The write approach

What do you do when you need a new watering system but the club says it can’t afford it? That was the problem facing 29-year-old Alastair Cale when he joined Ifield Golf and Country Club last year as head greenkeeper after five years as assistant at another Sussex course, Ham Manor.

When I arrived here, it was clear that the watering system had been causing problems for some time. It was based on a triangular system of three pop-ups per green and the coverage they were giving was very poor. Also, the pump wasn’t producing the right pressure. There was almost no tee watering – what there was had been cannibalised to keep the greens going – and no approach watering either.

As the season unrolled, the watering system was giving me more and more problems, so it was obvious that something needed to be done. What had happened in the past, according to the committee, was that they’d only ever been given quotes for a brand new system. Now it doesn’t take a genius to work out what a club with very tight financial restraints will say when told that they need to spend £65,000-£70,000 on a complete new watering system. The quotes basically went to the committee who said they can’t afford it and the idea went out the window.

I took the experience I gained at Ham Manor where we had the same sort of problems with an inadequate watering system, but what we did there was put a proposal forward to phase in the system over a number of years with the main priority being the greens. So I set about doing my own report, which the committee seemed quite receptive to. One of the green committee members is an engineer, so he understood the principles of hydraulics, pumping and pressure. So the two of us set about writing a report on the failings of our watering system and the route we should take in upgrading it – but very much based on the idea of phasing it in over a period of time.

To compile the report we got a couple of the leading irrigation companies to come and give us their opinions of our watering system and to brief the committee member about irrigation systems in general. We also went down to Ham Manor, so I could show the committee member what we’d done and he talked to the secretary. I also asked a lot of greenkeepers I knew in the area who had parkland courses what sort of pop-ups they were using (impact or gear driven?). I got demonstrations on different types of pop-ups and over a period of about three months we began to form the basis of the report.

The report contains:

1. An introduction

2. Observations on the current system, pointing out the poor coverage, poor pumping, the fact that our water storage tank, although it has a few small leaks and should ideally be larger, should cope for the foreseeable future. The control system was very old and the wires kept breaking down and this gave me a lot of grief during the summer – it got to the stage where I had to go out every night and turn it on manually because I couldn’t trust it to come on on its own. It highlighted the poor piping round the greens and the spurs and it basically set out what was right and wrong with our system. One point was: “The greens staff have spent 100 hours between March and August repairing faults in the irrigation system. This time would be better spent on other jobs around the course.”

3. Ideal system objectives. This looked at the pumping capacity we’d need, the amount of pop-ups we’d need around the greens, the ideal ring main size, and said that tees and approaches should be incorporated.

4. Proposed approach. We looked at our pumping system. We had a spare pump and we found we could install that in parallel with our existing pump. We had the pump serviced and installed to increase the flow rate as well as the pressure. Then we looked at the control system. A new control system would need a complete new cabling network. This was a priority so it came in in phase 1. Also proposed for phase 1 were the eight first priority greens. More greens would be done in phase 2 while phase 3 included...
We'd gone about it in a way the club could afford

the rest of the greens, approaches and tees. It was decided that a new ring main was not urgent.

We got one of the main companies to give us a rough breakdown of prices so we could put approximate costs alongside these jobs.

5. Suggested programme of implementation. This showed clearly how the system would be phased in over three years and how much it would cost each year.

6/7. The easy-to-read report also had some interesting facts about watering systems and a proposed priority of greens.

8. There was also a table showing the current spacing of the pop-ups around greens. This varied from 17 to 26 yards (the recommended maximum being 18).

We presented the ten-page report to the committee and it went through without any problems because we'd gone about it in a way that the club could afford. I knew from the start the club couldn't afford a complete new system and if I kept pushing for that I would not get a thing.

It was decided we would do 12 greens this year, the remainder and a few tees next year, and the following year we'd finish off the tees and do the approaches. We'd do the cabling this year; we've already put our pump in so we've got the pressure and the flow rate to cope with the extra sprinklers on the greens. We've also decided to split-value the greens, so two of the four pop-ups come up at a time (we're restricted by a 2in ring main).

