

Turf Nursery Project

After approval from the club at the Spring General Meeting, we started planning to reinstate the old turf nursery left of the 7th green. This area had not been used for a turf nursery for several years and had been used to dump material taken off the golf course such as grass clippings, turf cut-offs or brash. There had been comments made by local residents and members asking if anything was going to be done to this area to tidy it up or reinstate it as a turf nursery as it began to look unsightly. In the back of our minds, we had always planned to reinstate it as a turf nursery which could be a useful and sustainable resource for years to come.





The turf nursery area before the start of the project with donated material from local projects

The site was just over 7000m² and it was decided to turn 5000m² into a turf nursery and use the remaining 2000m² as a compound area for storing/dumping materials.



The proposed layout for the turf nursery

We engaged with Kevin Brunton from Greentech Sports Turf based in Stirling. Initially, we wondered if we had the rootzone material we needed onsite already or if we needed to import rootzone. We test-dug six holes around the site and thought that by excavating the existing organic layer, we would be able to recycle a large quantity of material but might be some way short of the required amount.



Test hole showing the depth of sand under the existing vegetation.

Luckily, 2 house extensions that were taking place in North Berwick dumped the soil excavated from the foundations into the nursery. We transferred excess material from the 17th bunker project to the nursery as well as the material from the

foundations/compound excavation from our Bulk Material Building rebuild. Between all of the donated material and the organic layer, we thought again we would have enough to cover a large part of the nursery and would have to import material for the remaining area.

The initial plan was for our greenkeeping team to hire a soil screener to screen all of the material to remove stones, vegetation and other debris to leave a clean rootzone material. Still, as the season got into full swing, we realized we did not have the time or resources to carry out this work. We engaged with a local Digger and Bulldozer Contractor, Alex Dunbar from Dunbar Plant, to see if he could help screen the material. After further test digs and conversations with Kevin and Alex, it was decided that we would use a bulldozer to strip the site to a depth of 300-400mm, grade the subsoil, screen all the material to 20mm and then push the material back out over the site. As much as I would have loved to have done the project in-house to build experience within the team, utilising Alex's service was the right thing to do and we would not have achieved what we did without him (and Scott, the Dozer Driver). Alex came on site on the 10th of July.



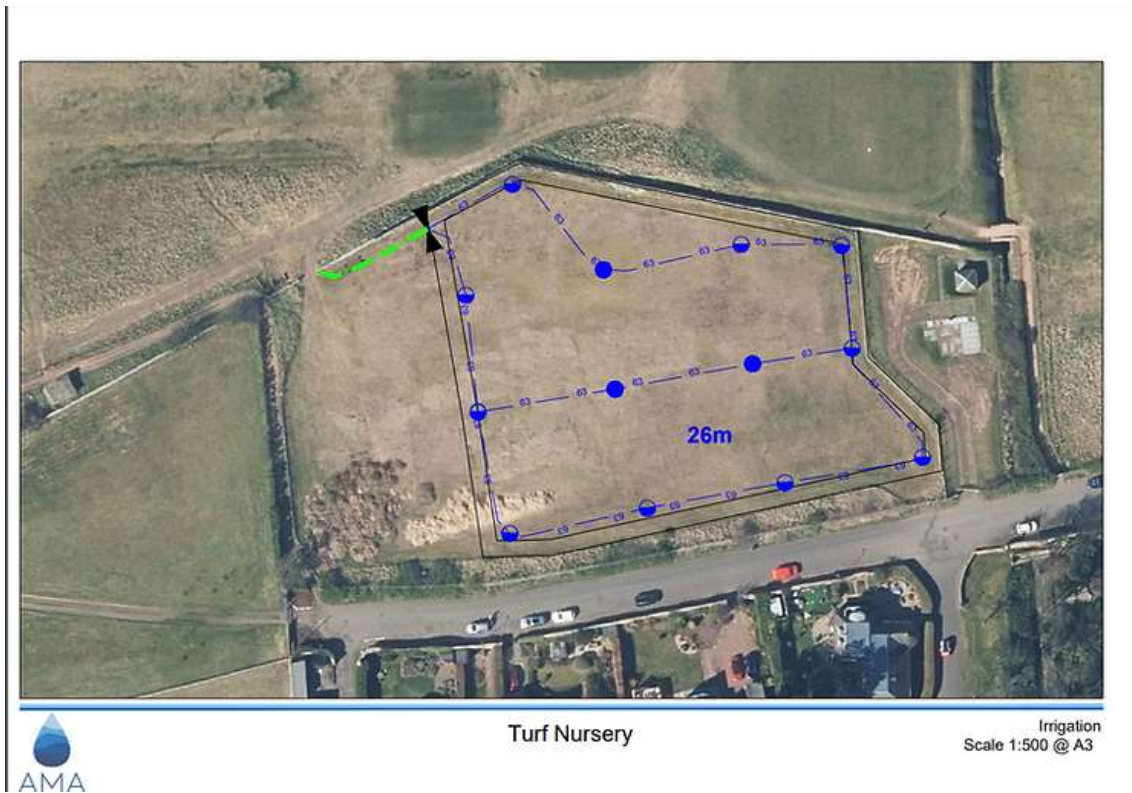
Scott in the Bulldozer starts to pile up the material to be screened.

