

ROYAL SYDNEY

Starting in January, Royal Sydney Golf Club closed its Championship Course to undertake a complete redevelopment at the hands of renowned architect Gil Hanse. The course, located in the inner eastern Sydney suburb of Rose Bay, is due to reopen in March 2025

A site to behold

One of the biggest golf course redevelopments currently underway in Australia has just ticked over the halfway mark. ATM editor Brett Robinson recently caught up with Royal Sydney Golf Club superintendent Adam Marchant and over the next 14 pages delves into the many unique components of this all-encompassing and groundbreaking project.



PHOTO: ROYAL SYDNEY GC

Course superintendent Adam Marchant stands on the sandy mound of what will eventually become the new 4th tee at Royal Sydney Golf Club and surveys the scene like a proud custodian. Before him there is a flurry of activity happening as one of the biggest course renovation projects in the country at present continues apace on a squally Sydney midwinter's day.

A skid steer loader spreads the gravel layer on the new 3rd green, while two excavators work in unison to shell out the greenside bunkers to the right. About 50 metres the other side, another skid steer spreads the rootzone layer on the 8th green, while further up the hole a group of Royal Sydney crew members are stacking layers of revetted sod around the edge of the fairway bunker complex.

Up in the distance, in the shadow of the iconic Royal Sydney clubhouse, world renowned US golf course architect Gil Hanse guides a D4 bulldozer as he shapes the large fairway bunker complex on the left-hand side of 18. Up at the green, the cavity of which was only completed the day before, Hanse's right-hand man Josh McFadden artfully manoeuvres the excavator bucket as he puts the finishing touches to the rear greenside bunker.

This is Hanse's third visit to Royal Sydney since ground was broken in January and, as Marchant will tell you, whenever he is on site it's like a hurricane has hit and its pedal to the metal for everyone involved. In this two-week late July-early August visit alone he will end up smashing out seven greens complexes.

The pace at which the course works are now proceeding is in complete contrast to the protracted, and at times tortuous, journey Royal Sydney had to go through before it could even contemplate turning the first sod. It was back in July 2016, over eight years ago, when the club first engaged Hanse to come up with a new routing for its Championship Course. Signing off on his new design in 2019, that October the club lodged its first Development Application (DA) with the local Woollahra Municipal Council. It wouldn't be until December 2022 and a NSW Land and Environment Court appeal ruling later that the club would get the green light.

As then club president Chris Chapman noted at the time of the ruling: *"In working extensively with Woollahra Council and heeding the feedback of the local community since the original DA lodged in late 2019, we have produced what can be considered the most exhaustively detailed golf course renovation plans in Australian history. At more than 1000 pages and including numerous expert reports on matters ranging from ecology and horticulture to flood planning and the extensive civil works involved, no stone has been left unturned and absolutely nothing has been left to chance – nor will it be."*

Over the past eight months, those detailed renovation plans have progressively come to life as the project crests the halfway mark and begins the run towards a highly-anticipated re-opening next autumn. To say that a transformation of quite epic proportions is taking place at the Rose Bay site doesn't do it justice. The once tight and confined parkland-

style layout has disappeared and in its place is a layout boasting a new sense of scale and grandeur. Sweeping playing corridors and greens complexes which marry in with the landforms around them feature prominently and will, in time, be complemented by a landscape canvas set to triple the number of native plant species on site.

"I think the scale of the place will be the most-talked about aspect of this redevelopment," states Hanse during a five minute break from his seat inside the D4's cab. "It's not a spacious property by any stretch, but speaking with the members they were saying it's like we've found all this extra space – it was here but it was covered over and not of any use. It's amazing when you get up to the clubhouse now and look back down across the course, all the way to the 4th which you couldn't see before. It's pretty surreal.

"The one thing we talk about here is that the presentation of the course was very modern with a lot of aggressive shaping. What we are hoping to bring is a course that will feel a lot older and more natural-looking that fits in with the original shape of the land, but one that also has all the modern infrastructure in place."

TRACKING NICELY

There are so many elements of the Royal Sydney redevelopment which make it an intriguing project. The landscape component, once complete, is a story all its own (read more, page 28). So too the impressive level of infrastructure going into the ground to hopefully set the club up for the next half century. Then you have the new greens

Left: During his July visit, Hanse shaped seven greens, including the 18th and practice putter (pictured). As of September, 16 greens had been seeded

Right: The new vista looking from the 3rd tee, across the 2nd green (about to be seeded) and all the way to the iconic Royal Sydney clubhouse. Tree removal has helped to dramatically open up what was once a tight and confined parkland-style layout

complexes, featuring Pure Distinction bentgrass and a rootzone profile tailored to produce firm and fast conditions, and the bunkers with their unique mix of revetted elements (read more, page 22).

