



Construction of number 4 green on new executive-length Fairgreen Golf Course in New Smyrna Beach, Fla., designed by golf architect William W. Amick. During and before this stage especially close attention must be paid to the basics of turfgrass establishment.

rain a year, but recently installed an irrigation system to carry over during the summer dry season.

Irrigation system design is a part of the architect's responsibility to his clients. Adequate supplies of water must be applied to produce the quality of turf demanded by golfers. Recent droughts have affected this thinking in the past year. It would be great if we could let our courses dry out a little!

At the same time we must have soil mixtures which allow for the internal movement of moisture through the soil. The USGA specification for green construction is a good catch-all spec, and it should be utilized in most areas where there is heavy rainfall. However, where normal precipitation is less than 15 inches a year I do not believe it adds anything but cost. I do not mean to imply that we can forget subsurface drainage entirely where an impervious subgrade exists, but we are successfully handling the situation by using drainage sumps at the low points in the subsurface contouring.

In arid regions most drainage problems on greens are caused by improper irrigation practices, not by excessive rainfall.

There is one other important consideration regarding drainage, especially on greens, and that is to provide adequate surface drainage for heavy precipitation. If the green contouring can be constructed so that water drains quickly off the green surface, it greatly reduces the need for more costly internal drainage systems.

Of course, on greens which are built completely with permeable material we do not have the problem in the first place.

The fifth basic: planting time

Construction schedules should always take into consideration the required dates for seeding and stolonizing for the best growth of the grass. In Hawaii it doesn't make much difference, as long as the site is somewhere near sea level. In the arid west, where construction work can go on almost year-round, we will plant cool season grasses anytime during the growing

period — allowing, of course, time for adequate growth before the dormant season comes. In the warm and hot areas we will plant bermudas anytime from April to September. When we plant both warm and cool season grasses on the same site, then we run into some scheduling difficulties.

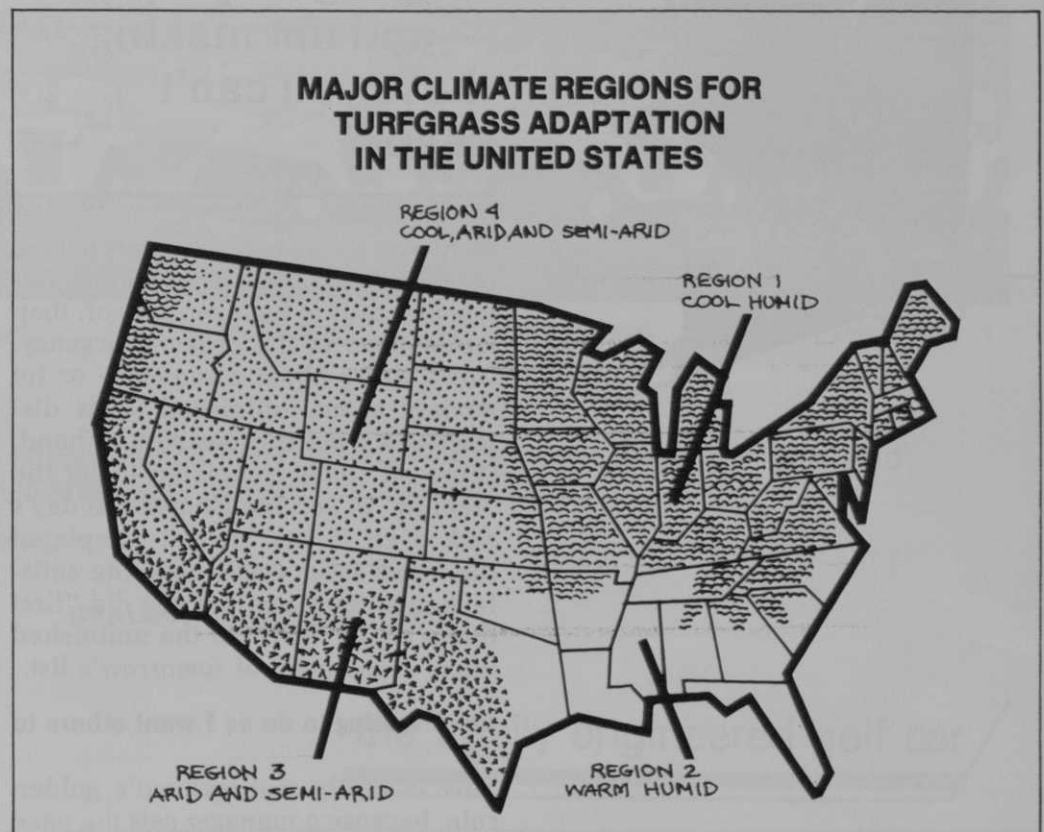
The sixth basic: initial maintenance

Once the whole package is put together — the grading completed, the irrigation system installed, finish grade work done, fertilizer and seed applied, the water turned on, warm air temperatures aid in seed germination — then what?

