# Mount Lawley in the limelight

In early February, Mount Lawley Golf Club officially opened its new-look course after a three-year, three-stage redevelopment. Under the auspices of OCM Golf lead architect Mike Cocking, the project has brought a touch of the Melbourne Sandbelt to Perth, complete with a new bunkering style and 007 bentgrass greens. ATM editor Brett Robinson catches up with course superintendent Rod Tatt to look back on the project and some of its unique elements.

he past six-and-a-half years have gone by in a flash for Rod Tatt.
It was 2018 when the Victorian superintendent departed Yarra Yarra Golf Club on the Melbourne
Sandbelt, travelling to the other side of the country to take the reins at another venerable golfing establishment – Mount Lawley. The move to Perth surprised many, but it has been one which has ultimately brought Tatt much success and proven to be a landmark period in his turf management career.

Arriving at Mount Lawley just weeks out from the club hosting the 2018 WA Open, Tatt had to hit the ground running. And he hasn't stopped since. In addition to navigating that tournament, a global pandemic (which for a Victorian in Perth was particularly challenging) and winning the ASTMA's coveted Claude Crockford Sustainability and Environment Award in 2023, the past three years has also

seen Tatt steer the club through one of the most significant course projects in its near 100-year history.

On 8 February 2025, Mount Lawley officially opened its new-look layout when life member Stan Bell hit the first tee shot down the 1st. It signified the end of a three-stage reconstruction project under the auspices of OCM Golf which saw the reconstruction of 21 greens, six tees, a major overhaul of the practice facilities and clubhouse surrounds and the reversal of nines. After initially focussing on the greenside bunkers, all fairway bunkers were rebuilt as well, with the overall number of hazards going from 62 to 86 and increasing in size as well.

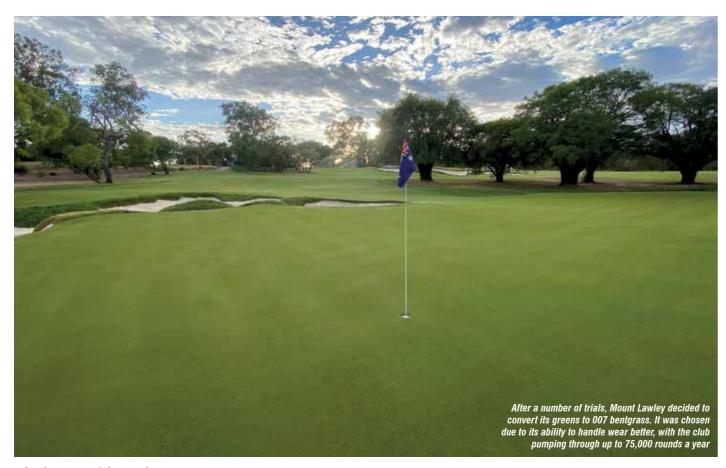
For Tatt and his core crew of 11, the project was very hands on, working closely with the OCM team which comprised lead architect Mike Cocking and project manager Rob Swift. As Tatt attests it has been quite the journey

they, and the members, have been on, but one he is confident has set the club up for prosperous times ahead.

"It has been the biggest project of my career without a doubt," reflects Tatt (51). "We did a lot of planning, trials and testing which was critical, but the most important thing was the hard work and support from the staff and the members. It was exciting to turn up every day and see the gradual progress being made and getting the positive feedback from the members that we were on to something good.

"I'm really proud of the staff. We were able to pull the whole thing together with a relatively small team and they did an absolute power of work. We also had great support from the Board and general manager Troy O'Hern. Obviously with each stage we would learn a bit more which would help with the next and I think the finished result is something both the staff and members can be very proud of."





# **LONG-TERM SOLUTION**

What has eventuated at Mount Lawley over the past three years is certainly more significant than what was originally planned. While the WA Open was Tatt's immediate focus upon arriving in 2018, shortly after that the club was all set to launch into a greens resurfacing program. Tatt, however, could see that the existing 1019/1020 bentgrass/*Poa annua* greens had a number of inherent issues which wouldn't be remedied by a quick fix solution.

Mount Lawley members love their golf and the annual round numbers reflect that. In an average year they'll clock up 70,000, while during COVID that shot up to 75,000. At just a hectare overall, the previous greens were relatively small for the amount of traffic they were receiving and the wear and tear was showing. Under the surface. Sting nematode activity was a constant headache, causing a shallow root system which was compounded by shade and other microclimate issues. There were also design shortfalls, with some green shapes holding excess water which exacerbated water-borne diseases such as pythium. As Tatt describes it they really had to "nurse" the greens through Perth's brutal summer months with staff spending many hours on the end of a hose

With a number of issues at play, Tatt recommended the club step back and reassess their approach in order to give the members the best result possible long-term.

