

Sustainability Summary

New Craigend Golf Course
Royal Troon GC, Scotland

Produced by:



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"The 9-holes created provide an accessible entryway into golf but also a way to transition out of the game and the physical challenges the championship links present to members. This socially minded approach was a big part of the decision-making process for the project and we believe it will help it to provide multiple benefits to all generations of the local golfing community."

Royal Troon Golf Club



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New Craigend Golf Course
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photo credit: Mackenzie & Ebert

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Summary

Situated within the world renowned Royal Troon Golf Club, the New Craigend course will enhance the experience for golfers of all levels, abilities, with all ages able to enjoy the game and feel welcomed - every hole is playable with a putter making it a fun form of golf that should encourage more participation and also support the 'School of Golf' initiative to continue to grow.

The concept of valuing the land to make it more efficient, effective and productive is key to a contemporary sustainability vision, and was borne out in this project through increased biodiversity levels, overlapping multiple land uses, robust design and resourceful material sourcing. Every square meter across the project has been used to its full potential not only in terms of golfing, but also in environmental enhancement, resource management savings and operational efficiencies.

The club have truly embraced the values of sustainable development and produced a course and facility that will be sure to enhance the legacy of Royal Troon Golf Club.



Project Description

This project sought to maximise the productivity of the land and to enhance the golf options at the club, providing an improvement to the hosting capabilities and logistics when major events come to the club such as The Open Championship. The use of existing linksland meant the new golf proposals now appear as though they have been there for generations.

The project was developed in a very efficient way, utilising the time to also make improvements to the existing Portland Course while the appropriate plant equipment was on site. The project includes a new 9-hole par 3 course, amendments to 3 holes on the Portland Course and improvements to a 6-hole short course, members' practice area, the irrigation and drainage infrastructures.

The clever design and space allocation allows the land to have multiple uses, the new 9-holes doubles up as an extensive elite level tournament practice area when needed; the 6-hole academy course is also a TV compound for televised events. These features reduce disruption during event times and afterwards, while giving the club increased golfing options and continuing to provide for the worlds elite players, TV utilities and any tournament staging needs in the future.



Photo credit: Mackenzie and Ebert

"We were conscious make sure we to put in place a new 9-hole facility of a standard that matched the other two courses at the club. Sustainability and resourcefulness, in particular, were very important to us, to help ensure the best outcome for the club and also ensuring we respect the great natural environment and resources of our links land."

Royal Troon Golf Club

"The whole project from start to finish has been done with the utmost care and attention to detail and resourceful use of the land and natural resources available. The course now provides a wonderful golfing playground for those both young and old to enjoy a very fun form of the game, which will hopefully allow the club to continue its successful school of golf work and maintain a strong connection to the local community and its golfers."

Sam Thomas - Sustainable Golf - Developments Director, GEO Foundation

Key Achievements

Golf is well established in this part of the world, with the Royal Troon GC having a particularly rich history within the sport. Situated on already good golfing ground, the new 9-holes present a form of the game suited to players of all ages and provides a good base to run a number of different types of golf programmes and initiatives in connection with the local community.

As well as the community work the club also used this opportunity to carry out improvements to other parts of the site, including drainage and irrigation improvements, works on the practice area and short course, as well as changes to three holes on the Portland Course. Below are some of the key sustainable golf metrics delivered:



Nature

- Over 10,000 sq.m of gorse dominated species-poor habitat was removed.
- Just under 9,500 cu.m of earthworks were needed.
- 100% of exotic species were removed.
- 100% of new native planting was transplanted from around site.



Resources

- Creating multiple uses on one site for golf and events.
- 50% of the sand used as rootzone was sourced from site.
- Just over 3,400 sq.m of existing turf was lifted and re-used.
- State of the art irrigation to maximise water efficiency and match quality across all courses.



Community

- Increased opportunity to golf for members and community initiatives.
- A golf layout able to host groups supporting those less mentally or physically able.
- A base to support 'School of Golf' programmes to over 2,500 children.



Photo Credit: Mackenzie and Ebert

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Design Stage

Overview

The design process addressed a broad set of sustainability issues such as increasing the productivity of the land available by layering uses and reducing the disruption footprint on the natural environment when hosting major events. The ability to improve and extend existing habitats while building up biodiversity levels was planned as well as ensuring the new facility would be able to serve all members and the local golfing community needs.



Nature

Throughout the design process it was imperative to the team to ensure that the course not only fits in with the existing courses but the entirety of the surrounding links landscape. Turfgrass was chosen to be the same species mix as what was used on the existing course, already known to be well suited to the site and conditions.

The works presented an opportunity to carry out removal of over 10,000 sq.m of gorse (*Ulex europaeus*) which was dominating scrub habitats. By carrying this out, the net biodiversity of the site increased as other native species such as heathers, wildflowers and fine grasses can establish themselves and thrive. Areas of 'dune heath and acid-grassland' were increased to over 9,000 sq.m, in keeping with the character of this links.



Resources

Ensuring maximum resource efficiency was going to be realised was a strong driving factor in this design decision making on the project. Clever design and planning allowed for multiple uses on the same parcel of land, which would utilise the time and availability of expensive plant machinery to deliver it.

The 9-hole golf course doubles as a elite level tournament practice ground and short game area; while the designated TV compound area accommodates up to 6-hole short course when not in use for TV.

A state-of-the art irrigation system, including hand moisture sensors to inform irrigation practices was installed. Manual watering points were provided to allow for spot watering as needed. The infrastructure provisions required for hosting tournament (electricity, drainage, water and fiber cables) are there and future proofed to avoid future disruption to the course. This work should all minimise the time the golfer wont have access to the grounds and short course following any televised event the club decides to host in the future.



