areas, hindering or diminishing conditions during the summer, as the golf course and fair weather facilities will be the primary
means of revenue.

The golf park was created from 'scratch' and can therefore follow guidelines for construction of the additional facilities to be implemented on the site. The golf park required more land than a traditional golf course and in this study I worked with undeveloped land to allow for maximum suitability between areas of activity.

Creation of the golf park created no extraordinary amounts of pollution or other adverse environmental condition. The natural systems implemented in the golf park plan will, if anything, have less affect on the environment than a traditional golf course.

Any new venture requires risk. However, in my study I assumed that this idea would be a success and therefore I did not concern myself with studying the marketing strategies related to acquiring clients for the golf park. On the other hand, I assumed that realistically the idea of a golf park would be controversial and widely rejected. People are comfortable with the norm and it will take time for the new golf park concept to be accepted primarily by developers and golf course owners but also by the area public.

Before undertaking the task of designing the golf park I was compelled to decide what geographic, topographic, space, density and other conditions would have an effect on the park. There were several factors and the consideration of these factors had an effect upon the location of my site. The considerations were:

1. The park should have some topographic relief for two reasons: aesthetics and exercise productivity. The presence of some form of relief in the topography allows joggers and cyclists the opportunity to get a productive workout if they desire. This is important in an area where there is notoriously flat topographic conditions. Also, the rolling hills add to the aesthetic value of an area, which is an important aspect of the golf park.

2. The golf park should be located near a major road which leads into a medium- or large-sized city. This is to ensure that people can easily get to the park without maps or extensive directions ("Head east on state road 26 for four miles; it's right after the bridge. You can't miss it.") It also adds to the publicity of
the park by making it easily visible to the thousands of people who drive by it every day.

3. The golf park should be located near a medium- or large-sized city. This was to ensure the marketability of the park. (My assumptions stated that I was not concerned with marketing the golf park, but this premise for the site at least allowed for the feasibility that the golf park could be successful.)
**Background**

This chapter contains a compilation of the research which has been done for the Wildcat Creek Golf Park project. The research was divided into sections: golf park amenities and supporting golf park facilities.

**Golf**

What is a good golf course? What makes a good golf course is made up of each person's feelings about golf but some good general ideas follow:

... it creates a desire in the golfer to return and play it again and again. He might not be able to explain why the attraction exists--it just feels good!

... it is one the real estate developer, municipality, daily fee operator, resort or private club can afford to maintain. (A golf course might be very dramatic, picturesque, and striking in its visual effect, but if it is too difficult to play, the average golfer, after playing it once or twice, will decide that he is not enjoying it and will never go back again. Income from green fees will diminish and the quality of maintenance will suffer. Poor maintenance will cause a further reduction in rounds of golf played. Also, because of excessively steep mounding and other design features, maintenance costs may be higher than usual.)

... it is one in which the design relationship between the parking area, the pro shop, the practice tee and green, the first and tenth tees, and the ninth and eighteenth greens work well.

... it is one where a routing plan takes advantage of existing topography.

... it is one, where, if possible, the order of holes (par-wise) should be 4-5-4-3-4-5-4-3-4 for each nine holes.

... it is one where taking advantage of existing topography means using all of the interesting features existing on the land in the design. Where nature has not provided interesting contours or other features, we must attempt to match nature's theme and make it appear that only clearing, floating, and planting was required to develop the golf course.
... it is interesting and challenging, but not impossible or unfair, for all types of
golfers, including low, middle, and high handicappers and, very importantly,
the ladies. (use of multiple tee locations and positioning hazards so that the
longer hitter is faced with the need for accuracy).
... it has the practice fairway facing toward the north.
... it has individual holes which create a complete picture within itself, with each
area of the hole being a unified part of the total effect.
... it has each hole aimed in a somewhat different direction than the previous
hole, if possible, to prevent monotony of the view from the several holes as
play progresses.
(Arthur Jack Snyder, from insert found in Turf Management, by H. Burton Musser).

