



**THE GREEN INDUSTRY AT WORK**

# Integrated Land Development



Top: Arvida Corporation's major resort hotel complex is the Boca Raton Hotel and Club. With the completion in late 1969 of the 26-story guest room tower, the hotel can accommodate 1,500 guests daily. Pictured above are, from left: Mac Parsons, superintendent of the two Hotel courses; W. H. Wright, superintendent of the two Boca Raton West courses; and C. C. Shaw, Arvida vice-president for golf course development.

**I**NTEGRATED LAND DEVELOPMENT, is the fashionable phrase. Add a few million dollars to a planner's dream and you can build a beautiful tropical atmosphere for living.

But who keeps the dream looking beautiful year after year?

What system of landscape maintenance works? Should services be hired, or should a staff be maintained? Should the staff have central direction, or should specialists tailored to a particular job be allowed to function independently?

Probably every combination has been tried, and many have worked. Nevertheless, it is interesting to examine how one large Florida corporation is taking care of its own landscape maintenance.

Arvida Corporation, a multi-million-dollar land development firm headquartered in Miami, inherited part of its system. Another part evolved from practical experience, and modifications stemmed from good business sense.

*(continued on page 18)*



The Hotel course is the "palm tree" course while the Boca Raton West courses are sprinkled with pines. The palms are an extra maintenance headache, and must be trimmed regularly.



Grass flies at Boca West. Year-around operation puts a strain on machines and maintenance scheduling. A partial equipment list for the four courses includes triplex greens mowers and walking greens mowers plus a complete line.

### Green Industry (from page 8)

Arvida is a builder, a developer, and a salesman of resorts, hotels, and entire residential complexes of all kinds. It is one of Florida's largest landholders with practically all of its 34,000 acres situated in three southeastern "Gold Coast" counties. Arvida's holdings include the world-famous Boca Raton Hotel and Club, whose recorded history is more fascinating than its considerable legendary trappings.

Harry Eckhoff, facility development consultant of the National Golf Foundation, says Arvida is representative of planners and developers of modern communities who "consider golf courses one of their most effective sales weapons."

NGF records reveal, says Eckhoff, "that more than 25% of all new golf facilities opened for play in 1969 were part of golf and real estate ventures, such as high-rise apartments and condominiums, housing developments, mobile home sites and vacation or second-home projects.

Having extensive property to maintain is one thing; with golf courses included, the problem can become complicated.

Arvida has a golf course professional on its top management staff to head off maintenance problems and costs through proper development.

C. C. Shaw, who counts 40 years' experience in every aspect of golfing, knows the industry from the blueprint to the pop-up sprinkler. In essence, his job is to expertly mesh together the ideas of the architect, the requirements of a golf course, existing land available, the housing concept, and the investor's hopes for a good return on their money.

From a land developer's viewpoint, Shaw said, "a golf course is a necessary cost item." Land taken up by a golf course would return more money if it were in housing or hotel units, he explained "but people want to play golf. Some play the game from sunup to sundown. And they don't want to travel far to play, especially those who have retired."

Aside from the inclusion of golf courses in its residential and resort complexes, Arvida planners design extensive greenbelt areas.

The critical coordinating that Shaw must do doesn't end when the earthmovers take their first bite. Practically never is the blueprint totally transferable to the actual site. The project can be likened to a puzzle. Change the shape of one piece and you affect the shape of dozens

of others. Because a golf course represents a major segment of any development, any change at all will usually affect it. That's where Shaw comes in. A mistake can mean a continuing, costly maintenance problem.

A centralized maintenance system was tried, said Shaw, but it didn't work. So the system that has evolved is a landscape maintenance professional at each Arvida property. This individual works independently of his counterparts (although the superintendents of the golf courses in Boca Raton closely coordinate their activities). Maintenance budgets are a part of the respective facilities' operations.

"I'm not certain if there is such a thing as an exact budget for golf course maintenance," said Mac Parsons, superintendent of an 18-hole course and a 9-hole executive course adjacent to the Boca Raton Hotel. "We request what we think we need and usually get it. For example, we can buy sod cheaper than we can maintain it. When we go in for maintenance funds, things like this are taken into consideration."

Shaw estimated the maintenance cost for a golf course that is open year around to be "in the neighborhood of \$100,000 for 18 holes."

Across town is a total community development, Boca Raton West, that will eventually encompass 1,400 acres. Plans call for four 18-hole championship courses. Two of these courses are now completed and in operation. Course superintendent is W. H. Wright.

"We try to buy all the materials we can through the University Park Nursery in Boca Raton. This is another division of Arvida," said Wright. "However, if we get a better price somewhere else, we go there."

Elevation in the Boca Raton area, is about 12 feet of sand above sea level, and that means the courses experience severe leaching of fertilizers and chemicals. "We'll use five to six times the amount of organics used in the north," said Parsons.

Water supply is critical. Three deep wells at the hotel and six at Boca West are the sources. Shallow wells are contaminated with limestone and rust. Percolation and evaporation rates are high priority conditions to watch. "We may use two million gallons a day in the dry season," said Parsons.

"When the temperature reaches 80 degrees," Wright added, we can lose .3 inch of water per day."

Design of Boca West, a 1,400 acre spread of which the two operating

golf courses take in 400 acres, includes numerous water holding areas. They are all connected to a pumping station located at the edge of the Hillsboro Canal, which empties into the ocean. Since too much water can be as much of a problem as too little, a large turbine pump is used to remove excess water. "We can literally reduce the water table from under the entire development," said Wright. "We have pumped 13 million gallons in a 24-hour period."

The chemical bill at Boca West runs about \$15,000; the Hotel's about \$7,800. About 50% goes for insecti-

cides, 25% each for herbicides and fungicides.

Overseeding of Penncross bentgrass and Pennlawn fescue runs about \$7,800 a year. The fertilizer tab is about \$28,000.

Arvida Corporation, in adding new dimension to the tradition of Boca Raton, is openly sinking a fortune into the area and publicizing it lavishly. The customer has the option of enjoying the grandeur of the Hotel and Club, or purchasing a piece of the grandeur of an Arvida development and living there year around.

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