Personally, I prefer that the golf course maintenance crew take over

the job from this point. Normally the golf course superintendent and his staff are far more qualified than the contractor to carry on this phase of establishment. The contractor rarely has the equipment or the knowledge to pursue the requirements of the growth of turfgrass.

In summary, I want to stress one point: nothing is as subject to change as are specifications for turfgrass installation and maintenance, because of the multitude of varying conditions encountered on each and every project. A golf course architect cannot be satisfied with one standard specification. He must be prepared to revise and adjust his specifications to produce the best possible turfgrass for each golf course. □



How good a manager are you?



Whether you are a golf superintendent, course owner, general manager, or other supervisor, how well you manage may determine the success of your golf course and the realization of its fullest potential. Anything you can do to improve your present management skills is a step toward success. To find out whether you are developing the habit of good management, ask yourself these leading questions:

How well do I manage myself?

Unless you are adept at organizing your own time and talents, you can't do a really good job of managing others. From long experience comes

“Honesty means keeping all promises — and not making those you can't keep.”

this suggestion: every day prepare a list of things that need to be done, letters and calls to be taken care of, then tackle them in the order of urgency. Don't worry about a sequence or let anxiety about unfinished items distract you from the business at hand. Cross off items completed to get the “feeling” of accomplishment. At day's end, even if you haven't completed the listed jobs, you'll have the satisfaction of knowing that you did “first things first.” And, put the unfinished items at the head of tomorrow's list.

Am I willing to do as I want others to do?

This is really management's golden rule, because a manager sets the pace

for his staff whether it numbers 1 or 100. Come in on time, shun lengthy lunch hours, do a full day's work each day — and your employees will think twice before doing otherwise, even without the benefit of lectures from you. Be free-and-easy in your work habits, and employees will take the cue and do likewise. Then, when you protest, they're bound to resent your goofing off and laying down rules you won't follow. Yes, you are the boss, but you have to set a good example.

Am I a good teacher?

All good managers are — but poor ones, never sure their employees have “caught on,” tend to become nursemaids instead. Are your instructions outlined in step-by-step form, clearly worded, phrased in “do's” rather than “don'ts”? Do you use visual aids (even a rough sketch can help)? Ask questions to make sure you've been understood? Perhaps most important of all, do you understand the value of proper teaching? Would you, for example, be willing to pay for a training program to improve employee performance? Would you pick up the tab for job-connected schooling?

Do I “level” with others?

Perhaps the surest way to win an employee's respect is to be consistently honest with him. “You always know where you stand with the boss” is the way he's likely to describe it. Honesty, of course, doesn't mean brutal frankness or reckless disclosure of secrets. It does mean that you should let your staff know, as soon as you properly can, about a pending change in policies; morale plunges when people feel kept in the dark. Your employees shouldn't find out about major decisions affecting their livelihood from visiting salesmen, from competitors, or from country club scuttlebutt. It also means that you should not withhold unpleasant truths to be popular; if a man has little chance for a raise at this time, don't foster false hopes. Finally, honesty means keeping all promises — and not making those you can't keep.

Know when and how to offer criticism?

“Criticize in private, praise in public” is a good rule to follow. But just be-

cause you give someone the courtesy of private criticism, don't feel entitled to speak as bluntly as you like. Criticize constructively; mention good points along with flaws, and emphasize how improvement could be achieved. Criticize the individual's performance, not the individual; never hint that it's he, not his work, which leaves something to be desired. You'll make your point just the same — and without making an enemy.

Always give credit where it is due?

High on the list of employees' pet peeves is the "glory grabber" who assumes all the credit for successes. He may not say he did all the major work; he may just sit back and let everyone draw that conclusion. Go out of your way to credit others for the help they give you — even if you must labor hard to whip someone else's rough work into finished or acceptable form. You won't lose face, but

"Before you change work routines, consult those who would be affected."

you will create priceless good will among those who work with and for you.

Help assistants upgrade their jobs?

If you can make your tractor driver perform like a foreman, or your foreman do a superintendent's work, you have increased their value to your operation — and there are many ways to upgrade an assistant's job.