With OCM Golf on board the scope of works soon became a complete reconstruction of all greens complexes complete with a new growing medium and bentgrass variety.

Prior to his arrival, the club had already conducted a number of bentgrass trials, but with the change of plans that enabled Tatt to

# BY THE NUMBERS – MLGC REDEVELOPMENT

- Over 14,000 hours labour by course team, plus countless hours planning.
- 21 greens reconstructed (13,850m² of 007 bentgrass seeded).
- 5.5ha of Santa Ana couchgrass laid.
- 5,500m³ of greens growing medium imported (blend of sand, 2% compost and 1.5% Mineral Magic by volume).
- Over 5,000m³ of native sand moved to construct green and tee bases.
- 86 bunkers reconstructed and/or added (up from 62 on the old course).
- Six tees complexes.
- 3000m² practice tee.
- Multiple clubhouse and course pathways.
- New reticulation installed in all new greens, tees and fairway bunker areas.
- OCM Golf took eight months to construct split over three years.
- Over \$450,000 in course staff wages.
- Total spend \$3.7million

assess some newer varieties. It also allowed him to look more thoroughly into the best rootzone mix and amendments for the greens and bunker sands, with Perth-based consultant John Forrest brought in to assist investigations.

From a turf perspective, four grasses were planted into two greens to assess how they would handle Perth's unique climate and also the crew's management regimes. 777 was the new variety which hadn't been trialled earlier and it would come down to a three-way race between it. 007 and Pure Distinction.

For Tatt, there were a number of key qualities he was looking for. First and foremost it needed to be able to handle traffic and wear but also not be high maintenance. Due to their high round numbers, Tatt didn't want to be out every week trying to dust or verti-mow. Not surprisingly Pure Distinction quickly dropped out of consideration due to its propensity for rapid thatch development. In the end, it came down to 007 and 777 with the club opting for the former, older variety.

"They're all great grasses and in different climates and under different management regimes they all produce great surfaces. You look at Peninsula-Kingswood and the Pure Distinction there is amazing," explains Tatt. "In the two years of trials we did, the 007 produced about half the amount of thatch that the others did with our management practices. The 007 also has a bit more lateral growth and recovery ability from pitch marks. It might be

one of the older grasses, but 007 is certainly fine enough and you can really work it and get it as fine as you want."

# STARTING SMALL. FINISHING BIG

After initial delays due to the pandemic, the Mount Lawley redevelopment kicked off in earnest in the latter half of 2022. The first stage would see four of the more problematic greens – 1, 7, 8 and 11 (which now play as holes 10, 16, 17 and 2 with the reversal of the nines) – tackled first. The plan was to start off small, with a six month gap in between each stage to enable Tatt and his team to really highlight the quality of the new greens to members before pushing ahead with the next stage.

Stage 2, in the spring/summer of 2023/2024, comprised eight greens (now 3, 4, 5, 7, 11, 12, 14 and 15) and also saw the addition of the fairway bunker element of the project (more on that below). The third and final stage, completed this past February, was the biggest – greens 1, 6, 8, 9, 13 and 18, two practice putters and a new chipping green. Stage 3 was the most challenging due to the increased scope of works which also included the construction of a 3000m² practice tee along with all clubhouse pathways and surrounds.

As each stage progressed, Tatt and his team would finetune their methods and grow-in/management regimes to streamline processes. Each green was initially stripped of all irrigation hardware and anything salvageable, like valve boxes and sprinklers, was kept. The existing turf was sod cut and taken away, bunker edges removed and the whole greens complex then rotary hoed to give OCM a clean slate.

OCM would then box out each green to 300mm before irrigation was installed and the native sand push up base fumigated with Draslovka's EDN product. After being left for 10 days, the new rootzone mix was imported which consisted of a local Carramar plastering sand (typically used in greens construction in Perth) which was blended at the quarry with compost (2%) and Mineral Magic (amorphous silica, 1.5%) to increase moisture retention.

After OCM completed final shaping, the greens were handed back to Tatt's team who would lay a strip of Santa Ana couchgrass around the perimeter of each green before a local company came in to hydroseed the 007. The remainder of the surrounds were then solid turfed with Santa Ana (the majority of which was supplied by West Coast Turf), while staff would also finish off all the tie-in work with the new bunkers.