Then there is the design and strategy of Hanse's new layout which aims to bring a touch of Sandbelt golf to Sydney's eastern suburbs. Indeed, the new short par four 13th is an homage to and mirror image of Royal Melbourne's famed 10 West. This project marks Hanse's first foray into Australia and he couldn't have landed a bigger job. As he notes, his company knows how to build golf courses and can do them quick and do them well, but what makes this project particularly special is not only the scale of the transformation taking place but the stature of the club involved.

Also adding a little to the pressure is the timeframe which it is all being delivered in. Having closed the Championship Course in the middle of last December, the club has given an undertaking to members that it will reopen in March 2025. During that time members are playing a composite 18-hole layout made up of the nine-hole Centenary Course (not touched as part of the renovation) and the neighbouring public nine-hole Woollahra Golf Club.

The initial months of construction saw excellent progress made, with Hanse on site for around 10 weeks between January and



March. Starting on the boundary holes, nine holes were quickly shaped with the first six greens seeded in late April. During his second visit across 10 days in May, Hanse completed holes 1 and 9 and the new short game area which also doubles as the club's new 19th hole. Hanse's July-August visit saw greens 3, 8, 10, 11, 17, 18 and the small putter shaped and he will return in mid-September to finish off the 16th green.

Officially, as of September, 19 of 20 greens have been shaped. Sixteen have been seeded and Marchant is hoping to have the last green (16th) down by mid-October. All couchgrass surfaces (Santa Ana) are being solid turfed with around 15 hectares of 22 already laid to date. Elsewhere, 91 of 100 bunkers have been shaped, while more than 100,000 landscape plants and nearly 1000 trees (small and large) have been put in the ground.

The only aspect of the project timeline that is keeping Marchant awake at night at the moment is the construction of their new dam. Supposed to be undertaken as part of preparatory works last October, construction

of the 8ML storage dam, which resides to the left of the new 16th tee complex and behind the 3rd green of the Centenary Course, was delayed due to permits. While frustrating, Marchant is hoping that construction will be completed over the next couple of months and fully operational ahead of the all important first full growing season.

"Off the back of Gil's most recent visit, we are well over the halfway mark which is really pleasing," says Marchant. "We were going well for the first few months and then had a real wet period between April and June which put a halt to that momentum. We were having to work where we could as opposed to where we wanted to, but since then construction has progressed well and we are back on track."

THE RIGHT PEOPLE

A project of this magnitude involves many moving parts and for the club to ensure a successful outcome it means having the right people involved. That starts with Marchant and his team which has been expanded to cater for the demanding timeline that has been set.



SUSTAINABLE MACHINERY
QUALITY TECHNOLOGY



EXCLUSIVE IMPORTERS FOR MANUFACTURERS INCLUDING



+61 448 475 196 **+61 2 4651 1512**

SUSTAINABLEMACHINERY.COM.AU **INFO@SUSTAINABLEMACHINERY.COM.AU**

18 AUSTRALIAN TURFGRASS MANAGEMENT 26.4

JULY-AUGUST 2024 19



Royal Sydney superintendent Adam Marchant (left) with assistant Thomas Jones (centre) and senior foreman Matthew Broad. In the dozer behind them is Gil Hanse shaping the 18th fairway bunker complex

Marchant's senior crew is led by assistant superintendent Thomas Jones, who joined the club in early 2018, and senior links foreman Matthew Broad. The senior team comprises a mix of extremely skilful people who all specialise in different areas – irrigation technician Christian Pink, foremen Alistair Dunn and Kenny McNamee, head horticulturist Todd Stark, Sporting Areas operations manager Wendy Lloyd, Northern Areas turf manager John Flaherty and clubhouse horticulturist Brandon Brightman. All these staff are playing crucial roles in the project and ensuring all other areas of the club that aren't impacted by the project are being maintained and presented at a standard the club aspires to. This team and the entire Sporting Areas team have been instrumental to date and Marchant has been impressed with the buy in from everyone to ensure a successful outcome.

The Hanse design team have three full-time staff on site. Canadian McFadden is lead shaper and essentially acts as Hanse's eyes and ears when he isn't on site. He is assisted

by young Scottish shapers Reece Haspell and Rory Paul, with all three being housed locally by the club for the duration of the project. As part of that, the club also purchased all construction machinery – two D4 bulldozers, two 13-tonne excavators, a six-tonne excavator and bunker bike.

Working alongside the Hanse team is the crew from Atlas Golf led by Jim Norfolk, Peter Phillips and Glenn Woolcock. Once the green cavities and bunker complexes have been shaped by the Hanse team, the Atlas crew come in to install the required infrastructure (drainage, SubAir etc...) and the respective gravel and rootzone mixes. Working in and around them are a number of other contractors (e.g: irrigation installers) and Royal Sydney staff who look after the bunker vetting, solid turfing and greens seeding.

Marchant has made sure that his team is heavily involved in almost all aspects of the project and as part of that budgeted for an additional 10 staff, with six added so far. The project is a rare opportunity for Marchant's

crew and is exposing them to new skills that will serve them well as they progress their careers. To that end, there are mechanisms in place for the salaried staff to be earning extra money for working extra hours which has been beneficial due to the additional workload.