Delegating some of your own chores is only one of them. Spend some money to modernize your office

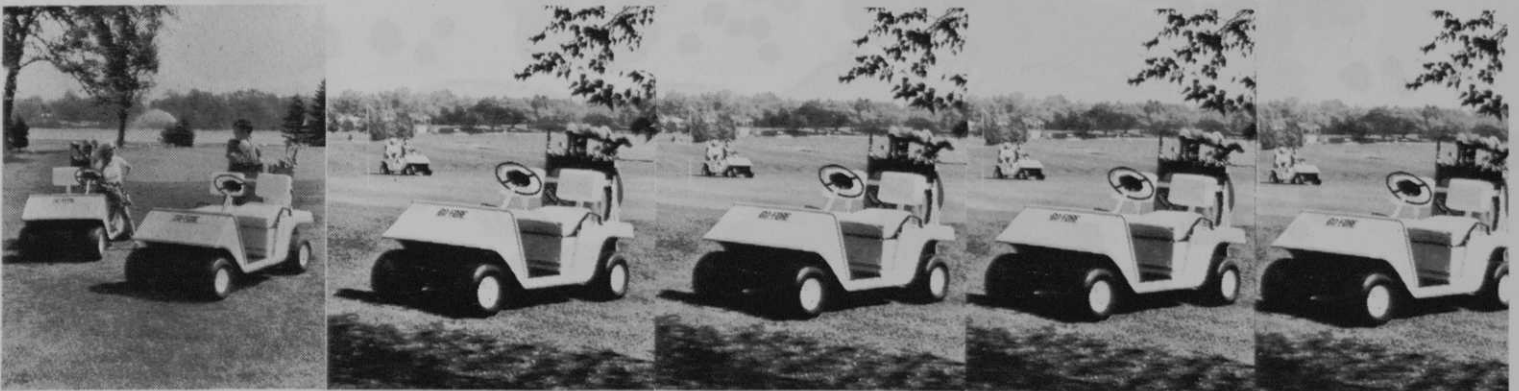
and maintenance premises — purchase machines to eliminate distastefully menial chores.

Am I too proud to ask for help?

Managers who get best performance from their staffs have usually discovered the magic in the simple phrase, "What do you think about this?" Before you change work routines, consult those who would be affected; even if you don't accept their viewpoint, they'll feel better for knowing it was considered. Encourage assistants to bring you their brainstorms; many people have perfectly good ideas, but won't voice them without being asked.

These, of course, are only a few of the key principles that should be mastered by a manager. But if you can manage to apply them, you'll be giving strong proof that you are indeed a good manager and worthy of the trust and loyalty of your employees. □

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How bunker placement affects

by Geoffrey S. Cornish & William G. Robinson

Growth in numbers of golf courses around the world since the Korean War has been enormous. National Golf Foundation data shows some 5,000 courses in the United States in 1953. Today there are over 12,000. But because golf is a game of tradition, changes in its architecture are seldom revolutionary even in an era of expansion. Vast technical changes have nevertheless revolutionized course construction.

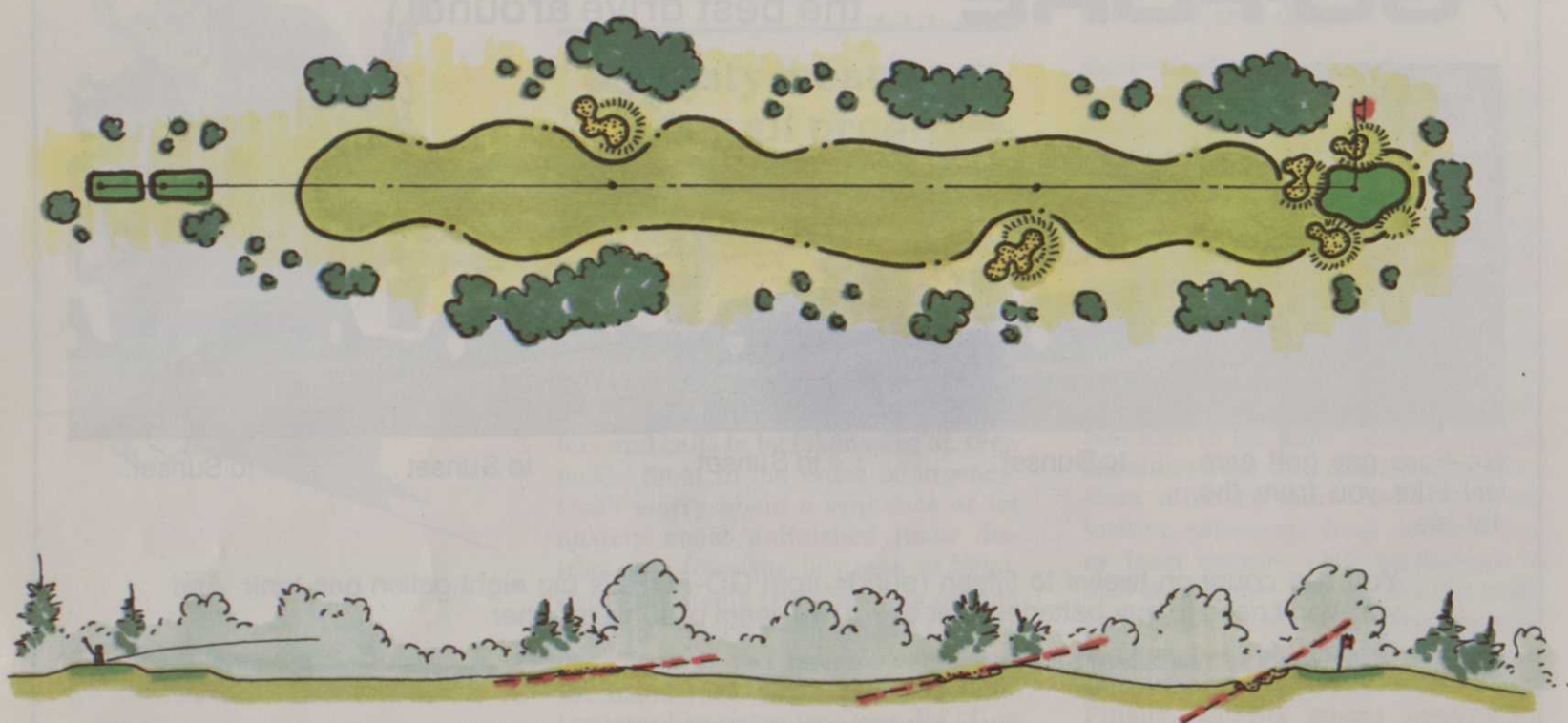
In turn, these technical changes and changes in the game have contributed to an evolution in design — although it is true that design methods have vastly changed.