Spending the money

Once I'd got the money approved, I had to decide what to spend it on. The main choice was whether I went impact drive or gear driven for the greens. There's a big debate raging about that. I was a confirmed impact man but I decided I must look at everything from an objective point of view. So I got demonstrations of both, I asked around — both greenkeepers and installation companies. And here gear-driven models had the edge.

I still hadn't made up my mind when I went on holiday to South Africa where I played a lot of golf. They'd all got gear-driven systems. And a company I'd only heard about over here recently — Hunter — I saw in action at the Royal Cape Golf Club. I had a long chat with the course manager and he told me they gave a full five-year warranty, which began to sway me because one of my initial concerns about gear-driven systems was that some people had said the gears wear out after a couple of years. Well, perhaps the early ones did.

I came back from my holiday and did a bit more research on the Hunters, on the warranties they give and so on, and this is the route I went down.

The other big debate was controllers. I decided to get four of the leading companies in — Toro, Wright Rain, Watermation, and Prime Watermen and a small local installer, Flanderblade, who was recommended by a ex-head greenkeeper. I got them to quote for roughly the same thing, but I asked them to go out on the course and send me a report and diagrams. I said I was looking at Hunter sprinklers, but I'd also like a quote on the impacts as well. So, apart from Toro, they were all quoting for both. When the reports came in they were all completely different. Some were recommending 1/4in pipe round the greens, some were recommending 1/2in. Some were recommending five sprinklers on one green, some were recommending four. Obviously they all recommended their own controllers, except for the independent guy who said he would install whatever I wanted.

So I asked other greenkeepers what they had and set out my own spec and got the companies whose specs differed to re-quote. So now everyone was quoting on the same thing. But there was a difference in price of nearly £6,000— from £19,000 from one of the 'big' companies to around £13,000 from the others.
Some did more than others

£12,500 from the independent guy. He said he would fit whatever controller I wanted – either one from the big companies or one from a smaller company I’d never heard of.

Control panels
Some did more than others, but in general they all did the same thing. With the constant updating of panels, I realised that whatever I bought would be out of date by next year. The fact that a company had produced a brand-new control panel tended to put me off because although they were a big name, that panel was no more tested than some of the smaller names. I did a phone round of greenkeepers to find out what they used and what they knew. I went down to Worthing Golf Club to look at Watermation, I knew the Wright Rain one from my days at Ham Manor, although they had just brought out a new one that is completely different. I had a friend who had a Toro system, although not the one I was interested in. And then cost came into it. I had to balance up what I felt was giving us best value for money.

The installer then pointed me in the direction of another little company in Littlehampton. He said he’d only fitted one of their units but it’s a superb little controller. The company was HHI Electronics, who normally make controllers for nurseries and horticultural applications but have one model suitable for golf courses. I hadn’t heard of this company before so I got a few references and went down and spoke to them. I got the man who designed the controller to show me how it works. It’s a no-frills unit with some great little features, very versatile and they haven’t had any problems with the decoders.

So, in four years time, we’ll have a watering system that will be functional for a small 18-hole golf course. It won’t be state of art, it won’t have all the gimmicks, but it should do the job. I’ve researched it thoroughly (over six months), but whether I’ve made the right decisions or not, only time will tell. I’m waiting for the weather to break to start installing the system. Since the course is on clay, I don’t want heavy plant driving around when it’s wet.

In fact, it hasn’t stopped raining since we got our proposals passed!

The 3rd hole at Ifield Golf and Country Club

Super Mosstox is as effective on turf as it is on hard surfaces (and as gentle)

SUPER MOSSTOX is a liquid Mosskiller that can be used on fine turf and hard surfaces, wherever moss is a problem.

Controlling moss and spores, SUPER MOSSTOX is easy to use, effective, yet kind to both turf and hard surfaces, such as synthetic sports pitches, car parks or stonework.

SUPER MOSSTOX may be used at any time when the conditions are moist.