



The 18th at Woking, courtesy of Jason Livy Photography

Futuristic investment benefits WOKING'S GOLFERS

How this Surrey club is **reaping the rewards of Rain Bird's innovative irrigation system**

Founded in 1893 and the oldest of the Surrey heathland courses, Woking Golf Club is a traditional golf club with immense character ranked 17th in GolfWorld's Top 100 Golf Courses in England. When Andy Ewence joined as the new Course Manager three years ago, his ambition was to steer this highly-rated course towards an even better standard of conditioning, leaving a legacy that would benefit golfers well into the 2050s.

Within weeks Andy discovered the existing irrigation system was in poor shape, some of it at least 25 years old, with deteriorating PVC piping, rotors manufactured by Bear redundant over a decade ago and a computer system no longer supported by software updates. Without detailed information about the location of cable paths and cable joints that weren't waterproof, faults occurred every time the system was operational. Grass coverage was continually lost, partly due to sprinkler configuration, so all fairways had to be overseeded regularly, with repair costs spiralling to over £20,000 a year.

A year earlier, the club had brought in specialist irrigation consultant Roger Davey, Managing Director of Irritech Limited, to carry out an initial appraisal. Roger was appointed

again in 2018 to complete a detailed design blueprint, full irrigation system tender specification and bill of materials.

"Woking Golf Club was very much ahead of the crowd in tackling its water sourcing and storage early on, utilising an existing bore hole and creating a water storage lake," Roger explains. "They took the long view and really did carry out their due diligence. Choosing the right solution means investing in a system that will last for many years.

"The new irrigation system design addresses the hydraulic challenges of an undulating site across a very large area, rising from the lower parts of the course around the 6th, 7th and 8th holes to 20-30 metres at the 9th and 10th holes. That variance has been managed so that even coverage is achieved on the fine turf areas but water is still conserved.

"With Irritech's vast experience of working in the Middle East, where you're lucky if it rains every two years, we were able to design a solution that achieves uniformity of coverage and maximises irrigation efficiency.

"It comes down to three essentials – control, nozzle selection and system management. There are clubs out there at the moment who are ripping out much newer

and cheaper systems, redundant sprinklers and valve boxes that are simply not fit for purpose. And too many clubs are failing to tackle the health and safety issues; water under 8/9 bar pressure in a failing irrigation system could be dangerous."

With an independent design specification completed and backed by the Committee, Club Captain Duncan Aldred approached members to gauge their support for replacing the entire system and their appetite for funding what would be the most significant investment in the club's long history.

The response was both immediate and positive. Within a month, a substantial number of members had offered gifts or interest-free loans to help finance the investment. With such generous support from its members, the club could step forward with confidence.

Ensuring members were kept fully informed, there were presentations and Q&A sessions to help them understand why the current system needed to be replaced, the risks associated with continuing to operate with the old system and how investment would ensure the club could look to achieve even better tournament-quality course standards for years to come.



Woking's 6th hole, courtesy of Jason Livy Photography

The wider vision for the club included an ongoing woodland management programme to re-establish the heather and allow many of the original views across the course to be reinstated. Members were sent a video about the installation process and many were surprised that, when it happened, installation was far less disruptive on the course and a lot less like the building site they had imagined.

Duncan Aldred, Club Captain, says: "It was clear to me at an early stage that we needed a new irrigation system. The question was when, not if, a system could be installed, with financing being the main determining factor.

"It was also vital to bring the membership alongside so they understood what we were proposing and why and so that they were fully supportive of

the project to the point that they would help finance it. I am delighted with how the whole project went.

"After a detailed selection process, we chose to work with Rain Bird and MJ Abbott. They have been a pleasure to work with on this important project for the club, with the installation continuing to plan through some very wet winter weather."

The installation of a Rain Bird IC System™ with Stratus™ II Central Control and 875 Rain Bird rotors began in October 2019 with Rain Bird 751 and 950 Series valve-in-head rotors on greens, tees, approaches and lawns and a triple row watering system on fairways, which avoids watering the surrounding heather. Pipework is large enough to facilitate future system additions. The pandemic caused a slight delay but

work was completed by MJ Abbott in May 2020.

Contractor MJ Abbott faced unusually challenging circumstances with the installation, as Technical Director Adrian Abbott explains: "The installation of the irrigation system had gone entirely to plan, with just the pump station left to install and then along came COVID-19.

"The confines of the UK Government guidelines for safe working in close proximity meant that instead of a team of four, we could only have one and sometimes two people on site. I was acutely aware of the need to get the project over the line for the club, so we had to be innovative and adapt our approach very quickly.