Some changes, although not revolutionary, are profound. For instance,

a contemporary golf course is truly a huge art gallery containing 18 compositions. This emphasis on beauty and arrangement is an example of profound development in the last quarter century.

Less profound — but nevertheless important — changes have arisen in recent decades. Because these somewhat minor developments are sometimes overlooked — despite the fact that they have great influence on how a golf course is played and maintained — we here illustrate several related to bunkering and strategic design. We hasten to add, however, that much in golf architecture is arbitrary. These changes are not absolutes. Each involves judgment.

Geoffrey S. Cornish and William G. Robinson are golf course architects based in Amherst, Mass.; both belong to the American Society of Golf Course Architects. Previous contributions to *GOLF BUSINESS* appeared in our June issues in 1977 and 1978.



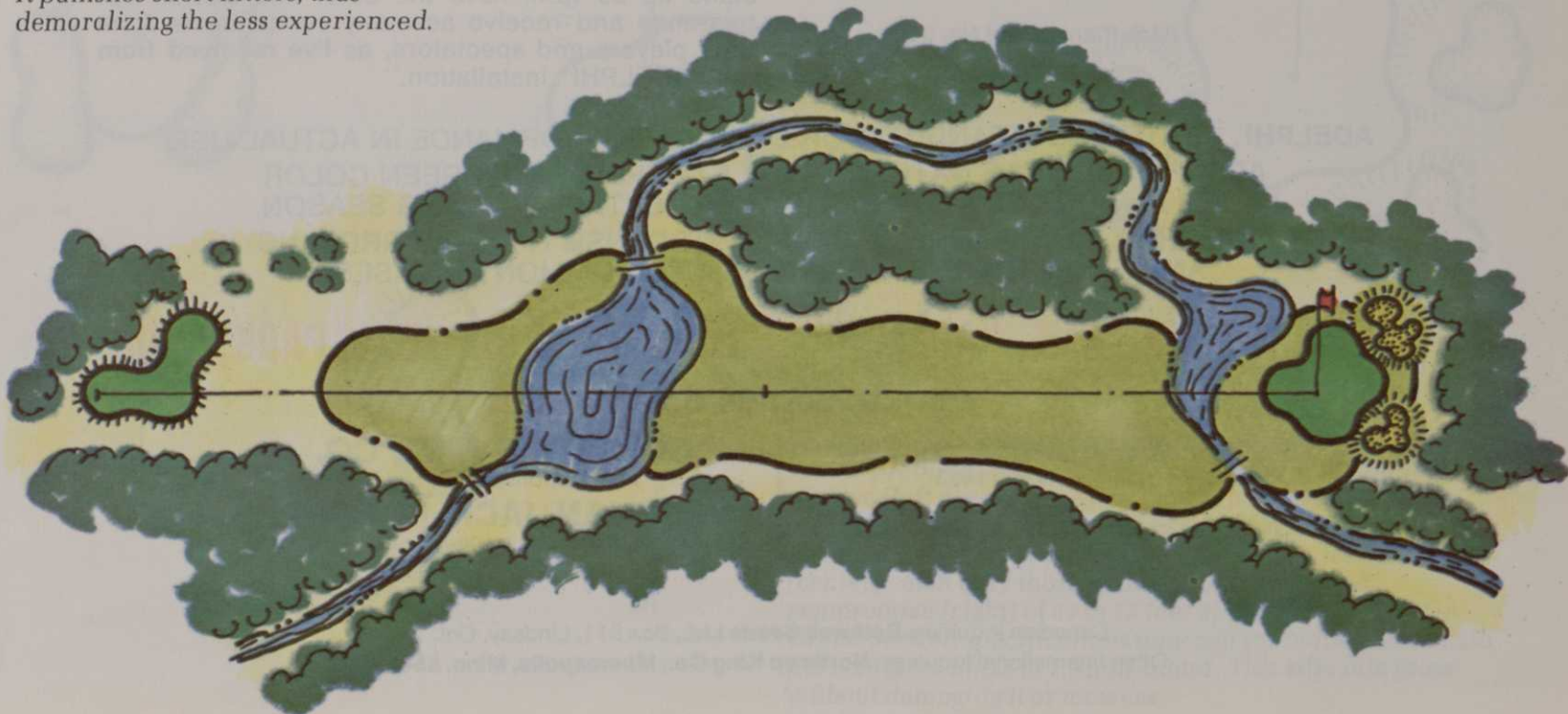
The closer a bunker is to the green, the deeper it should be and the steeper its face. The first bunker off the tee of this par 5 is shallow and almost flat; the second is deeper and steeper; the one protecting the green is deep and steep.

