GEO Certified®

GEO Certified® Report
Haesley Nine Bridges

Prepared by independent verifier: Valentine Godin

Certified by GEO Foundation: 2023
Recertification due: 2026

GEO Foundation
Sustainability in and through golf

“Haesley Nine Bridges continue to show a great commitment to environmental stewardship, with strong initiatives in habitat conservation and water stewardship. Looking ahead, I look forward to seeing further innovation, especially in sustainable practices across integrated pest management and habitat protection. The course's proactive effort to water efficiency is exciting and I look forward to following their efforts in continuing to innovate over the coming years to reduce resources usage, enhance their environmental footprint and positively impact their local community.”

Valentine Godin
(GEO accredited independent verifier)

Introduction

GEO Foundation is pleased to confirm that Haesley Nine Bridges has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

Haesley Nine Bridges has:

1. Met the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points (CIP) set for the future and Critical CIP's (CCIPs) to be reviewed at recertification, Haesley Nine Bridges should be awarded GEO Certified® status.

For the certification period stated above, Haesley Nine Bridges can therefore claim a position as a leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the independent verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course, maintenance facility and clubhouse. These dedication and leadership qualities are an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation

Carole Kerrey
Manager, Data and Reporting, GEO Certification Ltd.

Verification and Certification

Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at **www.sustainable.golf**

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at **www.isealalliance.org**

The Sustainability Agenda for golf covers the following themes and action areas:

THEMES	ACTION AREAS
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• Partnerships & Outreach • Golfing & Employment • Advocacy & Communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE

N1 Habitats and Biodiversity

Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	**N1.1.1 Sound understanding of the nature and landscape value of the site**	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	Haesley continues to demonstrate a good understanding of local habitats and follow best practices in terms of environmental management with an annual site review taking place with local authorities to ensure long-term conservation of local species.

			No external survey has been achieved and a land use plan has not been submitted. **CIP: An annual report summarising the site review with local authorities and documenting the current state of affairs and evolution of the site over time is strongly encouraged.**
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	Situation similar to first certification with comprehensive habitat map, which is updated annually (verified and seen up to 2022). Suggested CIP respected with local article on Bubo Bubo species shared in the club magazine raising awareness amongst members on the club role in protecting biodiversity. **CIP: Please continue efforts to raise awareness on local wildlife. Consider introducing an annual course walk or a constant sustainability section in the newsletter raising awareness on various sustainability topics regularly.**
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	2020: During construction in 2008, the Koryo Dynasty Buddhist temple heritage site was excavated. A 3-story stone pagoda, which was recovered under the guidance of a heritage expert, and two piles of roof tile were conserved and installed as an information board. The cultural heritage office visits to verify them once a year. **CCIP: Please create a strategy to raise awareness about local heritage and to protect it appropriately. (continuation of 2020 CIP)**
N1.2 Opportunities to naturalise the course	**N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass**	Observe, track and / or monitor golfer play	No more reduction of playing areas reported.
N1.3 Actively manage habitats for wildlife	**N1.3.1 Projects to manage habitats in the best way for wildlife and golf**	Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	No formal habitat management plan in place and no change in playing areas since 2020.

			CCIP: Please ensure a formal annual habitat management plan is created and submitted by re-certification i.e., a working document with procedures for managing the landscape for species conservation.
N1.4 Conserve key species	**N1.4.1 Practical conservation measures for priority species**		No change in conservation measures since 2020. **CCIP: Please implement landscape and biodiversity surveys, potentially harnessing an environmental expert.** **CIP: Please consider professional advice on conservation measures for the bubo bubo population.**
N2 Turfgrass			
N2.1 Maintain optimum turf and soil health	**N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors**	Select appropriate grass species for climate	Best practices in place in terms of IPM and management methods to support / mitigate effects from climate change. Management supported by expert advice and work from 2020 continues.
	N2.1.2 Practices to maintain good soil structure and condition		Soil health analysis continues to be completed yearly alongside water analysis.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Soil health analysis continues to be completed yearly alongside water analysis.
N2.2 Prioritise mechanical maintenance	**N2.2.1 Non-chemical pest, disease and weed management**	Sharpen mowing blades; Remove surface moisture; Hand weeding	2020: The numbers of sharpen mowing blades are 16/year for greens, twice/year for tees and fairways. Same practices as reported in 2020.
N2.3 Use chemicals responsibly	**N2.3.1 Application of chemicals only when necessary to prevent or**	Establish patterns and levels of risk for pests and diseases; Scout the course daily for early signs of pests and disease;	Decreased number of applications on greens, tees and fairways while doubling number of fungicide applications on maintained rough causing overall increase in amount active ingredient applied (+30%).

		cure defined / identified turf health issues	Accurate pest and disease identification; Map and track pest and disease hotspots; Establish pest and disease thresholds	**CIP: Please continue documenting the use of pesticides, as well as the reasons for further applications, to ensure appropriate use and continue efforts to minimise impact on the environment.**
		N2.3.2 Application of chemicals with full safety precautions	Use only legally registered and approved products; Ensure staff are fully qualified and licenced to use pesticides; Regularly calibrate and test applicators; Use appropriate protective equipment; Dilute and dispose of leftover product on untreated areas of turf .	2020: Application of chemicals is done carefully, keeping buffer zones between lake edge and play areas and avoiding all ecologically sensitive areas. Confirmed using legally registered and approved chemicals when reviewing chemical log. Confirmed licenced staff using chemicals when reviewing chemical log. Best practices continue to be followed.
	N3 Pollution Prevention			
	N3.1 Prevent pollution across the entire site	**N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations**	Document procedures for emergency spill responses; Maintain mowing buffer zones around water and all ecologically sensitive areas; Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas; Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas.	No BOD and SS results from water analysis in the last three years. **CCIP: Please continue to maintain buffer zones, wherever possible.** **CCIP: Please continue to ensure no-spray, no-spread buffers are implemented around sensitive areas.** **CIP: Please map no-spray and no-spread areas to inform sustainable management.** **CIP: Please monitor and record annual BOD and SS results from water analysis.**
		N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge	List of hazardous substances seen. No picture provided.