"We have some really good people across all areas of the project which is helping to make things run well," says Marchant. "That starts with Gil and his team. Gil is a great guy, very humble, and when he's in the dozer he's in the zone. When he is on site it's hectic because we know his time is precious, but everyone works in well to make sure everything is ready for when he gets here.

"The Atlas team have been world class. This project is extremely difficult, especially as it relates to the infrastructure that is going in the ground and more importantly the conditions of consent that need to be adhered to. Jim Norfolk and his highly skilled team have managed this process really well.

"At the end of all this, once I sit and reflect, the big thing for me will be how well 'our' team did. I knew they were good and I knew they were going to enjoy this, but I have been blown away by how they have bought into it.

"My senior team – Thomas, Matt and Christian – have been superb. I know that in our morning meetings I can go bang, bang, bang, this is what needs to happen today and I can leave it in their capable hands to implement which takes a lot of weight off my shoulders. That allows me to then make sure that Gil's guys are all good and concentrate on the other things that I am responsible for – communicating with the club and ensuring all the ordering (plants, trees, turf, sand, gravel) is done and everything is coming in when it is supposed to so that everything keeps moving."

A MASSIVE YEAR

Having the right team certainly makes Marchant's job a lot easier due to the all-encompassing nature of the task at hand. As well as overseeing all the various work and teams out on the course, Marchant also provides that critical communication conduit to the club, its various committees and a passionate member base regarding the ongoing progress of the redevelopment.

To that end, the club is documenting every stage of the construction, with Marchant fronting regular videos outlining the various works and features as the course comes to life. While Marchant admits he's not exactly a natural being in front of the camera, the videos are proving a hit with the members and are the most effective way of showing the progress that is being made each week.

In a way, this project has brought Marchant full circle. He initially joined Royal Sydney back in 2001, arriving at the club from his hometown of Mudgee and slotting in as a

junior member of a crew headed by the great John Odell. Within a year, between 2002 and 2003, he found himself involved in the Ross Watson redesign which focussed on greens and bunkers and can fondly recall being on the end of a shovel shelling out bunkers. After leaving for a two-year period to work for an irrigation company, Marchant returned to Royal Sydney in 2008 as a senior greenkeeper, rising to foreman then assistant and eventually taking over as superintendent in 2018 after the departure of Kiwi Steve Marsden.

While the 2002-2003 works were significant, they are but a patch on what is currently being undertaken. And therein lies the challenge for Marchant who after 21 years at the club is now playing one of the leading roles in one of the biggest projects not only of his career but in the club's history. The scale of the transformation taking place is equalled only by the level of expectation from the club and its members which Marchant is only all too aware of. Despite that, he is revelling in the once-in-a-lifetime opportunity and with the project now over halfway can envisage how good the finished product will be.

"It is full on and the weight of expectation is pretty heavy," reflects Marchant. "My name, my crew's name, is all over this and it has been for a long time. And we can't say we



Gil Hanse (dozer) and Josh McFadden (excavator) work their magic on Royal Sydney's new-look 18th

don't have the money or the time, so there's definitely no excuses on our part. It is pretty all-consuming and at times you do feel like you are being pulled from pillar to post. I live on course too, so you can't exactly get away from it, but I wouldn't have it any other way.

"My wife Yvette and kids (Max, Willow and Mackenzie) have been really supportive. They have ridden the rollercoaster of the last six-and-a-half years that I have been superintendent. It gets difficult at times trying to manage the project and family. Thankfully they all know how much this project means to me and have allowed me to allocate the time needed.

"But this is the bit now that for me is really enjoyable. I knew it was going to be a massive year, but this is the stuff I love. Making it that little bit easier is knowing we have the right people involved. Gil and his team are unbelievable at what they do. I'm glad the club stuck with him and stuck with the redevelopment despite all the challenges.

"The last couple of years getting the DA approved were pretty brutal, but if anything that period gave the committee and club more motivation and drive to see this project through. Now that we can see all the work finally happening and the new course taking shape, it makes all that effort worthwhile."

Editor's Note: ATM wishes to thank Adam Marchant and Royal Sydney Golf Club for allowing publication of this significant project update. For further details on the Championship Course renovation visit <https://championshipcourse.rsgc.com.au/>.



A project of the scale of the Royal Sydney redevelopment involves many moving parts and for the club to ensure a successful outcome it means having the right people involved across all areas

PHOTO: ROYAL SYDNEY GC



THE GOLD STANDARD OF GREENS AERATION

The ProCore® 648s builds on the tremendous legacy of the ProCore® 648 by incorporating innovative new features while preserving the time-tested design elements that changed the way you aerate. Proven reliability, improved performance and exciting innovation – that's what makes the ProCore® 648s the new superior choice. The next addition to Toro's legendary ProCore line of products is the new TransPro 648 trailer which allows for the secure and efficient transport of the Toro ProCore 648s and 648 models around your property.