play and maintenance

Contemporary golf course design is strategic in concept, rewarding the golfer who takes a chance and succeeds. At the same time it provides longer, but safer, routes for the less daring.



Penal design once widely practiced requires compulsory carries. It punishes short hitters, thus demoralizing the less experienced.





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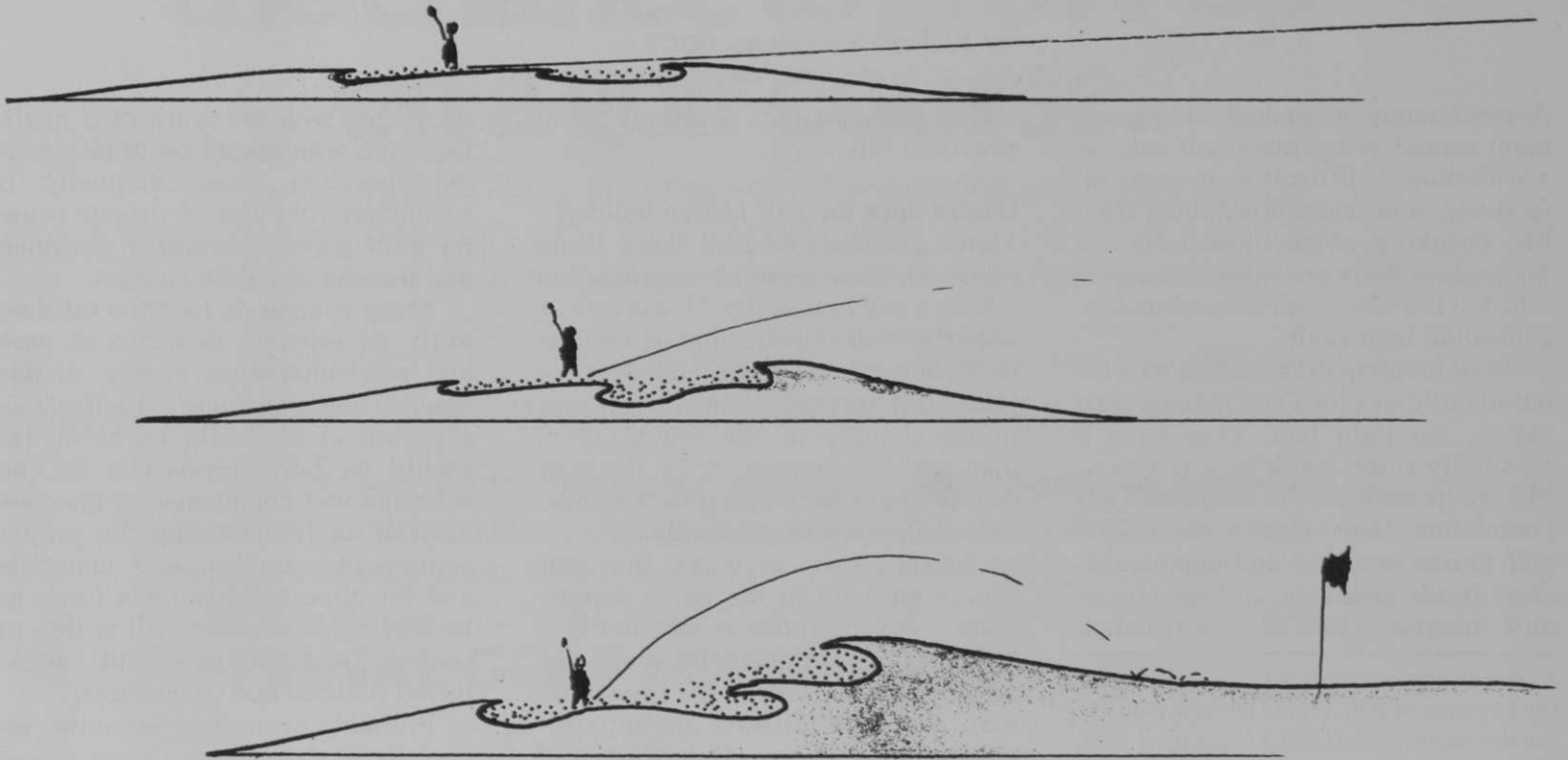
