

Reclaiming Land for Golf

By Paul Albanese

I have heard it all when it comes to designing a golf course on a brownfield: Can you design the methane stacks as hazards on the course? If you take a divot, is there an explosion? Although those questions are easily answered with a simple shake of the head and a smile, there are considerations to creating a golf course on a brownfield that merit attention.

Although creating a golf course on degraded property is not a new idea, the combination of current growth in brownfield redevelopment, governmental incentives to transform blighted property and golf operators looking for higher density markets has created a renewed interest in pursuing the option of developing a golf course on a brownfield.

Three Reasons Golf Works

A brownfield site is a viable consideration for a golf development for three reasons:

 A golf course, unlike many other forms of open space, is revenue generating.

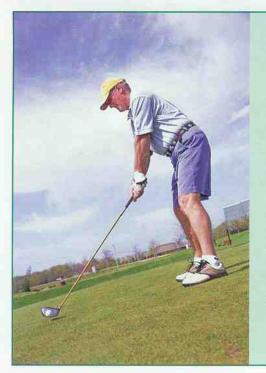
- Brownfield sites are often in higher golf population markets than typical greenfield golf sites.
- When combined with constructing the cap for the brownfield, there can be an economy of scale not usually found in golf construction.

Why is the development of a golf course a better deal than some other type of open space, such as a park or ball field? The main reason is the revenue a golf course can generate. Unlike other recreational land uses, a well designed and properly operated golf course can operate in the black and earn a return on the investment made in the project, all while functioning as community open space. Brownfield golf projects can generate gross revenues of well over \$1 million per year depending on the specifics of the project.

Golf course developers want to be where there is a hearty market for golf. Many greenfield sites, often associated with suburban housing developments, are located farther away from high population centers in the midst of suburban sprawl. Brownfield sites are often in highly dense population centers, which translate directly to a larger proportion of golfers, which further translates to a more robust business plan.

The usual requirement of capping a brownfield with clay will often necessitate hundreds of thousands of cubic yards of material to be engineered upon the site. Similarly, a typical golf course design (on a flat site) can require similar quantities of earthmoving, which is one of the more costly items of a golf project.

So, when the earthmoving needed for the capping of the brownfield is combined with the earthmoving needed to create the golf course, there is a significant economy of scale, which lowers the cost of developing the golf course project. Also, because many brownfield projects are in areas of high development, there are usually other sources of free fill material. And, in some cases, there are developers willing to pay to dispose of their excess fill — which simply adds to the



Comparison of Brownfield Golf Development versus Typical Golf Development

(assuming similar, medium range golf products)

	Typical	Brownfield
Rounds of Golf	20,000	25,000*
Fee for Round	\$40	\$40
Income	\$800,000	\$1,000,000
Costs		
Clearing/Demolition	\$400,000	\$200,000**
Earthwork/Grading	\$600,000	\$200,000**
Features	\$500,000	\$500,000
Irrigation	\$750,000	\$750,000
Drainage	\$300,000	\$300,000
Grassing	\$400,000	\$200,000**
Grow-In	\$350,000	\$350,000
Total	\$3,300,000	\$2,500,000

- * Assumes brownfield in a higher density population area
- ** Paid for in part by capping fund

value of the golf project without a significant cost increase.

Case Study: Wyandotte Shores

Wyandotte Shores Golf Course, located just south of Detroit, is a stellar example of how to transform a community eyesore into a community asset. Bob Thiele, the general manager of the golf course, states, "Wyandotte Shores Golf Course is the best project Wyandotte has ever developed."

I was the project architect for this site working for Jerry Matthews. We transformed a degraded, abandoned chemical factory into a profitable golf facility that is integrated with the community.

Wyandotte Shores, as the name alludes to, is located adjacent to the Detroit River with wonderful vistas of the water and the Detroit skyline. Once a BASF Corporation chemical factory, the site had been contaminated by many chemicals over its 100 years of history. After working closely with the Michigan Department of Environmental Quality (DEQ), it was determined that the brownfield site was not suit-

able for anything other than recreation. However, Wyandotte wanted to create an entity that would generate revenue, while still providing open space to the community. So, a golf course, designed in conjunction with a public park, was the vision for the project.

Unlike many golf course projects, this golf course is located in the heart of a highly populated area, which makes filling their tee sheet an easier task than having to cajole golfers to drive a long distance to play their facility. In fact, similar to how the classic golf courses of Scotland function as vital pieces of their community structure, the Wyandotte Shores Golf Course was designed to reflect and integrate with the overall urban design of the city.

Bob Thiele is thrilled with the location, and said, "due to the population base, we are putting 100 to 150 people per day through the course because this is a great spot for a golf course."

As part of this project, the site needed to be capped with fill material.

Again, working closely with engineers from BASF Corporation and the DEQ, we created an integrated grading and earthworks plan that ensured public safety and enough material to create an interesting and dynamic landscape on which to route the golf course. This also significantly reduced the overall cost of the project.

Golf courses have the dual benefit of being both community open space and revenue generators, as evidenced by the Wyandotte Shores Golf Course. The duel benefit of brownfield sites being located in good markets for golf and the economies of scale created during the construction process will continue to make reclaiming land for golf, if you will excuse the pun, a true birdie.

As Bob Thiele from Wyandotte reiterates, "The golf course not only makes us money, but it is the gem of the community." **BFN**

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