All the material was mounded into a huge pile visible from as far back as the 5th tees, Alex got to work screening all the material which was surveyed and estimated to contain over 4000 tonnes worth of soil. We estimated we would need approx. 3000 tonnes of material so we were going to have about 1000 tonnes of surplus material which is a huge bonus as we can use this for future projects for several years.



The pile of materials to be screened

We also engaged with Adrian Mortram (AMA Irrigation Consultants) and Callum Oliphant from Applied Irrigation to design and install the irrigation system. There was already an existing system in the nursery but it was outdated and hadn't been used for a long time. Adrian designed a plan, Alex dug out the channels for the pipework and Callum (and Dougie) installed the pipework, sprinklers and cable. We were fortunate to have 2 of the greenkeeping team spend a couple of days with Callum learning how to install/connect the pipework using a fusion welder, install sprinklers and swing joints and wire/set the sprinklers to the finished level. This was probably the most satisfying part for me as I watched Alex and Graeme install the pipework and confidently set the sprinklers after only a couple of days of training. This was a great experience for them to try something different and it will be beneficial for them in the future.



Irrigation plan designed by AMA Irrigation Consultants



Graeme and Alex learning how to fusion weld pipe together by Dougie



Pipe and cable being laid out



Alex digging the irrigation trench.

Once the irrigation was installed, the trenches were backfilled and the material was pushed back over the site to 300mm ready for Greentech to come in to cultivate the site, ready for seeding. Ryan Melling and the team came in on Monday 14th of August to do some minor landscaping works before using a power-harrow to prep the site for seeding and level out any imperfections. A pre-seed fertiliser was applied (10-18-10+23% Humic at 45g/m².) before the seed was sown using a Culti-Pack in 3 directions at 40 grams per square meter. David Greenshields from Barenbrug, a seed producer and distributor, recommended an adapted BAR SGT Fine Fescue mix with 40% Barpearl (Slender creeping red fescue), 35% Barrisse (Strong creeping red fescue), 25% Hardtop (Hard Fescue).



Culipak dropping seed into the ground.



The finish left by the Cultipak

The final part of the jigsaw was the connection of the irrigation to the existing system to supply water to the site. The pipework was connected and the sprinklers pressurized on Thursday 17th of August which essentially meant the site was handed over to us to manage the grow-in and maintenance. We hope to see seed germinating in the next 7-10 days, during which we will then manage a programme including rolling, irrigating, feeding and cutting to establish the nursery as best as possible.



The irrigation system in action.

This has been a great project to be a part of as we have worked with a host of contractors sharing their expertise, learning about a construction project and ultimately future-proofing this site as a resource for the West Links finished in six weeks. Before the ground was broken, there was an expectation that we would have to import material to complete the project, but all the material used was already onsite with a surplus left over. This means that the project was wholly sustainable and regenerative which also helped to complete the project well under budget. The irrigation system was installed with the view that if we decide to upgrade the irrigation system in the future, there would be minimal work required to connect/upgrade the nursery to the upgraded system.



The finished turf nursery from above.