"The grow-in and establishment went really well and I couldn't be happier with the

The project was carried out across three stages, with the new 17th (old 8th) among four of the more problematic greens tackled during the opening stage



The Mount Lawley course redevelopment has been the biggest project of Rod Tatt's superintendent career. The Victorian moved to Perth in 2018 after a successful stint on the Melbourne Sandbelt

new profile and how much root depth and structure we have in the greens," says Tatt.
"The whole point of the compost and Mineral Magic blended into the profile was to get some carbon into the soil and some moisture and nutrient retention long-term. Even with the older 'new' greens we are still getting roots down to the end of the hole changer.

"It's so nice to be working with a new profile that drains well and doesn't thatch up like the old greens did and hold moisture near the surface. Our nematode counts, which we monitor regularly, are still low too. We know they will be back at some point, but we aren't having to treat them yet."

# SANDBELT STYLE

Arguably the most unique aspect of the redevelopment works has been the significant shift in bunkering style. In a deliberate move to create a point of difference between it and Perth's other top tier courses, Mount Lawley has gone for a distinctly Melbourne Sandbelt

feel with its new bunkers. Given both Tatt's and Cocking's experiences working on and affinity for the Sandbelt, it was a good marriage and the end result is striking.

In typical Sandbelt style, the Mount Lawley greens are now cut right to the edge of the bunkers, while the backsides and tongues are rolled over Santa Ana couchgrass oversown with fine fescue. Using fescue is certainly a bold move given Perth's extreme summer heat but Tatt is confident they're on to a winner.

"Mike (Cocking) really wanted to capture that Sandbelt feel with the greens complexes," explains Tatt. "Having worked together over the past 25 years, we workshopped some ideas and came up with how we were going to get that sharp edge look. We decided to revet the edge using turf off our couch fairways and sod cut it thick and laid them back to back about 2-3 high which gave us that instant edge and real good stability. So we have couchgrass sod on the bunker edge and then bentgrass up to that which has worked really well.



10 AUSTRALIAN TURFGRASS MANAGEMENT 27.2 MANAGEMENT 27.2











A key part of the project was reinstating Mount Lawley's famous 'Commonwealth' par three hole which was part of the original layout when the course opened in 1928. Having lost its original design intent, the green, which is in the shape of Australia, has been reimagined by OCM Golf and has become the club's signature hole

"With the fescue on the backside and in the tongues, as it has matured it is getting better. The couch is in there to hold the bunker edge together over summer because the fescue wouldn't hold on by itself and would get knocked around too much. Admittedly, it was a bit tricky in the first year keeping the fescue alive during the first summer with the extreme heat we get. When we started seeding some of the fairway bunkers in June they were great because you were able to get it established, but towards the end of the project when we were seeding them into October it was a bit tricky getting through the summer.

"The older the fescue gets, it finds its own length. We don't have to be in there chopping it down with a whippersnipper all the time. We may go in once a year to give it a good hard haircut and let it come back over winter, mainly to reduce the amount of couchgrass material that builds up over the warmer months. We also go back and hydroseed any areas that need filling in. Overall we feel it is working really well and giving us a great contrast to the roughs and the short grass areas."

As Tatt alludes to, adding to the complexity of the bunker works was the club's decision midway through Stage 2 to redo the fairway bunkers as well. Although it had been flagged that there would be a significant difference in appearance between the new greenside

and old fairways bunkers, the club was initially content to review them at a later date. However, after seeing the impressive new style, the trigger was pulled on the fairway bunkers to ensure continuity throughout the course.

In most cases the fairway bunkers were replaced where they were and remodelled to mirror their greenside counterparts. A few new ones were added, some larger bunkers were turned into 2-3 smaller ones and others were simply filled in depending on the strategy with the new greens complexes.

"It added to the workload and logistical challenges across those latter two stages, but it made a lot of sense and was definitely the right move," says Tatt on the call to redo the fairway bunkers. "Like with any construction project, you deal with the challenges that are thrown at you. We had 12 holes' worth of fairway bunkers to do so it meant we needed more turf. Getting supply from the turf farm was challenging so we had to strip some fairways and also getting contractors to lay it at short notice had its moments."

# A SPECIAL SIGNATURE

One of the more creative parts of OCM's work was reinstating Mount Lawley's iconic 'Commonwealth' hole, what was the par three 13th which is now the 4th in the revised layout. Back when the course was first built in the late

1920s, the 'Commonwealth' green was shaped in the outline of Australia. Given the lack of technology at the time, the original design was pretty accurate with sand running around the green perimeter to accentuate the shape.