For more information call 1800 356 372 or contact your Toro Area Sales Manager
toro.com.au

Follow @ToroAustralia on:







WORDS: BRETT ROBINSON PHOTO: ROYAL SYDNEY GC

Royal Sydney's new-look par three 6th green complex with the 15th (left) and 12th (right) greens just above. In the background to the left is the new par four 13th

"Even the new 12th (old 13th) grabs you with the way the hole moves, the positioning of the bunkers and the width. Flatter works better when it's wider and you're not hemmed in by trees. Those flatter middle holes were always going to be the challenge for Gil, but what he and his skilled team have come up with is really elevating that section of the course."

PURE GREENS

To complement the new routing, Royal Sydney's turf varieties are also being updated. Gone are the Penn G2 bentgrass greens replaced by Pure Distinction, while the Wintergreen couchgrass fairways and roughs make way for Santa Ana.

Pure Distinction was chosen following comprehensive trials which began back even before Hanse was engaged in 2016. The new generation bentgrass was a standout and in conjunction with perched water table greens construction and a SubAir system, Marchant is confident it will provide exceptional playing surfaces for many years to come.

As mentioned in the previous article, as of the middle of September, 19 greens out of 20 have been shaped and 16 dry-seeded. Greens 5, 6, 12, 13, 14 and 15 were seeded on 22 April, followed by further batches of two greens – 4 and 7 in May and 1 and 9 in June. Following Hanse's midwinter two-week visit, the 2nd and short game greens were seeded in early August, with greens 3, 8, 18 and the practice putter seeded mid-September. As this edition was going to print, greens 10, 11 and 17 were being prepped for seeding, which will leave just the 16th to do.

One of the main criticisms of Pure Distinction is its propensity to thatch up aggressively during establishment and more so in Sydney due to the increased humidity. To combat that, Marchant took a judicious approach when seeding the new greens.

"The benefit of having that prolonged DA period enabled us to work out how we were going to do things," explains Marchant. "We knew what the Pure Distinction was like so we seeded them at the lowest rate possible. With the first six greens we knew we weren't time poor so there was no need to rush things, although the seed probably ended up going out a little later than I had hoped."

"We seeded in late April and had five days of really good weather. They all germinated but then we had 200mm of rain across two days which washed a lot of seed out. I did question whether the low rate was such a good idea after that, especially because in the worst areas we have had to go back and do a lot of plugging. (Senior foreman) Matthew Broad

Above, below and beyond

Whether it's the aboveground features of the new Gil Hanse design or the impressive infrastructure going into the ground, the redevelopment of Royal Sydney's Championship Course is setting it up for many decades to come.

The breadth of the project to revitalise Royal Sydney Golf Club's Championship Course is huge, with practically every area of the existing layout being reworked by appointed architect Gil Hanse. The new design makes some significant routing changes, with the playing corridors vastly wider and more connectivity between holes.

Holes 1-6 follow the old routing along the site's undulating boundary terrain, with the new par four 7th cutting back inwards and playing down what was previously the corridor of the par three 14th. From there, the new 8th and 9th holes return to the clubhouse along the route of the old 15th and 16th. The old 17th becomes the 10th, which when finished will be a 200m par three. A uniquely-styled halfway house will be constructed adjacent to the tee which will feature a slate roof and flagpole identical to those which sit atop the eastern tower of Royal Sydney's famous clubhouse.

The new 11th and 12th holes play along similar corridors to the old 12th and 13th holes, leading to perhaps the most significant change to the routing. The old par five 7th, which previously hugged the O'Sullivan Rd boundary, has been sliced into two, making way for two cracking short par fours – 13 and 14. The 13th, as noted in the previous article, is Hanse's homage to Royal Melbourne's 10 West. The green boasts a wicked false front while there is a yawning hazard short and to the right which is nearly as large as the green.

The old 8th and 9th holes become the par five 15th which is currently a makeshift construction compound and will be the last fairway worked on despite the green being among the first to be built. At just a touch over 300m² each, the new 15th green and neighbouring 12th are the smallest on course. The closing three holes – 16 (playing down the old 10th), 17 (old 11) and 18 – are tailor made for a tournament grandstand finish, while the

short game green, between the 18th green and 10th tee, doubles as a 19th hole.

"It has been so interesting watching Gil do his thing and listening to him and Josh (McFadden, lead shaper) talk about the new design," says Royal Sydney superintendent Adam Marchant. "There is a reason behind everything they do and as part of this whole process it's going to be important that as a club we capture that so we can explain to members why things were done a certain way."

"The big one for me are the new angles they are producing. The new 7th (old 14) is a perfect example. The corridor is essentially the same, but by taking some trees out, widening the corridor, creating new grassing lines and cutting the bunkers into an area which already had movement, it has created a completely different look. It's the same with the new 8th (old 15th). That hole was arguably the most boring on the course, but once the trees were removed it had a completely different feel."