Tips on course planning...
...The distance between the green of one hole and the tee of the next should
not be more than 75 yards, and a distance of 20 to 30 yards is recommended.
Tees should not be closer than 20 yards for safety reasons.
...The first tee and the ninth green of the course should be located immediately
adjacent to the clubhouse. If possible, bring the sixth green close to the
clubhouse, also, so that a player who only has about an hour to devote to his
game can comfortably play a few holes.
...As far as is practical, no holes should be laid out in an east-to-west direction.
...The first hole of the course should be a relatively easy par-4 hole of no more
than 380 to 400 yards in length. It should be comparatively free of hazards or
heavy rough where a ball might be lost, and should have no features that will
delay the player.
...Generally speaking, the holes should grow increasingly difficult to play as the
round proceeds. It takes a golfer about three holes to get well warmed up.
...Whenever practical, greens should be plainly visible, and the location of
sand traps and other hazards should be obviously apparent from the
approach area, which is that portion of the fairway extending tee-ward for
approx imately 125 yards from the green.
...Fairways sloping directly up or down a hillside are bad for several reasons: (1)
steep sloping fairways make the playing of the shot by the majority of players a matter of luck rather than skill; (2) the up-and-down climb is fatiguing to the golfer and (3) turf is difficult to maintain on such an area.

...the par-3 holes should be arranged so that the first of the two is not earlier in the round than the third hole and the other one is not later than the eighth hole. Par-3 holes should not be consecutive.

...Trees, slopes, creeks, lakes and other natural details will provide hazards enough for the average well designed small town course. If sand traps around the greens can be well maintained, their use provides the course with a feature that is of metropolitan course character. But if the construction or maintenance cost rules out such traps, turfed hollows in which the grass is allowed to grow several inches high and of a design that fits in the natural surroundings will do well.

**Mapping the course.** A course (each nine) should measure over 3,000 yards, preferably 3,200 yards. Par for the course should be 35, 36, or 37 (National Golf Foundation 7).

**Length and number of holes.**

<table>
<thead>
<tr>
<th>Par</th>
<th>Number per 9</th>
<th>Length</th>
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<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>130-250</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>251-470</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>471-521+</td>
</tr>
</tbody>
</table>

**Women**

<table>
<thead>
<tr>
<th>Par</th>
<th>Number per 9</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>up to 210</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>211-400</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>401-575</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>575+</td>
</tr>
</tbody>
</table>

**Minimum lengths.** Minimum length of a par-4 is 251 yards. The same objection attaches itself to par-4 holes even as long as 350 yards where physical peculiarities are lacking. This distance, from 251 to 350 yards is known among golf architects as "No Man's Land", a zone to be avoided if the course is to be genuinely popular with golfers (NGF 7).
Layout for par-4s. Par-4s should be graded up by easy stages to the upper limit of the par-4 range (470 yards) (NGF 7).

Clubhouse location. The best location for the clubhouse generally is convenient to, but removed from, the highway. Road construction and maintenance costs must be kept in mind when location the clubhouse (National Golf Foundation 6).

Drainage. "Drainage improvement is needed when any conditions occur which prevent the movement of surplus water out of the soil or concentrate water in limited areas. The methods commonly employed are improved surface drainage, installation of tile drains, or modifying the physical condition of the soil to facilitate water movement."

Effects of poor drainage. "Saturated soil affects playing conditions adversely. Players cannot walk or make a satisfactory shot on wet soggy fairways. Tractors cannot operate on them. Slippage of the traction wheels prevents adequate mowing and scars the turf. A waterlogged green lacks resilience, the surface bakes badly because of sparse grass coverage, and putting quality is poor because of surface irregularities caused by deep ball marks and footprints. A saturated soil on tees does not provide the firm stance required for tee shots. Poor drainage reduces the use of a course. Swampy fairways and rough compact greens are not attractive and result in loss of membership by private clubs and reduced revenue on public and fee courses. Wet soils are cold soils. Growth starts slowly in the spring and stops early in the fall. Where grass is thin because of poor drainage, freezing may cause honeycombing and heaving of the soil, with further loss of grass by winterkilling. Poor drainage checks the activity of beneficial soil organisms and causes shallow root systems. Grass with a shallow root system is apt to wilt on hot windy days. Unless watered lightly several times a day the turf withers, turns brown, and dies. Then scald and algae become pronounced. Poor drainage destroys soil structure, which reduces the ability of the soil to store ailand moisture. It also hastens the development of soil acidity" (Musser 51).