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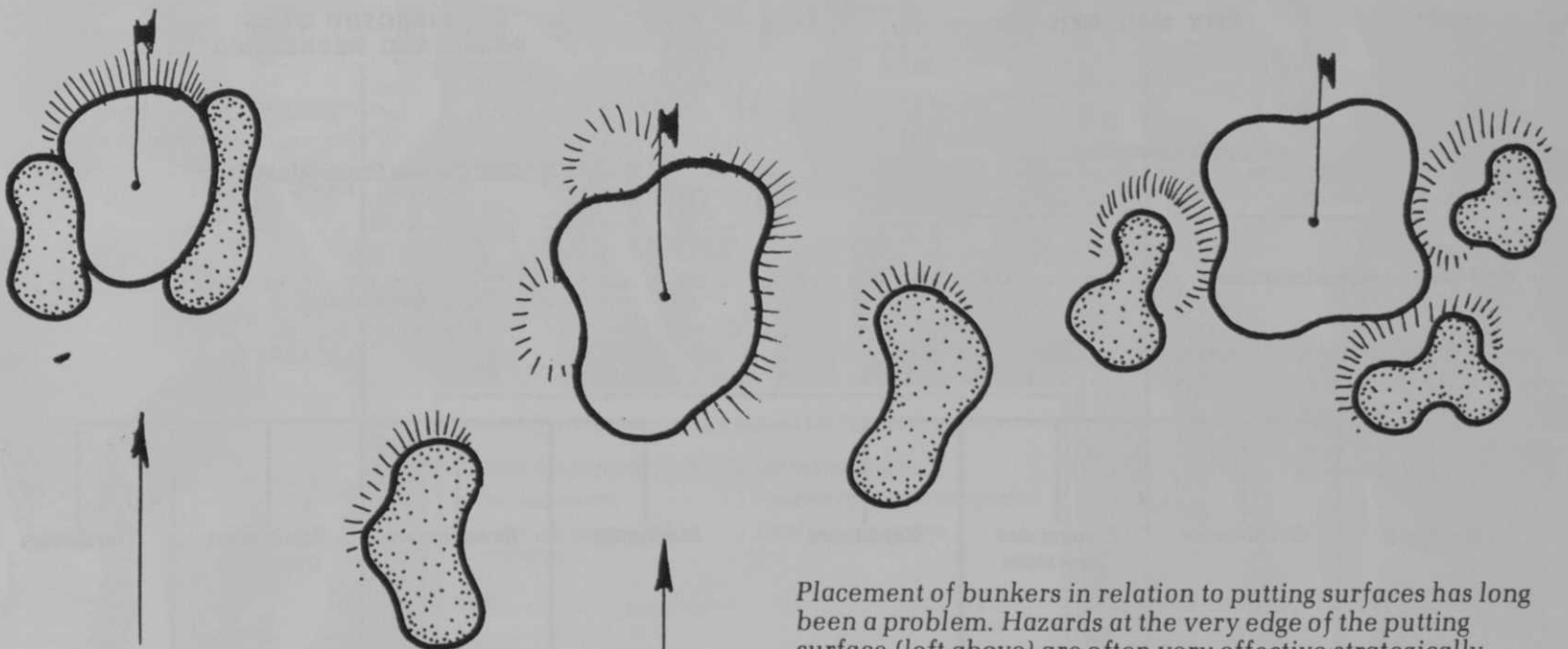
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How bunker placement affects play and maintenance (continued)



A player can use a wood from the first bunker at the top, while the middle one 140 to 150 yards from the green calls for a middle iron. The lower bunker near the green requires a sand wedge. This is an example of the architectural axiom "form follows function."