The new Royal Sydney greens feature a perched water table construction along with Sub Air infrastructure

has been an absolute gun looking after that for us. The greens have come back well and I am happy with where they are at.

“The 13th, which has a big false front, was a nightmare, but we persevered with the plugging rather than reseeding sections and having the grass at different stages. We ended up using some covers to protect the greens from further washouts. We had some old tarps from when we hosted the Davis Cup in 2011 and we also borrowed some from the SCG.

“We are deliberately keeping the greens lean and being patient with them and throwing a heap of sand on them. We have done six heavy topdressings already and making sure we are managing that thatch accumulation. Those first six greens are now about 21 weeks old and they feel firm underfoot already without really doing much to them. We just put a mower on them, haven’t rolled them and just keep up with regular dustings.”

Assisting Marchant with the grow-in phase and helping him formulate programs both onsite and at the turf farms (*more on them below*) is Cowra-based agronomic consultant Allan Tarrant. Since taking over as

superintendent in 2018, Marchant has been working with Tarrant to focus on soil health across all areas – the golf courses, lawn tennis courts, bowling greens and croquet lawns.

“It’s all about promoting good soil health and getting the environment right for the turf to do what it needs,” explains Marchant. “Allan said to me, ‘*You tell me what you want out of your grass and then we’ll talk about what needs to happen underneath*’. The big thing is not giving the turf anything it doesn’t need. We want to make sure that we are in control of the grass at all times and can easily ramp up or down when needed. As far as the grow-in goes, that has been working really well for us.”

SOLID APPROACH

In contrast to the greens, all other playing surfaces – tees, fairways and roughs – are being solid turfed due to the project’s tight timeline. That equates to around 23 hectares of Santa Ana couchgrass, with Marchant utilising two separate turf farms. Primary supplier is Dad and Dave’s Turf based near Pitt Town west of Sydney, while around seven hectares is coming from Thoroughbred Country Turf



in Aberdeen (upper Hunter Valley) owned by Ellerston superintendent Rod Hinwood.

The reason for having two separate suppliers was that the club needed a flood contingency. In recent years, many of the turf farms situated along the Hawkesbury River in the Pitt Town area have suffered devastating flooding. Were that to happen during the Royal Sydney redevelopment it would cause significant delays. Marchant therefore ventured to Aberdeen to inspect the Santa Ana turf there and knew that with Hinwood’s experience as a superintendent and having the right equipment he could deliver that contingency.

The club has three pads of fairway turf at Dad and Dave’s, with the rough turf being grown at Southern Cross Turf. As part of the turfing process, early on Marchant had two of his course staff – Lisa Thorncroft and Lawson Grant – based at Dad and Dave’s full-time, along with dedicated mowing and spraying equipment. The idea was that they could keep on top of a specific fertiliser program, weed spraying and cutting requirements to ensure that when the turf was harvested it would arrive on site at the desired quality and height.

“The turf guys have certainly made our lives easier,” says Marchant. “Graeme Colless and the entire team at Dad and Dave’s, including Paul Saad at Southern Cross Turf, have been amazing, as has Rod in Aberdeen. With a project of this scale and the weather impacting the way it has, it has been difficult at times to exactly forecast when turf will be needed. These guys have always accommodated our needs. With so much going on, it’s a huge relief to be working with people like this who can pivot quickly to ensure we get the turf when we want it and, at times, on very short notice.”

BUNKERS AND SAND SELECTION

Bunkers have always been an area of intense scrutiny at Royal Sydney and the redevelopment has provided a perfect opportunity to remedy some inherent issues. As a result, the amount of work that has gone into determining the best bunker construction methodology and sourcing an appropriate sand has been significant.

Over the past five years Royal Sydney trialled no less than 15 different bunker sands, yet when the project started still hadn’t chosen one. At that point three were in the mix – two from Sydney and one from Victoria. Marchant was a fan of the interstate sand as it provided a point of difference from the two local options which were already widely used at other courses across Sydney. The only issue with

The new Pure Distinction greens were seeded at deliberately low rates to combat the variety’s propensity to thatch up quickly. That did, however, create issues when washouts occurred, with the team doing a heap of plugging to ensure full coverage

the Victorian sand, sourced from Langwarrin in Melbourne’s southeast, was the significant difference in cost due to transportation (effectively a 2000km round trip). A month into the project, Marchant remained steadfast in his Langwarrin recommendation and was able to convince the club to sign off on it.

“It is a fantastic product and will provide us with something different,” states Marchant. “I thought the logistics of it would be a nightmare, but Burdetts have been fantastic. We stockpile the sand on site and when we need some more they will send a couple of trucks a day for the next couple of weeks.

