Pump Problems? No Problem at All

A Texas course needed a new pump system to beat the summer heat — and fit into an existing pump house.

Problem
Since The Four Seasons Resort Tournament Players Club was built in the late 1970s, the pump system was not sufficient to meet the needs of hot Texas afternoons.

Solution
Upgrade the system to the Flowtronex PSI Silent Storm system, with a pumping capacity of 4,000 gallons per minute.

The problem
Because the course was originally designed in the late 1970s, there was concern about its aging pumping system failing during a hot Texas summer. A new system would have to fit an existing wet well, slab and pump house.

Filteration would also prove an important consideration since the water source contained silt, algae, Asiantic clams and other debris.

Finally, installing the system posed challenges as well. How do you protect turf from heavy equipment and machinery required to install the system?

The solution
According to Willie Slingerland, of Flowtronex PSI, careful analysis and consultation led course officials to a Flowtronex PSI Silent Storm station with a capacity of 4,000 gallons per minute.

Scott Miller, Four Seasons resort director of golf and landscape operations, said: “We evaluated our old system and found that we needed to replace the old pump station. The logical decision was to choose a system with variable frequency drive to increase our efficiency and with increased filtration to handle a variety of sediment.”

Three Amiad SAF filters were chosen to complete the system.

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Implementation
To install the system, the team worked around a settling building slab that had

dropped 6 to 12 inches. To keep the station level, a new steel frame was constructed on
top of the existing slab.
The team also had a tight squeeze; as the new station was too large to fit through the
pump house door.
Generally, a pump station will be
brought into the building in pieces and re-
assembled once inside, Slingerland said.
Club managers, however, decided that since
the roof was already beginning to show
signs of weakness and leaking in spots, they
would remove the roof and bring the system
in from above. A new roof would then be
constructed once the system was set into the
structure.
Two options were considered to protect
turf:
Option one was to set the station with a
helicopter. Unfortunately, the helicopter re-
quired to lift the massive weight was tied up
on another project.

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seen, the new pump
system has been virtually
maintenance free.

Option two — the one selected — was
to construct a plywood road on which a
crane and the truck containing the station
could be driven to the site with minimal
damage to the turf.

Outcome
Today, officials at the Four Seasons Resort
TPC at Las Colinas and Flowtronex engi-
neers look back on the two-day, 24-hour in-
stallation process during a hot spell in June
with pride, since the new pump station has
performed flawlessly. “In addition to the en-
ergy savings we have seen, the system has
been almost maintenance free,” Miller says.
The old station was reaching the point
where it was beyond repair, Slingerland said.
Now officials can rest assured that the
pump station is reliable and concentrate on
keeping the championship course, which
was remodeled in 1984, in top condition.