Over the years the green was changed numerous times, boasting various shapes and bunker complexes to accommodate the increase in traffic and new equipment such as ride-on mowers and boom sprayers (the original green only had two access points). As such the unique character of the hole had been progressively lost, however, in the summer of 2011/2012 the club attempted to recapture that when it reconstructed the green with a more 'Australia-looking' shape.

Keen to reinstall the green to its origins and make it a true signature hole, OCM Golf used a 1948 aerial image of the hole as inspiration (see above, top left). As well as reinstating the full Australia shape, their design includes three large bunkers – one takes up the Gulf of Carpentaria and wraps around Cape York Peninsula, another hugs the Western Australia coastline, while the largest is around Tasmania which is represented by a grassy island of couch oversown with fescue. From the elevated tee you can kind of make out the shape, but it's from the air (see photos above) where you get a true appreciation of how faithful OCM's shaping has been.

"The reimagining of the Commonwealth hole was an important part of the project," states Tatt. "It has been really exciting to reintroduce it and it has become quite the talking point among the members.

"It's a great little hole – only 120 metres – and the green has increased from 400m² to 650m². The old green was one of our problem ones – it was small, flat, surrounded by trees, was at a low point of the course and had a lot of microclimate issues. Thankfully we've been able to remove a few problematic non-endemic trees behind the green which has helped to improve airflow.

"There's now a lot bigger opening on the left-hand side for players who want to run the ball down, whereas before there wasn't much of an access point as there was a bunker in the middle. If you play it smart you get out of there with a par, but if you take on the 'Melbourne/ Victoria' pin behind the bunker it's a very tricky shot and you might walk off with a six.

"From a maintenance perspective, it can be a bit tricky mowing 'Queensland' with the narrow peninsula, but the staff do really well with the hand mowers which we use most of the time. It can be a bit tricky with the boom sprayer as well so we mostly use a pedestrian boom on that green now."

### GOING NANO

In tandem with modernising the greens both above and below the surface, Mount Lawley has also been extremely proactive behind the scenes across the project improving its irrigation water quality.

In the spring of 2023, the club became the first in WA to trial a Nano Bubble Technologies (NBT) treatment unit which aims to increase dissolved oxygen (DO) levels, oxidise iron and control cyanobacteria and pythium in its



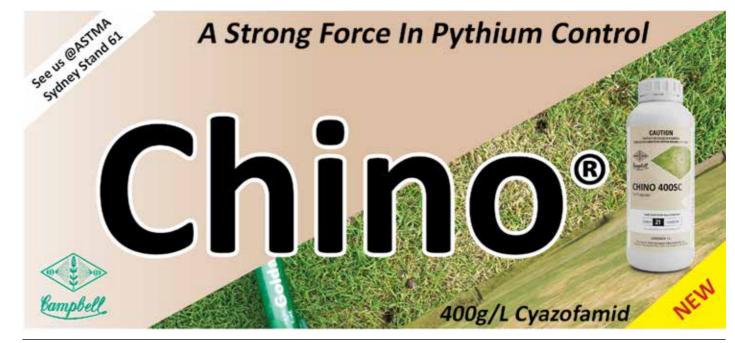
Mount Lawley has been trialling a Nano Bubble Technologies water treatment unit over the past year. Tatt says it has made significant improvements in the quality of their irrigation water and greens surfaces as a result

irrigation water. Like all courses in Perth, Mount Lawley relies solely on bore water and has a 372ML annual license which come 2028 will be cut by 10 per cent as the WA Government reduces water allocations for sports and recreation facilities.

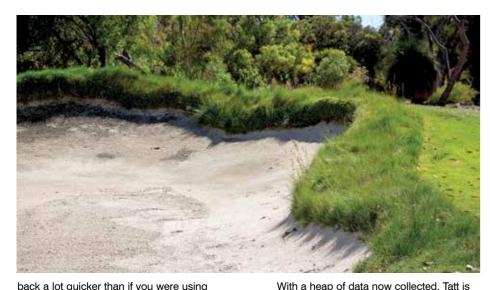
The 6ML Mount Lawley irrigation dam contains three 'ponds'. Bore water is pumped into a small top pond before flowing into another similar sized pond which both aim to remove some of the iron content. That water then flows into the main pond where it is treated. The NBT treatment unit – which Tatt describes as the "Rolls Royce" version – is housed in a container next to the irrigation dam and comprises two sets of five injectors. Water is drawn from the main irrigation pond into the injectors, with one outflow line sending treated water into a wet well which feeds straight into the irrigation system, while a second line sends treated water back into the lake.