“Throughout this whole process we have worked with John Neylan (SportEng) and Civiltest, not only with the bunker sand but also the greens sand and gravel. We have conducted hundreds of tests to ensure we were choosing the exact materials we wanted. John has been amazing. I know I have hassled him a lot and probably tested more than what was necessary, but from my end it was important to get this aspect right.”

From a bunker construction perspective, Royal Sydney has opted to go with the Better Billy Bunker Method (BBBM) which is replacing the old geofabric liners installed as part of the Watson rebuild. The BBBM is essentially a locally-sourced gravel which is spread to a 50mm depth across the base of the bunker and then sprayed with a special binding polymer which cures over a 24-hour period.

Combined with the BBBM, Marchant is using a combination of synthetic and natural sod revetting to construct the bunker lips. Once the bunkers have been rough shaped and handed over by Hanse’s team, the Royal Sydney team come in and hand excavate a 300mm-wide ‘bench’ around the perimeter of the bunker. The Atlas Golf team then comes in and shells out the bunker and puts in the drainage before the course crew go back in to place the gravel which is spread up and over the ‘bench’. Atlas then sprays the polymer.

Once cured, staff then install three layers of DuraTurf synthetic revets on top of the bench. One layer of natural revetted sod is then initially placed on top of the synthetic revets before Hanse’s team come back and indicate how many more layers of natural sod are needed to provide the desired shape and final look. That can be anywhere from two or three layers for the fairway bunkers and up to six or seven for the greenside bunkers.

“It’s something unique and while it sounds quite complicated it is working really well and providing the look we are after,” says Marchant. “The idea for the DuraTurf layer

Royal Sydney is using the Better Billy Bunker Method in its bunkers which comprises a locally-sourced gravel spread to a 50mm depth and then sprayed with a binding polymer. The photo shows how the gravel goes up and over the 300mm hand-excavated ‘bench’



Due to the redevelopment’s tight timeline, all couchgrass areas are being solid turfed with Santa Ana

came after some discussions with Nelson Caron at Seminol in the US who had worked with Gil and was doing something similar. The theory behind using the synthetic revet is that it will provide a permanent marker of the original shape and design of the bunker, even if the natural sod wears away or we get sand movement. The synthetic revet will never be seen as the bunker sand will come up to the bottom layer of the natural sod revet. We have also been playing around with burning the sod which gives it that black look and makes the bunkers pop out and more defined.”

IMPRESSIVE INFRASTRUCTURE

While the aboveground features of the new course will all be impressive elements of the finished product, it’s also about what’s going in the ground that is, for a superintendent anyway, just as exciting. In a bid to set the club up for decades to come, much thought and attention has gone into the infrastructure set up. Whether that’s in the form of macro drainage systems, a specially-designed irrigation system or SubAir infrastructure in the greens, little expense is being spared.



The new Rain Bird irrigation system is a case in point and from Marchant’s perspective will be the big game-changer for his maintenance operations. In a word it’s supersized and once you add in the new 8ML dam and state-of-the-art Grundfos pump station, it will be one of the most sophisticated irrigation systems in Australia. Designed by leading irrigation consultant Paul Jones, the new system will cater for Royal Sydney’s water needs well into the future.

“The brief we gave Paul was that we wanted to be able to run an entire par five hole all at once – tee, fairway and green – and to give us the pipe size, pump capacity and control system that would be able to do that,” says Marchant. “That’s where it all started and that’s what has taken the design from a normal irrigation set up to something where, in Paul’s words, you probably won’t see a bigger pipe network on an 18-hole golf course.

“With the old system, if we were putting out a wetting agent on our couch surfaces, say on our par five 2nd, I could get the spray rigs out the door and the fairways sprayed quickly. But to then water it in ahead of play took three



A unique combination of synthetic and natural sod revets is being used to construct the new Royal Sydney bunkers

separate stages because we didn't have the pipe capacity. We wanted a system whereby we could do it all at once so we could get those practices done ahead of golfers.

"To do that, our pipes are big. The old mainlines were either 100mm or 150mm. We will now come out of the pump station at 355mm. The majority of the mainline is 250mm and drops down to 200mm at the smallest. All our laterals are 90mm whereas the old ones were 63mm. To put it in perspective, we could deliver 70L/s out of our old pump station. With this new system, which has six large pumps, we will be able to deliver 170L/s."

The system features back-to-back Rain Bird sprinklers on all greens, with all 100 bunkers having their own dedicated heads to keep sand moist and consistent. Each green has a back-up potable water loop with QCV, while there are two isolation valves that feed the front and back of each green with a QCV on each. Other thoughtful additions include running the pipe network beyond where it would normally end and capping it so that the system can be expanded easily if needed in the future.

"The collaboration on this system has been so enjoyable," says Marchant. "Between myself and the senior team, in particular Tom and Christian, we are heavily involved in final placement to ensure that everything makes sense once construction is over. Our approach is that we will be using this system daily, so it's best to get everything in the right position now. Josh is great with advising where valves and heads are best placed and runs all irrigation positioning. Gosford Irrigation Water Services (GIWS) are installing the system and they have been great to work with and are doing a fantastic job given the scale of it."