"Fortunately, MJ Abbott has a number of portable pump stations, one of which was



Andy monitors individual rotors and system performance from touch screen mapping in his office and remotely on a mobile

temporarily installed down at the water storage lake, some 500 metres from the pump station location, to enable us to pump water out onto the course. We were then able to fully commission the irrigation system and hand it over to Andy before then building the permanent pump station and swapping it over. We were 100% committed to finding a way through because having no irrigation in the record-breaking dry spring would have been catastrophic for the club, the course and all the heather work that had been completed over winter which needed irrigating to establish and grow."

Andy Ewence, Course Manager, adds: "An irrigation system is one of the largest investments a club ever makes. My aim was to have the safest, most future-proof system



Woking's 5th hole, courtesy of Jason Livy Photography

available.
 "Paperless, fully computerised, using the very latest touchscreen and mobile technology. And we've got that. We're totally teched up! We have a 60" screen in the office for mapping, a smaller computer in the team tea room, a laptop and mobile making accessing the system easy.
 "The Rain Bird IC System™ gives us an immediate and direct line of communication, straight from PC to rotor head. When I come in at 5.30 in the morning, I can do a full system test straight away, in minutes. We've

got complete confidence in the new IC system because it works, it's safe and it's reliable."
 He reports that the results out on the course are both performance-enhancing as well as immediately visible.
 "The difference is astounding," says Andy. "All the surfaces are green and there are no bare patches at all. We're achieving excellent distribution, a better, closer cut which means a consistent speed on greens. And members have noticed.
 "The Head Professional has had

lots of positive feedback and there's now a waiting list of people wanting to join. The Committee, Captain and members have been hugely supportive and interested in the new irrigation system. We're now taking small groups of members round to show them how it all works and they love it.
 "There's a real 'wow' factor when they see the mapping on the huge screen in the office. This is the best golf course there is. And what's exciting for our team is that we're still learning and tweaking the system. Next year, we will be able

to realise the true potential of the IC system in bringing the club's overall vision to life."
 Richard Pennell, Club Secretary, adds: "The issue of needing to replace the irrigation system was always likely to be among my first challenges on arriving at the club and it was clear early on that this needed urgent attention, despite the considerable costs involved.
 "We operate in a very competitive market in Surrey and to have any chance of keeping up with or moving ahead of our peers, we needed to provide our staff with

the appropriate tools for the job. With excellent communication from all involved, the decision quickly became not 'do we need this?', but 'how soon can we do it?' and 'how do we afford it?'.
 "We were already spending a lot of money propping up the existing system, in addition to the time and frustration in doing that for all involved and even then the old system could not water effectively.
 "Add into the equation a strong desire to be achieving best practice with regard to environmental and sustainability considerations, and a compelling argument was made and accepted. We were thorough in the process of choosing equipment and contractor too and both decisions have proved to be great ones."
 "Despite the weather, despite COVID-19 and lockdown, despite everything, the entire team involved has excelled. The hot spell this summer and high traffic post-lockdown gave the new system a chance to shine and it did. It's a great success and sets the club up for a couple of decades of 'compound interest' in terms of efficiencies, turf retention and improvement. Thank you all!"
 Alastair Higgs, Golf District Manager UK, Ireland & Iceland, Rain Bird, says: "For Rain Bird, being selected as the irrigation partner with the most user friendly and intelligent system that money can buy is especially satisfying.
 "The care and attention delivered through the design and installation has resulted in a stunning outcome. This course will go from strength-to-strength under Andy Ewence's stewardship. I can't wait to see the ongoing results. Rain Bird IC products offer the flexibility that allow the club to be agile and adjust to suit its needs well into the future." 📧

PROJECT DETAILS

Woking Golf Club
<https://www.wokinggolfclub.co.uk/>

Secretary
 Richard Pennell CCM

Course Manager
 Andy Ewence

Captain 2018/19
 Duncan Aldred

Contractor
 Adrian Abbott
 MJ Abbott Limited
<https://www.mjabbott.co.uk/>

Irrigation Consultant
 Roger Davey
 Irritech Limited
<http://irritechlimited.co.uk/>

Rain Bird Europe personnel
 Alastair Higgs

Rain Bird products:
 Integrated Control (IC) System™
 Stratus™ II Central Control V8 IC Connect for real time monitoring of Pump Flow and Rain Fall
 Pro LT Weather Station
 875 Rain Bird rotors:
 8005 & 5004 Series Rotors on tees
 751 & 950 Series Rotors on greens
 751 & 950 Series Rotors on approaches
 751 Series Rotors on fairways
 PEB IC pressure regulated valves
 34,000 metres 2-core control cable