Grasses. The best grasses for the different areas of a golf course are listed below:
<table>
<thead>
<tr>
<th>Area</th>
<th>Conditions/needs</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>green</td>
<td>moist, cool (Indiana)</td>
<td>bentgrass</td>
</tr>
<tr>
<td>tee boxes</td>
<td>fast growing, durable, can withstand close clipping</td>
<td>bluegrass/bentgrass</td>
</tr>
<tr>
<td>fairway</td>
<td>can withstand close clipping, heavy fertilization, watering</td>
<td>colonial bentgrass/ creeping bentgrass</td>
</tr>
<tr>
<td>trap facings</td>
<td>holds sandy soils</td>
<td>lovegrass/ sheepfescue</td>
</tr>
</tbody>
</table>

(Musser 88-92)

To ensure the safety of all other users of the golf park there should be a safety zone which extends 150 feet from the centerline of all fairways. This distance is a standard safety distance for property lines which run parallel to a golf hole.

(Taken from a conversation with Don Lapierre at the Hoosier National Golf Course, Bloomington, Indiana, February 2, 1991)
Bicycle Trails.

User profile. This survey of bicyclist preferences showed bicyclists tended to travel in small groups. Fifty-one percent (51%) traveled in pairs. Other preferences are listed according to degree of importance.

User preferences: 37% scenic beauty
24 smooth paved surfaces
13 surrounding trees/ forest environment
likes......
10 separation from auto traffic
8 good trail maintenance
7 peace and quiet
6 shade and coolness

16% crowded
15 stretches of bad pavement
14 conflicts between autos/bikos dislikes......
11 inconsiderate bikers
6 too short
6 too many pedestrians
3 too narrow

(Trends 22)
The width of a bicycle trail should be a minimum of eight feet to allow for two bicycles to ride side-by-side without the risk of danger.
The surface should be of a hard construction material. Most commonly asphalt or concrete is used.
Jogging.

Course environment. Many joggers are fortunate to have access to environments that are scenic, peaceful, and open. Jogging courses laid out over such an area could be compared to a cross-country course. The anticipation of viewing something different each day along the same route motivates many joggers to seek out such an environment *(Williams 78)*.

The best jogging environment should meet the following criteria:

* convenience
* smooth dirt or grass surface
* inclines: if you are an advanced runner you may seek out hills; otherwise be content on completing your distance on flat terrain.
* free of auto traffic
* free of animals, reptiles, and insects: jogging with a dog in hot pursuit is not the most enjoyable way to increase intensity.
* pleasant surroundings: a natural environment provides many pleasant things to look at and to listen to. Such an environment will make the miles fly by, as well as provide shade and protection from the wind *(Williams 74)*.

Fitness aspects. A runner will burn one calorie per kg (2.2 lbs) of body weight for every km (.62 mile) jogged. This extrapolates out to about 100 cal/mile *(Williams 20)*. Jogging trails can be measured out in distances to allow runners of different skill levels to run a measured distance. There can be short trails for elderly people or beginners to jog or walk, and longer (several miles, throughout the park) with paths ascending the slope of the hill for the experienced runner.

Trail construction materials. Jogging trails should be made of dirt or a soft material to prevent shock to the runner's feet *(Williams 24)*. (Dirt trails will not be practical or aesthetic in this case so an alternative should be found. Possibilities: asphalt - not as hard as concrete, but will drain water off and not create a muddy mess. Gravel - though provides a less jarring surface on which to run it shifts and requires more maintenance and will not 'repel' mud as
well.

Course surfaces. The degree of impact upon landing and the amount of force necessary in one's push-off is influenced by the surface upon which one jogs. While a soft surface, such as sand, absorbs most of the 80 psi exerted on your foot it requires more effort during the push-off, since you must push back the soft surface. The reverse is true on a hard surface, such as asphalt or concrete (Williams 77).
**Fishing**

Fishing ponds should vary in depth. Shallow depths for warmer spring water temperatures, and deeper water depths for cooler summer temperatures. Grass patches and sandy/gravelly bottoms to make all the fish feel at home (Parsons 189).
Site Location

As the name implies, the golf park is located near Wildcat Creek. This was considered an aid to give people a reference as to the general direction of the park as well as providing the park with an attractive name.

The golf park is located in the Midwest. This indicates some of the character which may be found on the golf park when completed. I feel that to successfully design a park of this type it should remain in its regional and immediate context. This applied for the character of the park as well as the actual look and construction of its amenities. Wildcat Creek Golf Park, located just to the east of Lafayette, Indiana, is in the northwest part of the state. This area of Indiana was on the eastern boundary of the Great Plains which once stretched across most of the Midwest. Some of the character of the Plains is evident in the design of the park.