"The important part here is getting the golf design right first and then the irrigation. This makes it difficult at times as there is no way to get in front as the design on the plan could change once Gil and his team start shaping. There is never any issue from the GIWS team if we need to change the design which is great."

GETTING AIR

In addition to the irrigation infrastructure is a SubAir system which will allow Marchant to eventually moderate and control subsoil

environmental conditions in the greens. It was back in 2017 when Royal Sydney reconstructed its trial green and first installed a SubAir unit with the view of ultimately rolling them out across all greens.

The SubAir system essentially hooks into the drainage network via a ring main around all greens, with the appropriate inlet and outlet pipes hooked up to dedicated units. The club hasn't purchased the units as yet but is installing all the necessary infrastructure (pipework, electrical) so they can be connected in the future.

The SubAir system will provide a number of benefits. The primary one will be that when the units are in 'vacuum/suck' mode they will be able to pull water through the profile quicker when it is at field capacity, effectively increasing the drainage rate. The rootzone profile being used, which has been specced in conjunction with John Neylan, is on the firm side. Having firmness and a free-draining profile doesn't go hand in hand, so having the SubAir system will assist with drainage rates while still allowing Marchant to keep the desired firmness levels.

The other benefit that Marchant sees, although one that will be harder to quantify, is that when the units are in 'pressure/blow' mode they will effectively be aerating the profile. Combined with renovations and regular use of their Air2G2 and needle-tining, Marchant can see some great benefits. Pressure mode can also assist drying out the greens.

"Underground I'd like to think we are futureproofing the course and setting the infrastructure up for at least the next 50 years," says Marchant. "If that's the case and Gil gets the architecture right, then the only thing that might need to happen in the next 50 years is perhaps re-grassing the greens if a better variety comes onto the market. There won't be the need to change the shapes of the greens or the infrastructure in the ground because of the work we are doing now which is a pretty good result I think."

"We have also done work outside of our own infrastructure. There were two large council stormwater assets running through the course which we sought approval to replace at our own cost. It was a case of we had the machinery on site to do it, so while the ground was open it was a good opportunity to replace it. If we had left the old infrastructure in the ground we could have run the risk of something breaking and council coming in down the track and ripping it all up. It was a no-brainer to do that work and it now gives us peace of mind that everything in the ground is up to date and will last a long time."

After trialling 15 bunker sands over a five year period, Royal Sydney has opted for a sand that is coming all the way from Langwarrin in Melbourne

PHOTO: ROYAL SYDNEY GC



Women in Turf Program shines spotlight on female greenkeepers

COBRAM Barooga Golf Club again hosted a group of female volunteer greenkeepers for the 2024 Webex Players Series Murray River as part of John Deere's Women in Turf Program.

Returning to the site of the program's successful launch in 2023, the six volunteers had the rare opportunity to work alongside other women as they supported club Superintendent, Terry Vogel, and his team to prepare the picturesque course for the PGA event.

John Deere Golf and Sports Turf Key Account Manager, Corey Clark, said the program is about creating career pathways for female greenkeepers.

"On top of professional development, it also helps them build support networks and gain confidence plying their trade at a big tournament like the Webex Players Series," he said.



Sophie Warren from Glenelg Golf Club and Bella Browne from Thurgoona Country Club connected through the John Deere Women in Turf Program.

"Terry and his crew at Cobram Barooga have been super receptive of hosting the program again, and the volunteers have fitted in really well with them."

Mr Vogel said the club jumped at the chance to host the volunteers again.

"It was incredibly successful last year, so we were ecstatic when John Deere asked us if they could run the program at Cobram Barooga again this year," he said.

"All the women bring their own diverse range of skills and experiences into the team. The attitude and professionalism they showed throughout the week was infectious for the rest of the team."

At just 17 years old, Bella Browne was the youngest volunteer in the program, but said she was made to feel like one of the team.

"I was a bit nervous coming into it, but all the staff and the other girls were so welcoming and helped me settle into the week," said the Thurgoona Country Club apprentice.

"It's all male staff where I work, so it's cool to see there are other women in this industry, and to hear where they've come from in their careers."

Susie Rawlings is relatively new to the industry, starting at Toronto Golf Club in Newcastle only 12 months ago after spending 20 years in the telecommunications industry.

"I'm used to working in male-dominated industries, so this was a unique experience for me," she said.

"You can do a lot of different things in this industry, and the Women in Turf Program is a great stepping stone to experience different sides of the role." Susie Rawlings

The Women in Turf volunteers also included Tegan Lewis from Hartfield Golf Club in Perth, Shana Stopp from Green Options in Brisbane, and Holly Ross from Bayview Golf Club in Sydney.

