Getting on top of your drainage problems

GI looks at two Home County golf clubs which have invested in tackling their drainage problems

In an ideal world, every golf course would love to tackle drainage problems when the ground is relatively dry, when access is easy and potential surface damage can be kept to a minimum.

However, greenkeepers like groundsmen in other outdoor sporting facilities are subject to limitations brought on by the demands of the sport. The dry summer months are the busiest time for clubs. Events are scheduled, matches played and maintenance issues have to fit into the busy schedule.

Coupled with this is the desire for ideal conditions: the dreadful downpours and icy conditions. But this isn’t always possible.

So how do you get round the situation can offer huge benefits to the greenkeeper managing the territory. It’s how they approach the job that makes the difference to whether objectives are achieved, in spite of whatever nature throws at them.

The worst drainage problems invariably don’t surface until it’s too wet to get onto the course without causing more problems than you’re attempting to solve.

Last year seemed to be particularly dogged by poor working conditions, it comes with the territory. It’s how they approach the job that makes the difference to whether objectives are achieved, in spite of whatever nature throws at them.

The relationship between club and contractor has to work on many different levels with communication always being the key to success. It is vital that you choose a contractor that is experienced in the sport and has had first hand experience of the work.

The relationship between club and contractor is crucial to the successful completion of any drainage project,” said Nathan George, Contracts Manager.

“The relationship between all the parties is even more critical when the project is difficult. Patience and appreciation of all the factors coming into play from both parties can make all the difference to progress and a satisfactory outcome. So we recommend the following:

1. Provide details of existing drainage and services, outfalls etc.
2. Approve all materials before the contractor begins.
3. Provide a list of helpful pointers for the Course Manager to help them understand the implications of working in less than ideal conditions. Another important though rarely used resource is the reference. Get to know your contractor. Talk to others who have used them on previous projects.
4. To minimise disruption to the course, installation should take place during spring, summer or autumn. If this isn’t possible, choose a contractor that is experienced in challenging environments.
5. Tendering – Encourage different contractors to tender for the work, but check its like-for-like, particularly in difficult economic times when costs are not always transparent.
6. Communication is the key – open lines of communication to keep up-to-date with progress.
7. Approve all materials before use – check the quality.
8. Be realistic in your expectations and time frame.
9. Keep your Greens Committee informed on progress so they can keep members informed.
10. Keep in contact with your contractor - Good client/contractor relationships are built over time as contractors become accustomed to the site and staff. When the project is completed, maintain contact with your contractor and keep them informed of progress. They are there to support you moving forwards.

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However, greenkeepers like groundsmen in other outdoor sporting facilities are subject to limitations brought on by the demands of the sport. The dry summer months are the busiest time for clubs. Events are scheduled, matches played and maintenance issues have to fit into the busy schedule. Coupled with this is the desire for most clubs to achieve and maintain the highest standards.

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Last year seemed to be particularly dogged by poor working conditions, it comes with the territory. It’s how they approach the job that makes the difference to whether objectives are achieved, in spite of whatever nature throws at them.

So how do you get round the need to do the work but at a time which isn’t ideal? The first and the most important step is to select a reputable contractor preferably a member of the Land Drainage Contractors Association (www. ldn.co.uk) who understands fully the implications of working in less than ideal conditions. Another important though rarely used resource is the reference. Get to know your contractor. Talk to others who have used them on previous projects. Get to know their strengths and weaknesses before taking them on to do a job which has a direct impact on the quality of play enjoyed by members of your club. Experience in dealing with similar situations can offer huge benefits to the greenkeeper managing the wide range of drainage issues that can arise and choosing the different methods of solving them. It is also critical to understand the effects of drainage installation on the playing surface, particularly in adverse circumstances.

The relationship between club and contractor has to work on many different levels with communication always being the key to success. It is vital that you choose a professional outfit which has a very positive attitude and understanding of Health and Safety obligations for instance. You need to be confident that any legal requirements are adhered to and all the necessary service searches for gas, water, electricity and existing drainage lines are in place before any work is undertaken.

M.J. Abbott is an experienced and specialist contractors to the sports industry and have set out a list of helpful pointers for the Course Manager to help them obtain the most from their contractor and ensure that whatever the installation and whenever it takes place, it will run as smoothly as possible.

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“The relationship between all the parties is even more critical when the project is difficult. Patience and appreciation of all the factors coming into play from both parties can make all the difference to progress and a satisfactory outcome. So we recommend the following:

1. Provide details of existing drainage and services, outfalls etc. to the contractor before the project commences.
2. Be aware of relevant Health & Safety issues and regulations.
3. To minimise disruption to the course, installation should take place during spring, summer or autumn. Difficulties are possible, choose a contractor that is experienced in challenging environments.
4. Tendering – Encourage different contractors to tender for the work, but check its like-for-like, particularly in difficult economic times when costs are not always transparent.
5. Make your contractor aware of your expectations and limitations.
6. Communication is the key – open lines of communication to keep up-to-date with progress.
7. Approve all materials before use - check the quality.
8. Be realistic in your expectations and prepare club members for a small amount of disruption to your course.
9. Keep your Green Committee informed on progress with regular updates so they can keep members informed.
10. Keep in contact with your contractor - Good client/contractor relationships are built over time as contractors become accustomed to the site and staff. When the project is completed, maintain contact with your contractor and keep them informed of progress. They are there to support you moving forwards.”