Specifically, the golf park is located approximately six miles to the east of downtown Lafayette. Because Lafayette is a fairly large city, the park actually is quite close to many of the residential areas of the city. I-65, a major north-south interstate highway runs just four miles to the west of the park. Wildcat Creek Golf Park is bounded on the north by Indiana State Road 26, which is a major state highway running east-west through many smaller towns and runs directly into downtown Lafayette. Two county roads bound the east and west property lines of the park. The roads are sparsely populated with houses. A quarry is located about a half mile south of the park on one county road 625 E. The 246.87 acre site is oriented north to south and is approximately twice as long as it is wide.


**Site Analysis**

The following data was collected to properly design the golf park. The collection included the analyses of the site's soils, slopes, vegetation, floodplain information, and general desirable features of the site which were used in the design of the park.

**Soils analysis:**

1. **Soil survey of the site.**
2. **Primary soil types:**
   - **Map Classification**
   - **What it means**
   - **Ga**
     - Genesee fine sandy loam, 0 to 4%
   - **Gc**
     - Genesee loam, 0 to 4%
   - **Gd**
     - Genesee loam, high bottom, 0 to 3%
   - **Fa**
     - Fox loam
   - **Fb**
     - Fox loam, 0 to 3%
   - **Fc**
     - Fox loam, 3 to 6%
   - **Fj**
     - Fox loam, 12 to 25%
   - **La**
     - Linwood muck
   - **Hb**
     - Hennepin loam, 25 to 50%
   - **Hd**
     - Homer silt loam, 0 to 3%
   - **Ro**
     - Russell silt loam, 3 to 8%
   - **Ws**
     - Westland silt loam, 0 to 3%

(Soil Survey map of Tippecanoe County, Indiana)

    The primary soil types throughout the site are loams, sandy loams, or silt loams which create no problem for constructing a golf park. The small area of muck on the site is in the northeast corner and will not interfere with any construction.

After further analysis of the soils, I divided the soils into five categories: suitable, suitable-to-marginal, marginal, marginal-to-poor, poor. These rankings denoted the suitability of the soils to support a golf course. The golf course and building structures were items most affected by the soils. It was most desirable to locate the golf course on soils which were suitable to keep earth-
moving to a minimum. The area on this site which was most suitable was in the southwest corner. There was not enough suitable soil, however, to place the entire golf course on this part of the site so some earth-moving will be required to construct the golf course.
**Slope analysis.**

The best slopes for a golf course are slopes between five and fifteen percent. There are a number of areas on this property which met the criteria for a good location for a golf course. Other areas were best suited to jogging and bicycling: flat stretches of land which can be made into comfortable trails. For the experienced or adventurous cyclist/jogger there is a large ridgeline which runs southward about two-thirds of the length of the east boundary and along the entire southern boundary of the site. The elevation difference is as much as seventy feet from the lowest point on the park property to the highest point. Generally the entire area consisted of flat or rolling terrain with only the severe slopes of the ridgeline posing the problem of very steep slopes. The area of the entire property which consisted of the ridgeline's slope was not significant and the benefits of having the ridgeline outweigh the disadvantages of the severe slopes with which must be contended.
Floodplain analysis.
The primary concern for analyzing the area which would be affected by floods was when considering permanent building structures or golf courses. The one hundred year floodplain affects the Wildcat Creek Golf Park site but does not affect any placement of permanent building structures or golf holes. The floodplain area was restricted to the northwest corner of the property which was planned for parking and a buffer area between the clubhouse and State Road 26. The one hundred year floodplain was at elevation 685. The clubhouse, although it was located in the northwest corner of the site, would not be affected by the floodplain because it sits on a knoll. The clubhouse was constructed with a floor elevation of 690. Holes one, nine, and eighteen were located in what is presently the one hundred year floodplain but at a minimum the tees, landing areas and greens of these holes were elevated above the one-hundred year floodplain mark. The fill for this elevation process comes from the lakes to be constructed to retain the water necessary for watering the golf course.
Vegetation analysis.

In the past, the entire park property was vegetated but cultivation has cut the woods into small sections primarily delineated by the areas which were not able to be cultivated. Today, there are three major areas of vegetation on the site. First, the northwest corner of the site has a strip of native trees. This area is immediately adjacent to county road 625 E. It is the edge of a large wooded area which extends westward from the county road. This area of the site is the lowest part of the Wildcat Creek Golf Park site and the trees are native lowland trees. County road 625 E, which borders the site to the west has a bend in it due to the oxbow of one of the branches of Wildcat Creek which is located to the west of the site. The entire area to the west of the county road is prone to periodic flooding and therefore contains vegetation which can withstand such wet conditions. As a note, the oxbow of Wildcat Creek which is located to the west of the park has been cut off and eventually the area will begin to fill in and the nature of the vegetation will slowly change through time.