John Deere Production Systems Manager, Stephanie Gersekowski, said the program reflected John Deere's wider commitment to diversity, equity and inclusion (DE&I).

"The program not only provides invaluable professional development opportunities, but creates a sense of community among female greenkeepers, which is important in a typically male-dominated industry," Ms Gersekowski said.

"We really feel like we're still at the tip of the iceberg when it comes to the impact this program can make."

Passion project

The redevelopment of Royal Sydney's Championship Course is set to triple floral diversity on site and reinstate a more natural heathland aesthetic.

A primary component of the Royal Sydney redevelopment, and one which the club has invested significant resources into as part of its Development Application (DA), is the landscape. Guided by a detailed Biodiversity Management Plan which stretches to 217 pages, the club has undertaken to incorporate 500,000 landscape plants and 2187 trees as part of the redevelopment.

Those numbers are to offset the 595 trees that were removed as part of the initial works, 330 of which were large paperbarks. The removal of those trees has opened the site up magnificently, creating some incredible vistas across the property and providing a new sense of scale which had otherwise been hidden. This will be complemented by a strategic landscape design which has been devised by architect Harley Kruse who is working in conjunction with Royal Sydney's head horticulturist Todd Stark.

As part of the DA requirements, 250,000 of those landscape plants must be in the ground before the course can reopen next March. As of September, more than 100,000 have been planted, with Royal Sydney superintendent Adam Marchant looking to accelerate that now the bulk of the earthworks and shaping has been completed. Through the diligent and hard work of Sporting Areas operations manager Wendy Lloyd, Marchant is keeping detailed records off all plants coming on site, with upcoming nursery deliveries scheduled for September and December complementing those already in March and May.

Despite the number of trees removed, there will be a net increase of 1592 trees across the property by the end of the project. As of August, 438 of 948 'advanced' trees had been planted, while 482 of 1239 smaller trees have also been put in the ground.

The new landscape plantings will include a plethora of endemic heathland species,

including endangered Eastern Suburbs Banksia Scrub and naturalised native grasslands. Prior to the redevelopment, there were 30 different species of trees, plants, shrubs and grasses identified around the course, but by the end of the project this will be increased to more than 100 native species.

"This project is all about reintroducing the flora back into Rose Bay which is a huge passion of mine," says Stark, who has been at the club for seven years. "This a perfect opportunity to reintroduce a much more diverse plant population which will eventually lead to a greater abundance of fauna on site. Golf courses provide unique areas where rare and endangered plant communities within urban environments can thrive and this project gives Royal Sydney the opportunity to showcase that and lead the way forward.

"Personally, I'm really looking forward to seeing how the new par three 6th hole will progress. From a pure horticulture perspective,

to see the plantings that we are putting in there, it will be one of the standout areas on the course for me. It will be really interesting to look back at the before and after photos in a few years' time and see the transformation."

LOCAL PROVENANCE

Due to the scale of the landscape component, the club has been working closely with a number of specialist nurseries over the past four years to grow the required trees and tubestock from seed and cuttings. One of those is Harvest Seeds and Native Plants based in Terrey Hills, with managing director Marina Grassecker and her team growing around 120,000 plants. Marchant says the club is fortunate to be working with passionate individuals like Grassecker who sees the positive role golf courses can play in being sanctuaries for endemic species to flourish.

"It's a huge component of the overall project – getting them from seed and cuttings into tubestock at the nursery and then into the ground at Royal Sydney," says Marchant. "Someone like Marina and her team are a big part in helping us do that and helping us

Royal Sydney will incorporate 500,000 landscape plants and 2187 trees as part of the current redevelopment. Pictured is the new 7th which features extensive landscaping in front of the tee and to the left of the fairway



WORDS: BRETT ROBINSON PHOTO: ROYAL SYDNEY GC

Top: Royal Sydney superintendent Adam Marchant (left) with head horticulturist Todd Stark (centre) and landscape architect Harley Kruse; Middle: 2000 lineal metres of 'habitat logs' need to be incorporated back into the landscape; Bottom: Milled paperbark timber will be turned into course furniture, providing a sustainable link back to the old course

grow some of the rarer plants. It's similar to what has been done in Melbourne where the likes of Royal Melbourne work in conjunction with Bayside Nurseries who collect seed and cuttings from the course and propagate them. These are then planted back into the course and made available to the local community."

In addition to the substantial native plantings, as part of the DA requirements the club must also incorporate 2000 lineal metres of 'habitat logs' around the course. During the tree removal process, a separate milling company was brought in to cut the logs at the required lengths which have been stockpiled throughout the course for placement later on.

During that milling process, a stock of paperbark timber was also preserved which will be turned into course furniture, providing a sustainable link back to the old course. A number of different designs for tee signage, tee plates, tee markers and sand bins have already been fabricated. One end of the large machinery storage shed has been turned into a makeshift timber stockpile which will be processed in the Royal Sydney workshop once the final designs have been agreed upon. 🌱