Placement of bunkers in relation to putting surfaces has long been a problem. Hazards at the very edge of the putting surface (left above) are often very effective strategically, but huge quantities of sand are deposited on the grass. On the other hand, far-flung hazards 20 or more feet away (center) catch only those with troubles enough. A compromise (right) of 10 to 12 feet appears sound. USGA Green Section specifications now call for bunker sand with particle sizes of .25 to 1.0 millimeter. This sifts into grass without damaging it or mowers.

MUNICIPAL GOLF

A park director is not a golf superintendent!

by Richard Viereger, CGCS

A great many municipal or government owned or operated golf courses are finding it difficult to operate effectively, and many are having trouble breaking even financially. In many cases there are valid reasons for this, but too often poor operational organization is at fault.

Most municipalities, when they set out to build or buy a golf course, start out on the right foot. They have a feasibility study made by a responsible group such as the National Golf Foundation; they select a recognized golf course architect and make sufficient funds available to do a proper and adequate job of construction.

Richard Viereger retired 2 months ago after 12 years as golf course superintendent for the Sunnyvale (Calif.) Municipal Golf Courses. His 30 years as a golf superintendent included 7 years at San Francisco's Olympic Club, so he knows what it's like on both sides of the golf world, public and private.

Here, unfortunately, is where good practices often end.

Where does the golf course belong?

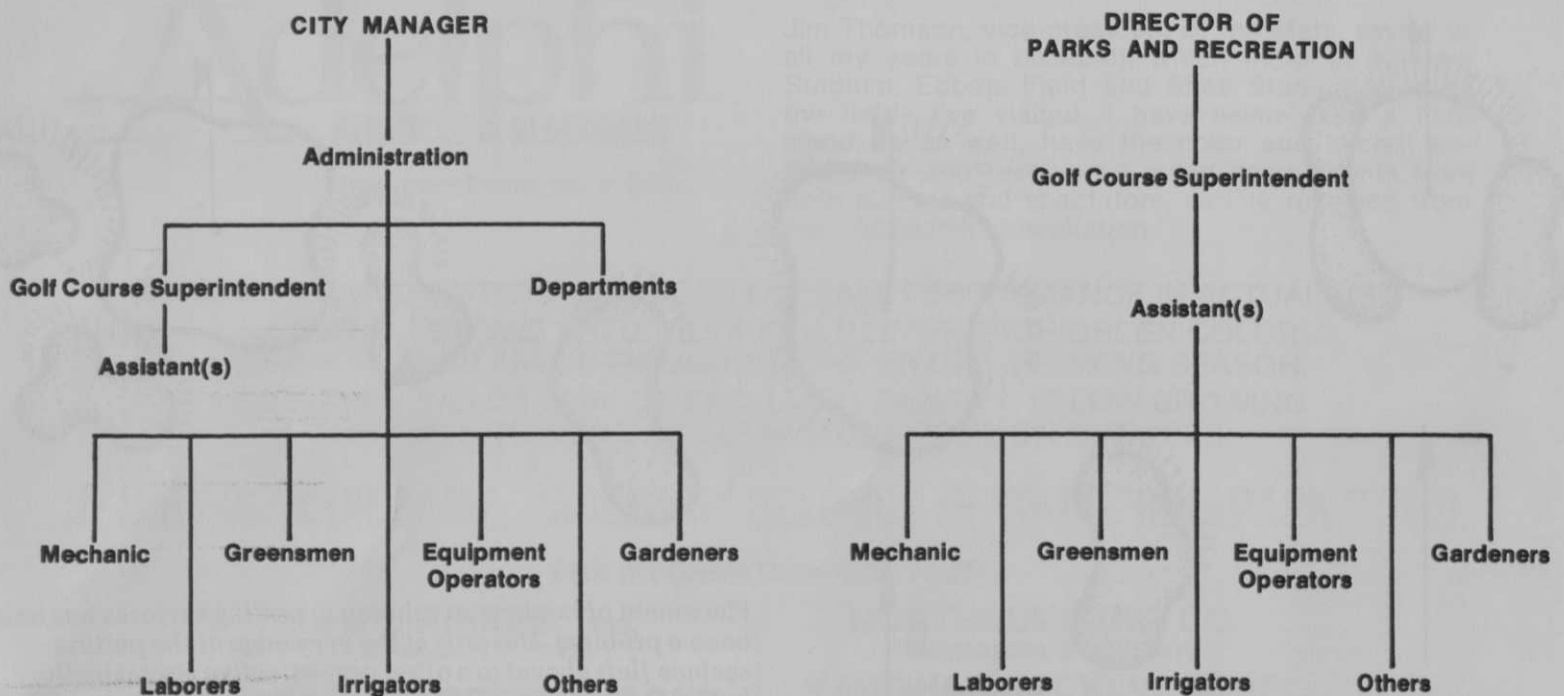
Many governments find there is no place in their existing organization where a golf course fits. This is true of departmental organization as well as Civil Service job titles and descriptions. But instead of making appropriate changes in the organization, they are determined to fit the golf course somewhere into it as it stands. This seldom works efficiently.

