Supers, experts collaborate on the idea of ideal irrigation system

by Terry Buchen

So what is the ideal irrigation system for an existing course or a new golf course construction project?

After discussing some ideas with irrigation consultant friends, we came up with the following ideas:

1. Hire a competent, unbiased irrigation system designer who is familiar with all types of irrigation equipment on the market representative of all manufacturers on the market.

2. Make sure water velocity is in the 3- to 4-feet-per-second velocity, never more. Irrigation piping can never be too large.

3. For lateral isolation valves, there should be four to eight heads maximum per lateral for fairways and roughs.

4. On greens loops, there should be one isolation valve before the main line gate valve and one after.

5. On the lateral lines for the teeing ground, one isolation valve is usually sufficient, unless looped, and then two are needed.

6. Each hole should have a gate valve so it can be isolated from the other 17 holes. That is, there should be at least two gate valves per hole.

7. Gravity drains should be installed on all low points on main lines and on lateral lines near creeks, bridges, lakes, etc.

8. All sprinkler heads should be valve-in-head.

9. All sprinkler heads should be individually wired back to the field satellite so stations can be combined or changed around, as needed. No more than two heads per station.

10. Solid-state field satellites should be hooked into central computer controls for full one-point, single-source responsibility.

11. Sprinklers should be spaced from 60 to 75 feet on triangular uniform spacing, depending on what site conditions dictate, because of trees, shrubs, buildings, hazards, course design features, etc.

12. Pumps should be Variable Frequency Drive (VFD), with good filtration before and after individual pumps.

13. Lightning rod protection should be provided for all field satellites.

14. The pumphouse should be properly ventilated and large enough to house all spare piping, repair parts and supplies, injector systems/tanks. A2-inch air compressor hook-up to the discharge pipe should be installed for blowing out the entire system on transition zone and Northern-type courses.

15. Lake fill-up laterals should be added as needed.

16. Consider adding domestic water lines in the same trench, with the appropriate wire sizing, for electric drinking fountains and any other electrical needs, such as aeration fountains, waterfall pumps/lighting, telephone lines, cable TV wires, etc.

17. Consider sizing the field satellite 110-volt wiring large enough to operate power tools and other future amenities.

18. Take a color 50- or 100-scale as-built aerial photograph after marking all irrigation equipment with white cardboard pizza boxes or tall white kitchen trash bags held down with sod staples. Areas that should be marked include all main line gate valves; lateral line isolation valves; air-relief valves; wire splices; quick-coupler valves; all sprinkler heads; surveyor coordinate points; property corners; drain line valves; where spare conduit sleeves are buried under roads and cart paths; drainage catch basins, etc.

Golf-water park plan progresses

NEW YORK, N.Y. — A nine-hole executive-style golf course and water amusement park project is one step closer to reality following the state Department of Environmental Protection's recent decision to grant a waterfront development permit.

The project, however, is not a done deal. The state DEP has asked trucking magnate Arthur Imperatore's real estate company, Arcorp, to meet 35 requirements before it can begin construction. The conditions range from public waterfront walkways to sewage treatment and road improvements.

Arcorp first proposed building a 30-acre complex consisting of a water amusement park, executive golf course and parking lot on the Hudson River in 1992. The company had hoped to open for business on Memorial Day weekend 1994 but must now satisfy a lengthy list of demands.