Murray Long, Courses & Estates Manager at Sunningdale Golf Club, has had first hand experience of the difficulties of timing essential remedial drainage work.

“We were aware that work needed doing well before the winter of 2008 but it wasn’t possible to even contemplate interrupting the Members’ fixtures for the coming season,” explained Murray.

“Any drainage works would have to be scheduled for late summer early autumn and recovery would have to be swift so that the Senior Open Championship due to take place the following July would be played on a course at its peak. We just had to hope that weather conditions would be favourable. In the event, they couldn’t have been worse.

“There are many factors to consider when choosing your contractor,” he continued. “We have always used several different contractors for a variety of work but what we looked for in this instance was a company that had the experience to give us the confidence that they were capable of the work. We had to acknowledge the significance of re-instatement and the need to avoid surface disruption. It meant the work would take longer and the contractor would have to dedicate their time and resources of labour and equipment over a prolonged period of time to ensure quality of finish rather than speed,” said Murray.

“Traditionally we would always aim to do drainage schemes in the drier late summer months” explained Nathan.
“But the problem at Sunningdale had become acute and we were asked to install drainage in conditions which were extremely challenging. Work was required on the 2nd and 14th holes of the Old Course that involved the installation of 365 linear metres of primary drainage with 100mm perforated mainlines and 650 metres of 80mm perforated lateral drainage at eight metre spacings. We excavated trenches at 600-700m depth, laid the pipe and backfilled to within 150mm of the surface with 15.5mm gravel, and approved sand/soil mix rootzone.”

“This was then followed by secondary drainage, consisting of narrow bands of gravel banding installed perpendicular to the primary drainage. The 280m wide x 180mm depth bands of 6mm gravel are injected into the surface at 400m centres. They make a positive contact with the piped drainage gravel and are designed to speed up the drainage of surface water lying between the lateral pipework.”

In order to keep surface disruption to an absolute minimum, boards were deployed to displace the weight of each piece of equipment when in operation. Three machines were working side by side at any given time, the trecherer, the dumper for spoil removal, and the gravel cart. Individual boards had to be laid, removed then re-positioned. Foshills Golf Club and Resort in Surrey called in Speedcut to carry out drainage work on greens as part of continuing improvements to course conditions.

“A wet summer in 2009 brought drainage problems to a head on several badly-draining greens,” said Course Manager, David Wyborn.

Speedcut Contractors Manager Kevin Smith said: “We carried out sandslitting on two greens that October with our AFT Wizz Wheel, having done one in March, and the heavy rain during the summer showed the full extent of the problem.”

Previously, two-laser-guided Masterbrook 10/120s had been employed on six fairways at Foshill, cutting trenches, removing spoil and laying pipeline.

“The torrential rain in July, up to two inches in a day on two occasions, would have been a real problem on the Longcross course but we fairways one, two and three sandbanded and they drained fantastically,” said David.

“In 2009 we had the second wettest year on record, and certainly the wettest summer,” he recalled. “Our drainage programme became increasingly pressing. During that summer we were hit by dreadful rain in July, which followed a terrible winter.”

“The rainfall in 2009 between the beginning of October and the end of February was a record 18 inches,” said David.

Six of the fairways at Foshills had suffered the previous winter and were to be closed for short periods, not only because of water not draining but because of slippery surfaces in some areas becoming a health and safety concern.

“We decided to drain three fairways on the Longcross course and three on the Bernard Hunt course,” explained David.

“The severe conditions on the course vary between sand and heavy blue clay, but in general the soil is heavy and poor draining.”

The three greens that were sandbanded are on the Longcross course. “They have always been prone to wetness but they now drain well,” said David.

“Foshills has superb surrounds and is very challenging from a greenkeeping point of view.”

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**Trolley / Buggy Policy.**

**Grass Species.**

A more recent trend has been to trial and use grass species that have been specifically bred to withstand high wear pressures. perennial Ryegrass and more recently Wri

**Trenchers AFT45 for compact tractors from 20hp**

With chain or slitting wheel, augers or conveyor to quickly install drainage systems, pipes or cables as and when needed. Ideal for sportsturf, agricultural, domestic and industrial markets.

**A Quick Guide to...**

**Easing Traffic Areas**

These days, the expectation of the modern golfer and the culture of the game demands “year round” golf which is best achieved using the latest products available with all the latest gadgets.

It is unrealistic for most to expect zero damage and compaction from golfing traffic. The skill is to limit the amount of damage.

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