An example is when the golf course ends up in the parks department. "A golf course is essentially a large park," say the city (or county, or other) officials. This is far from true. Also the park director or superintendent usually knows little about golf course maintenance operations and, even if he does, hasn't the time to spend on the many details that are required. In many cases, he actually

interferes with the work of a qualified man who should be in charge of the operation. This, admittedly, is sometimes true also of private country club greens committee chairmen and owners of public courses.

Many courses do function satisfactorily as separate divisions of park and recreation departments. In this case, an able and qualified golf course superintendent should be hired. He should be fully responsible for the selection and deployment of his crew as well as for choosing the proper equipment, supplies, and materials and for allocating available funds as he may find necessary. All of this, of course, in accordance with established policies and procedures.

Probably even more effective, especially in the case of a large course where championship conditions and superior maintenance are desired and budgeted for, or where a city maintains more than one course, is the es-



ABOVE LEFT would be a very workable table of organization with city manager, mayor, or other title at the top of large operation.

ABOVE RIGHT would be workable for a smaller operation. Categories could be combined for 9-hole or short course facility.

"Every kid should have the chance to grow up on a golf course."

Youngsters have never faced as many temptations and frustrations as they do today. And that's why I think it's particularly valuable for boys and girls to get involved in a sport like golf. It not only gives them a chance for self-expression, but it's a great teacher of self-reliance and self-discipline.

The problem is, most kids don't have an organized Junior Golf program to encourage them and help them learn the game. And that's why the National Golf Foundation is so important.

They've been promoting Junior Golf since 1936. And they'd like nothing better than to help you start a Junior Golf program at your golf club, in your schools, or in your town. I started in a Junior Golf program myself. And believe me, there isn't a better place for a kid to grow up than a golf course.

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establishment of the golf course(s) as a separate department directly under the city manager or equivalent. Here the golf course superintendent is not bound by policies, practices, and rules of another department when such rules would not normally pertain to golf courses.

What's in a name?

Municipal managers may look through their Civil Service job titles and not find "golf course superintendent" listed; so they might hire a greenskeeper, supervisor, foreman, head gardener, or something else to be in charge of golf course maintenance rather than create a new job title. This may do one or several things. First of all, top qualified golf course superintendents may not be interested or may not even realize that the requirements, benefits, and prestige are the same as they are seeking, so they may not be attracted to the position in the first place. Then if a qualified man is hired with some other title, even though he may have the same responsibilities and duties and receive as high a salary as golf course superintendents at other courses, he might not receive the respect and acceptance of his fellow professionals who carry the proper titles.

The titles of other golf course personnel should also be different from those of park, public works, or other personnel. A park gardener, for exam-

ple, could not satisfactorily do the work of a golf course greensman without a great deal of training. Neither could a public works tractor man take over as a golf course equipment operator. A qualified golf course superintendent would be able to select properly titled personnel, and his recommendations should be followed by the municipal personnel department.

Equipment and purchasing

Equipment maintenance is often one of the inefficiently performed functions in municipal course operations. Too often it is performed largely in a central shop, usually located in the city corporation yard. It is done by general mechanics and often involves delay because of priorities and lack of parts. It involves much lost time in transporting equipment back and forth between the golf course and the



Author checks fertilizer stockpile. If proper open orders are maintained, such supplies can be bought as needed, without delay.

shop. Also, mechanics available are not always experienced with the specialized equipment. A mechanic should always be assigned to the golf course, have his tools there, and spend full time there. I believe an honest appraisal of the cost will show a considerable saving, especially when the longer life of the machinery, the reduced downtime, and more effective use of operators' time is taken into consideration. The improved appearance and playability of the golf course will be another plus factor.

Purchasing is one of the most important items in controlling funds. This is done, of course, almost entirely by the purchasing department. The golf course superintendent must have certain latitude in the way of open or blanket purchase orders for emergency items such as chemicals, parts, seeds, small tools, etc. Most, if not all, municipalities maintain these orders and it should be the golf course superintendent's responsibility to arrange for these needs with the purchasing agent well in advance. The superintendent should spend as much time as necessary with the purchasing agent to make him familiar with current practices in requisitioning and writing of specifications, especially for major equipment.

With efficient maintenance practices, the quality of the golf course will be directly proportional to the budget allotment. □



Where there is no full-time mechanic on the premises, operators often try to make minor repairs themselves — but only qualified mechanics should work on specialized equipment like this.



This equipment has broken down on the course and may sit until the next day before a city mechanic can get around to repairing it — even though actual repairs may take only a few minutes.