The second area of vegetation is located on the northeast corner of the site. This area of vegetation is larger than the one on the northwest corner of the site and it provides a beneficial noise buffer from the passing cars which drive by along the highway to the north. This wooded area extends to State Road 26 on the north, to county road 650E, and runs along the section of Wildcat Creek which meanders through the park. This area is also a lowland area and is populated with trees which thrive in these conditions.

The third, and largest area of woods is located along the ridgeline. The line of trees begins on the bottom of the ridgeline where farm implements could no longer travel due to the slope and cover almost the entire ridgeline. There is a large area on the north end of the ridgeline which has been cultivated for experimental crops. The rest of the ridgeline, however, is covered with trees. This area of trees will provide a relaxing, shaded area for runners, bicyclists, golfers, and picnickers.

The majority of the remainder of the property has been cultivated and is no longer vegetated.
Natural Features

There are two primary features which make this park site valuable and interesting. The first, the park’s namesake, Wildcat Creek. The other is the interesting ridgeline which covers a large portion of the site.

Wildcat Creek travels in an arc in the northeast corner of the site. It runs through a wooded area and will travel close to where the clubhouse is sited. The creek has one small island, or sand bar, at this bend which runs along near the clubhouse area. This tributary and the other, larger, branch of Wildcat Creek to the west of the park, run northward until they meet the Wabash River to the north of Lafayette. There are also several intermittent streams which run down from the ridgeline onto the site which will be used for the benefit of the park’s users.

The other attractive feature of the park is the large ridgeline which extends southward along the east boundary of the park and turns west at the south end of the park. There is an elevation difference of nearly seventy feet from the lowest point in the park to the highest point of the ridgeline. The ridge will provide exercise opportunities for joggers and bicyclists, scenic views for picnickers (and joggers and bicyclists) and exciting golf shots for golfers.
Design Concept

The preceding information provided a background to what has been designed as Wildcat Creek Golf Park. The remainder of this paper will deal with the physical appearance, sizes, shapes and all other features which will become the essence of Wildcat Creek Golf Park.

The park was designed to function as a single working entity rather than separate functions which are placed within the same boundaries. Beginning with a central organizing unit (the clubhouse) the park extends out into the site. Much like the heart would do for the body, the clubhouse serves as the point at which all activities begin and end.

The park was designed with the surrounding land in mind. The park is located in a rural area and reflects the natural features which are contained in the area. The design reflects the regional, or Midwestern, context in which it exists.

The design of the park is derived from two historical aspects of the region: the prairie, whose borders extended to this area of Indiana, and the extensive woodlands which were a part of much of the Indiana landscape. Much of the cultivated areas of the park are planted in native prairie grasses to reflect the flat prairies which have almost been lost in the Midwest. The prairie area of the park is located closest to the entrance area. It is placed in the unwooded area around the clubhouse, extending to county road 650 E on the north side of the ridge, and along county road 625 E for almost the entire length of the park. The woods are visible behind the prairie. The wooded area of the park consists primarily of the trees which line the ridgeline and cover the top of the ridge. Some trees have been added to the golf course to provide shade and protection for the golfers, but the effect of a definite area of prairie and woodland prevails.

The park reflects its natural surroundings. The area around the clubhouse is more structured, however, and the structure diminishes as the users
venture further out into the park. Several large recreational areas around the park are all that remains to the structure of the clubhouse area. These large recreational areas are round in shape to create a more natural form and to conform to the shapes of the clubhouse area. The clubhouse rests on a knoll which is very circular. The inspiration for the curvilinear shapes throughout the park originated from this knoll.
Park Construction

Lakes.

The most obvious change to the site is the construction of five lakes. These lakes have been created to serve two purposes. The first purpose is to provide water for the golf course. The turf on the golf course requires one inch of water per week over the entire playing surface. The lakes were created to meet the demand for the water without piping water out from Lafayette. The lakes will be recharged from runoff from the ridgeline. The lakes have been placed in low areas of the site and are connected to the intermittent streams which run from the ridge. The lakes connect to each other through the intermittent streams and may be maintained at specified levels at the levees or dams at the low end of the lake.

