A keen eye identifies source of silt problem in Texas

A river rechanneled 30 years before was source of clay build-up at Brook Hollow GC

By Mark Leslie

Little did members of Brook Hollow Golf Club know in the late 1950s that when the city of Dallas rechanneled Trinity River, it would cost them more than $2.5 million in course reconstruction 30 years later.

But that is the case, says Director of Grounds Bill Shrum.

When Shrum arrived at Brook Hollow from Denver Country Club in 1989, he found 2-1/2 inches of silt clay at the surface of his greens — only five years after all the greens had been rebuilt.

That paled to the three to nine inches he later found on the fairways of the A.W. Tillinghast-designed track.

And all this on a piece of property rare in the Dallas area. It is blessed with sandy soil. Yet that sandy soil is now far below a layer of silt clay that spells death to turf.

"The problems were evident the second month I was here," Shrum said. "Nothing was right. The rooting wasn't proper. I did two years worth of tests and research and looked underground. I used several labs and brought in Jim Moore [U.S. Golf Association Green Section Mid-Continent director], [Drs.] Joe Duich and Milt Engelke and others, who all confirmed my findings."

The culprit, all agreed, was the water source. When the city rechanneled the river in the late 1950s, the section of the river at the course was turned into a drainage sump. The situation worsened further when clay from nearby freeway construction in the late 1950s went into the riverbed. Consequently, future waterings contained undesirable large quantities of silt and clay to the point of sealing the original sandy surfaces.

After two years selling the idea of renovation to Brook Hollow Golf Club committees and one year selling it to the membership, Shrum is looking forward to having a healthy course.

Course reconstruction, from tee to green, was scheduled to begin Nov. 2. With the reconstruction, which will shut the course down for 10 months, he is connecting the facility to a new five-acre lake contractors built as the clean water source.

A new pump station was equipped with floating intake and particle filters for additional protection.

The club has brought in architects Bill Coore and Ben Crenshaw and contractor Ed Connor of Golfforms. Coore and Crenshaw will design the shape of bunkers and greens, while Connor will strip the sod, contour the fairways, and laser-shoot the greens and tees.

Connor will strip off the top inches, chisel-plow 12 inches deep, and regrade for positive drainage physics. The club will then have a new irrigation system installed.

"We'll get the course working for us," Shrum said. "Here's a guy," said the USGA's Moore, "whose alertness has saved his club's course and a lot more money."

Though the problem has been discovered at Brook Hollow Golf Club, the work has just begun. In photo above, one can see what 35 years of silt build-up can do to sandy soil. In photo at right, the ill-effects can be seen in the root zone of this seven-year-old green.