Photo credit: Mackenzie and Ebert

**Less than
9,500cu.m
of earth was
moved during
construction**



"The project to create 9-holes on the linksland at Royal Troon was a wonderful opportunity to layout a fun, accessible, and very playable form of the sport for all generations and all standards of golfer. Using almost only on-site resources we have been able to create a par 3 9 hole course which will allow beginners to take their first on course steps in the game while exciting the more accomplished golfer hone their iron play and short game. We feel the course sits very naturally on the site and can also provide an elite-level practice range and stage for the very best in the game during major championships held at Royal Troon with a number of the greens of the course providing target greens."

Martin Ebert - Mackenzie and Ebert Golf Architects





Community

It was important to the club to have a facility that can host local junior programmes and community linked events. With an already successful School of Golf established, the new holes and improvements to the practice grounds allow for the potential expansion of the School of Golf programme - introducing new golfers to the sport as well as significantly increasing the number of junior rounds played at the club annually. The community outreach programmes include beach clean ups, access to golf facilities and community groups. The creation of the new course allows those who may not be able to play the full 18-hole courses an opportunity to still be a playing member of the club. It also represents a good place to develop the staff's course maintenance practices and grow the skills base in the course management team.

**Over
2,500
local school
kids at the
School of Golf**



Photo Credit: GEO



**Over
9,000m²
of dune heath
and acid
grassland**

Design



***PENDING**"It was very satisfying to see the design and construction process come together to create a great addition to the linksland here at Royal Troon. We built all the bunkers using our local turf and will be able to use this facility as a really good set of golf holes for our greens staff to implement practices they are learning, and to see how a new golf course grows in and matures over the coming years."**PENDING**"*

Billy McLachlan - Head Greenkeeper of Royal Troon Golf Club

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Construction Stage

Overview

Construction started here in October of 2020 and continued through seven months until May of 2021. The fact that the work was carried out in such a timely manner during the unprecedented restrictions imposed by Covid-19 is a testament to everyone involved in the project.

The construction work was carried out by Golf Link Evolve (GLE) and the maintenance and grow in process were managed by the existing greenkeeping team at Royal Troon. This helped ensure the look and presentation style of the New Craigend Course will be the same as the other two courses.

The construction team worked closely with the design team to ensure that the delivered project was in line with the designs. This was successfully carried out with no significant alterations to the layout or intent. Where issues arose in terms of supply of materials, the team proposed alternative options that minimise environmental impact and prioritised resource efficiency. Site clearance work were all carried out through the winter months which avoid important ground nesting bird season, this along with the exemplar pollution control measures in the site set up demonstrate the acknowledgment of the importance of achieving minimal environmental impacts.

Successful translocation of heather and rough grasslands



Photo Credit: GEO

Construction



Photo Credit: GEO

Activities

The following section outlines the construction process of the New Craigend course. It illustrates the steps taken during construction to deliver the highest quality golf course in a responsible, practical and resourceful way.



Nature

Resourceful use of existing materials such as vegetation, sand and turf was maximized and included the successful translocation around the site of heather and other grassland species with improved connectivity through large dune/scrub vegetation areas and selective retention of gorse and 'whin' plantings.

The earthworks were completed below the maximum limit stated in the design stage, these actions have seen the creations of golfing features that 'fit' the existing landscape character. There have also been increases in the extent of habitat that promotes dune heath and acid grassland type vegetation, translocation of these habitats have been a success and should continue to mature and add further definition and character to the new holes as well and a richer habitat of heather species and other acid grassland species.



Resources

Efficient resource management has been successfully achieved, notably the multiple uses for the New Craigend Course as a 9-hole golf course and elite level tournament driving range when needed. The extensive TV compound area also

operates as a short course when not in use for TV. The majority of materials brought in for construction were sourced from within Scotland, the exception being a small amount of turf from Norfolk in England - needed when heavy rains left existing turf unusable.

Appropriate pollution control was carried out, particular care was taken during re-fueling of plant machinery and the storage of any hazardous materials on site. Latest refueling technologies and spill prevention was in place and no incidents were recorded during construction.



Community

The development is a demonstrator project for a 9-hole course that can provide opportunity for wider golfer audience and invests in the future of the local golfers and the local community through improve tournament hosting capabilities.

The use of the existing greenkeeping team allows a presentation continuity with the rest of the courses and can act as a learning ground for new machinery and staff to develop the skills needed on the championship links. Where possible the construction workforce was based locally and helped to reduce travel times and build relationships with the local community. Now operational, there is a continued effort for the club and pro shop team to utilize the new facility to create community engagement events and promote the accessible form of the sport that is on offer at the New Craighend Golf Course.

**15
holes
of playable,
accessible
fun links golf
for all ages.**



Photo Credit: GEO

Construction



“During the design and development of the New Craighend Course, I have been able to observe the creation of a wonderful golfing addition to the Royal Troon property, with the creation of an exceptional 9-hole facility that is aimed at all golfing backgrounds. It is not just the golfing aspect, but also the attention to detail from all team members to be resourceful in decision making and be respectful of the heritage, nature and character of this linksland location.”

Matthew Johns - Independent Verifier for New Craighend Golf Course



"As the first GEO Certified® Development that is a 9-hole facility, the New Craighend golf course represents a shift in the focus of the industry and a wonderful recognition of the need for facilities such as this - to bring all ages together on the golf course and do so in a way that respects the traditions and qualities of the links landscape. The ability for this same land to then become used to host major global golfing events while reducing the impact and disruption of those events on the club and town is testament to the creativity and resourcefulness of the club and project team. We at GEO are delighted to congratulate the team on their all their achievements and look forward to seeing the New Craighend mature and grow in popularity with golfers young and old."

Jonathan Smith, Executive Director at GEO Foundation for Sustainable Golf





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