Clubhouse.

The clubhouse is located at the north end of the site on the circular knoll. Its shape reflects the circular theme of the park but the exact form of the clubhouse has not been determined yet. The clubhouse houses several activities which are related to the function of the golf park. It is a multi-story building and each floor serves a different function. The basement houses the storage facility for the golf carts. It also serves as a minor mechanical area for the carts and other mechanical equipment which are housed in the building. The first floor contains a pro shop, indoor pool, dressing rooms, snack bar, and some additional storage areas. The pro shop will sell golf, jogging, and cycling-related merchandise to serve all the people who will be using the facility. (Fishing equipment will be sold at the concession area at the other end of the park). The indoor pool will serve other family members who are not interested in the outdoor activities which are available at the park. The park is intended to be a family-oriented facility and attempts to provide activities for all members of a family. There are two dressing rooms (men’s and lady’s) which will serve as dressing rooms and bathrooms. The dressing rooms are also equipped with showers. There is a snack bar on the first floor to sell snacks to golfers or

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joggers as they return to the clubhouse area.
The second floor houses a restaurant, conference room, and viewing area which faces the golf course. The restaurant will serve meals from morning to late evening, so as to serve direct users of the park as well as others who wish to come to Wildcat Creek Golf Park for a good meal in pleasant surroundings. The conference room is available to businesses who wish to have a conference with all the amenities of the park at their disposal. A company may wish to rent the entire park and hold a conference and golf tournament for the business and recreational needs of its employees. Because it has other amenities it is relaxing and recreational for wives and children, also. The clubhouse area provides outdoor spaces for viewing or relaxation. Patios or decks are provided to allow people to get outside and enjoy the outdoors and the wildlife during warm weather.
A large putting green is provided for the benefit of the golfers. It is located near the clubhouse.

**Parking.** The parking lot is located to the north of the clubhouse. It is a 300-car lot situated between the clubhouse and State Road 26. The parking lot will be on a lower level than the clubhouse and will be screened from view. There was concern that building the parking lot directly in front of the clubhouse would detract from its beauty, but given the elevations of the parking lot and the clubhouse there will be no problem with the aesthetics of the site. The parking lot conforms to the overall curvilinear concept of the park.

**Maintenance buildings.** The maintenance buildings have been placed in the northwest corner of the property. The maintenance building serves as the area where all the major maintenance and mechanical work is to be done. A nursery for maintaining the plants in the park is included in this area.

**Concession buildings.** There are two concession buildings within the park. The primary building is located at the south end of the fishing lake and serves as the ticket booth for the sale of fishing tickets. The concession buildings will serve as refreshment stands, selling drinks and snacks, and will contain a men's and women's restroom in each building. The second concession
building will be located in the large recreation field at the top of the ridge. It will be near the eleventh green, accessible to golfers as well as joggers and cyclists.

**Trails.** The trails will accommodate both joggers and cyclists, and even golf carts at times. The width of a bicycle trail needs to be eight feet wide, jogging trails should be four feet wide. Combined trails are ten feet wide. This eliminates a great expanse of asphalt running throughout the park, and when joggers and cyclists meet they can slow down and pass safely within a ten foot area. At times the trails splits, allowing joggers and bicyclists each their own space. Where they split, the trails are ten feet in width.

**Picnic sites.** Picnic sites within the park are informal. Picnic tables and shelters are provided within the recreational or picnic spaces, but picnickers will be encouraged to use open spaces for a picnic provided it is in a designated picnic or recreational area. This allows people to get good views of the water, the ridgeline, or the golfers, whichever they choose, without cluttering the spaces with picnic paraphernalia.

**Recreational fields.** The recreational fields are circular in shape. This is a key to people that the space is provided solely for the purpose of recreation or picnicking and not golfing. The jogging/bicycle trails connect all of these circular recreational areas.
Conclusion

The design of Wildcat Creek Golf Park has been very fulfilling to me as a designer. I have had the opportunity to work on and learn a great deal about the design and construction of golf courses. I have also had the challenge and opportunity to attempt to integrate my golf course into a park setting. Wildcat Creek Golf Park convinces me that the integration of a golf course and a park, complete with other amenities is not only feasible, but can be an admirable and beneficial entity. Each part of the golf park complements the other parts and the whole is, as they say, better than the sum of its parts.
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Interviews