During the first summer of the trial, high iron levels in the bore water caused the unit's injectors to block. After working with NBT to resolve the issue – which involved swapping out the original stainless steel injectors for new titanium ones – the system is now working really well. With a full summer of operation now under the belt, Tatt is encouraged by the results he is seeing not only in terms of the readings from the irrigation dam but also visually on the course.

"The quality of the NBT water has definitely made a big impact on water usage reduction, improved uniformity across the course and greatly improved turf recovery from stress, particularly on greens," explains Tatt. "We had a few of the new greens dry out on us this past summer and their recovery from that was phenomenal. If you have a dryness issue or greens that are under a bit of stress, using the treated water seems to enable them to bounce



12 AUSTRALIAN TURFGRASS MANAGEMENT 27.2



back a lot quicker than if you were using untreated water. I guess that is what you'd expect because you are getting that oxygen down into the roots

"When the bore water comes into our top ponds the DO levels are about 4-5ppm, but once treated that rises to 10-15ppm which is better than rainwater. It's a big difference and we are getting those readings at the sprinklers also. We have a handheld DO meter which we use to take measurements at various points (dam, wet well, sprinklers) so we can tell that it is getting delivered straight to the greens.

"We are also testing for cyanobacteria and iron levels. There is a feeling that the system can oxidise the iron and drop it out in the main lake, so therefore it's not going through the system. The other beneficial thing is that because ozone is used as part of the treatment process, it is cleaning the irrigation system on the inside. You can also tell by looking at the clarity of the lake that it is making a difference. Normally in summer when water temperatures rise we get a lot of algae issues on greens, but the ozone is taking care of that."

Mount Lawley's new bunkers have a Melbourne Sandbelt feel to them. Greens are cut right to the edge, while the backsides (pictured) and tonques are rolled over Santa Ana couchgrass oversown with fescue

water helps it to penetrate the surface twice as fast than the untreated water, so we should have less dry patch not just in the greens but across the whole course."

### SHOWCASING MOUNT LAWLEY

After a hectic three years of construction, the past three months have been a welcome change for Tatt and his crew as they enjoy being back in more of a routine maintenance mode. While there are a few small areas still left to tick off around the course, the focus is now about lifting the bar and presenting the new surfaces at their best for the members.

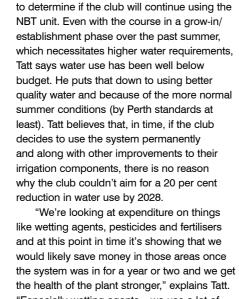
As Tatt delights in saying, managing the new greens compared to the old ones is like "chalk and cheese" and there have been some noticeable changes, whether it's using less product to combat disease or tweaking their regular maintenance regimes.

"The big thing with the new greens is that we have the confidence now of being able to go home and not be stressing about them on a weekend," explains Tatt. "If we do our prewaterings on a Saturday and Sunday morning we know they are going to get through the day without any dramas. With the old greens you'd be here in the afternoons nursing them through. You'd also be in mowing the old greens on the weekends whereas now we are able to drop that mow and get away with just a roll. The NBT treated water certainly seems to be helping with the pythium as well and we probably made only one or two preventative applications last summer compared to spraying every three to four weeks previously."

Just as the members are finally relishing playing a full complement of 18 new-look holes, for Tatt and his team they are looking forward to putting the new surfaces through their first real test in a few months' time. Having last hosted the WA Open within Tatt's first couple of months at the club, the tournament is set to return to Mount Lawley this October for the 11th time in its history.

"It's going to be great having the WA Open back and will give us a chance to really focus on that high-end presentation across four days of tournament golf," says Tatt. "We are superexcited that it is being broadcast on TV as it will give us the chance to showcase to the rest of the country the new Mount Lawley and the hard work that has been achieved by many to get to where we are." 4

The final stage of works was the most challenging and included nine greens, among them the 9th, 18th, chipper and practice putter (pictured), as well as a 4000m<sup>2</sup> practice tee and clubhouse tie-in



in the process of doing a cost-benefit analysis

"Especially wetting agents - we use a lot of them here because of our hydrophobic sands. Having the higher DO levels in the treated







by seconds, ET, rotation, or application: CirrusPRO™ puts a complete course view and crucial data at your fingertips, so you can make smart irrigation decisions and improve playing conditions too.



@ 18F7

00:09:00

Learn more at RainBird.com/CirrusPRO

Exclusive Australian Rain Bird Golf products distributor. Contact 1300 556 116 for further details.

