



# Perils and Pluses of “In-House” Renovations

Some jobs are appropriate as in-house projects, but some are better left to outside contractors.

BY JAMES F. MOORE

There was a time when Green Section agronomists discouraged superintendents and course officials from attempting in-house renovation projects. For a variety of reasons (many of which are discussed below), far too often such projects resulted in substandard work. In addition, the overall quality of the rest of the course often suffered as the staff’s attention shifted to the project and away from the day-to-day care of the facility. Making matters even worse was that the projects often took forever to complete, with significant progress measured in weeks or months rather than days.

Of course, not all in-house projects were so dismal. Many superintendents delivered outstanding finished products and saved their courses a great deal of money — a one-two punch that in today’s economy is more appreciated than ever before. How did they do it? The remainder of this article will highlight good and not-so-good approaches to tackling in-house construction projects.

## BE HONEST

Be honest with yourself and your employer regarding your abilities. A large number of golf

Let your permanent staff be a part of the project by hiring temporary help for the routine care of the course. This builds teamwork and their pride in the course. It also helps guarantee a successful project.

course superintendents “came up the hard way” in that they started at low-budget courses where, in addition to being in charge of the grounds, they repaired equipment, patched the roof, and fixed the water heater in the clubhouse. As a result, they developed the skills and confidence

dozer to shape the subgrade and surrounds quickly and efficiently.

Smart superintendents recognize their limitations and don't hesitate to call on other professionals to help them with a project. An irrigation designer can provide the plans for



Converting an overhead irrigation system to a subsurface drip system is a project that can be accomplished in-house with the right tools.

to tackle almost any construction or repair task. Such a person almost never says, “I don't think I can do that.” Although superintendents with such a wide range of skills are excellent candidates to attempt in-house renovation projects, they often make the mistake of overestimating their ability to handle the scale of the project. For example, while every experienced superintendent is well versed in all aspects of irrigation system repair (with the exception of the pump station) and would have no problem adding a few new heads to expand coverage, this does not mean they have the organizational skills, time, or resources to install an entirely new irrigation system. Another good example is green construction. Building a green to USGA guidelines is not a difficult task in terms of complexity. However, few superintendents have the experience on a

large-scale expansion of the irrigation system. The superintendent can then gradually expand the system in-house, but in small increments that don't exceed available resources. Hiring a professional dozer operator with golf course experience to do the shaping of green surrounds and green cavities can cut the time for green construction in half and allow the in-house staff to concentrate on installing the drainage, rootzone mixture, and planting.

### DO NOT ATTEMPT DESIGN WORK YOURSELF

Though many superintendents have a wide range of mechanical abilities, very few have architectural training. Even those who might be able to conceptualize a design change to the course would be wise to avoid taking on such

responsibilities. The most highly respected and talented architects in golf constantly deal with clients second-guessing their work. There are also liability issues regarding the safety of changes made to the course. Without the credibility of a professional designer, you might expose yourself and your employer to legal action should someone be injured. For the superintendent, this is a case where you simply cannot win. When it comes to adding or relocating greens, tees, and bunkers, convince your employers to obtain a professionally designed plan for you to follow.

### VISIT SIMILAR PROJECTS

When it comes to construction, one of the greatest advantages golf course builders have over superintendents is that they have learned which equipment is best suited to the task, the most efficient work flow to follow, and what problems they are likely to encounter. Prior to planning any in-house project that involves heavy equipment, the superintendent and perhaps the assistant superintendent should visit other courses that have successfully completed

similar work, as well as courses that have projects currently underway. The cost of three or four such trips almost certainly will be recouped many times over.

### HIRE EXTRA LABOR

A common and serious mistake made when attempting in-house projects is to fail to add the extra labor necessary to complete the work without letting the rest of the course suffer in appearance. The labor requirements for projects of any significant size should be estimated and viewed as a separate crew from the existing staff. However, just as most superintendents find they greatly enjoy the challenge and changes in routine that in-house projects provide them, the same is true for key employees. Consider utilizing the newly hired “extra” employees for the routine care of the course as much as possible, and shift your most reliable, seasoned staff members to the project. This not only will help ensure that the work is done more quickly and expertly, it will result in a team-building experience that will inspire pride in the project and the facility.

One of the keys to a successful in-house project is to have the right equipment. In this case, the superintendent found a great buy on a well-worn dump truck that was repaired and kept serviceable for the life of the project.



This in-house project was much larger than most superintendents would have attempted. However, in this case the superintendent utilized an architect to develop the detailed drawings of a new stone retaining wall. A professional shaper was contracted to do the heavy soil work, along with surveying and staking to provide guidance for the in-house crew.

## KEEP YOUR EMPLOYERS INFORMED

Superintendents should always keep in mind who is paying for the project and make every effort to keep them informed of how it is progressing. It is important to share good news and setbacks, but avoid making excuses. Prior to sharing a major setback on a wide-scale basis, be sure that you also can share the plan that has been put into place to deal with the problem.

Periodic tours of the project offer a great chance for your employers and players to see your staff in action. Email updates and blogs (complete with pictures) are great ideas, but keep them brief and to the point and send them only when you can show progress.

## DOCUMENT THE FINISHED PROJECT

There are three very important reasons to document your project. First, the superintendents who follow you need to know what you have put into the ground and exactly where it is. They also need to know the exact construction method in case they need to repeat the work elsewhere on the course. Secondly, the owners of the course deserve to know exactly how their property has been improved and the final cost of the project. Finally, assuming you have done a good job, you are going to want to share your accomplishment with others — perhaps future employers. A resume that includes a portfolio of the projects you have accomplished (complete





with before and after pictures) will help bump your application nearer to the top of the stack.

## IN-HOUSE PROJECTS

The key is to start small and work your way up as you gain experience with project management. Even though you may have the resources at your disposal to tackle a big project, it is equally important to have the time-management skills that are specific to project work. For example, if you are going to redo bunkers, start with one or two and keep detailed records of the time, labor, and expenses necessary to do the job in a first-rate manner. You then can extrapolate these numbers to a greater number of bunkers with a higher degree of accuracy. It is also extremely important to attempt only what you can do very well. It is much better to build two bunkers perfectly than ten in a haphazard manner.

In-house projects that experienced superintendents should be able to manage include:

- Bunker reconstruction.
- Green resurfacing (with contractors brought in if fumigation is necessary).

- Green reconstruction (being sure to involve an architect and shaper if design changes are made).
- Tee leveling (renting laser equipment is a must).
- Expanding the irrigation system.
- Converting portions of the irrigation system from overhead to drip, to conserve water.
- Installing supplemental drainage and sumps (may need to involve an electrician for buried, high-voltage wiring).
- Nursery green construction.
- Wash pads and fuel containment structures.
- Topdressing storage structures.
- Rain shelters (consider legal aspects of lightning “protection”).
- New cart paths and extensions of existing paths.
- Practice facilities (with an architect involved to ensure safety).

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Planning for in-house projects should include the cost of acquiring the equipment necessary to complete the work as efficiently as possible. In this case, an agricultural belt conveyor was purchased to facilitate moving sand out of bunkers on a project in which the underlying bunker liner prevented the use of heavy equipment.