	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	Ensure wash areas are on impermeable, leak-free surfaces; Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators	2020: Wash areas are on impermeable, leak-free surface. Several licensed companies are used for disposal of hazardous waste and collect them regularly. No change in practices since 2020 reported.
N3.2 Safely manage hazardous substances	**N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances**	Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building; Sufficient storage capacity; Impermeable flooring; Spill containment kits present; Emergency wash area; Fire extinguisher in the immediate area; Secondary containment for fuel, either externally constructed, or integrally manufactured; Regular inspection of storage tanks	2020: Maintenance facility and safe storage areas were recently renovated. 2-story building with roof. Lists of hazardous substances maintained and managed by authorised staff. Signs attached next to the storage building and gate. Confirmed who is the authority / emergency contacts. All storage areas are clean and installed very well. All wash areas are on impermeable and leak-free surfaces. Fuel storage tanks are installed in safety area and on impermeable, leak-free surfaces. No change in practices since 2020 reported.
N3.3 Responsibly manage waste / storm water	**N3.3.1 Appropriate wastewater usage and discharge licences**	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	2020: Confirmed swage water treatment network. All recycled water and storm water are used for irrigation. No change in practices since 2020 reported.

RESOURCES

R1 Water

Objectives	Requirements	Mandatory Practices	Verifier Notes

	R1.1 Minimise water demand	**R1.1.1 Measures to reduce the need to consume water**	Target irrigation to essential playing surfaces only	Club introduced a local weather station to combat an increase in water usage, which was due to climate change. Precision management supported through more hand watering focused on irrigating targeted areas. Water usage trends show lower consumption (3% decrease in last year). There are also reduction trends in the use of sand.
	R1.2 Maximise water efficiency	**R1.2.1 Practical measures to use water more efficiently on the golf course**	Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas; Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	No use of soil moisture reported but introduction of local weather station to drive irrigation decision on the course. **CCIP: Please procure a portable soil sensing tool before re-certification. These are now available relatively cheaply and will continue to minimise irrigation through precision management of the golf course** **CIP: Please ensure appropriate irrigation system calibration with a yearly catch-can test. This will help to optimise water consumption.**
		R1.2.2 Practical measures to use water more efficiently in buildings	Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	No change reported since 2020. Water volumes carefully separated and monitored. CIP: Please predict next years water use and set a target to use lower/ minimise usage annually.
	R1.3 Source water responsibly	**R1.3.1 Measures towards alternative, lower quality sources of water**	Ensure appropriate water abstraction permit and reporting, as required	2020: Two sources of water - ground water and Namhan River. Ground water is used for tap water for the clubhouse and Namhan River water is used for irrigation. No change reported since 2020.
	R2 Energy			
	R2.1 Reduce energy demand	**R2.1.1 Measures to reduce the amount of energy**	Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	Completion of Hamlet project and increased number of visitors has significantly increased energy usage (+40%) over the past three years. This is mainly non-renewable energy.

		consumed in course maintenance		**CIP: Please continue to explore ways of reducing energy consumption e.g., removing areas from intensive management; changing mowing patterns etc.**
	R2.2 Maximise energy efficiency	**R2.2.1 Measures to use energy and fuels more efficiently in buildings**	Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	As above.
	R2.3 Source energy responsibly	**R2.3.1 Measures to source alternative, renewable forms of energy**	Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	**CIP: Please continue to actively search for sustainable renewable energy alternatives or ways to mitigate increased energy footprint.**
	R3 Materials			
	R3.1 Reduce materials demand	**R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives**	Undertake a review of materials consumed	Important increase in share of waste being recycled (20% to approximately half of the waste stream).
	R3.2 Purchase responsibly	**R3.2.1 Practical use of an ethical / environmental purchasing policy**	Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials	Increased number of local suppliers with diversification of ingredients and number of options for the visitors/ members.
	R3.3 Reuse and recycle	**R3.3.1 Waste stream separation for maximum recycling and re-use opportunity**	Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	All food waste continues to be repurposed. The amount of food waste from employees is trending downwards (quote from on-site team, no data provided). Increased number of visitors and increased number of dinners at the restaurant leading to an increase in total food waste generated by the club. CIP: Please implement measures to raise awareness on food waste, implementing mitigation measures e.g., communication campaigns, smaller portions etc.

R3.4 Demonstrate legal compliance	**R3.4.1 Compliance with all local and regional waste management regulations**	Use authorised waste and recycling contractor for general, hazardous, industrial and green waste	2020: confirmed. No change from 2020.

COMMUNITY

C1 Outreach

Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	**C1.1.1 Social and recreational activities at the facility**		2020: The club hosts a wine market once or twice a year for its members and staff. This is very popular. Furthermore, a wine dinner event will be planned which is hosted by a professional sommelier through employee welfare events. No change reported since 2020.
C1.2 Provide for volunteering and charity	**C1.2.1 Opportunities available for volunteering and support of charities and good causes**		Volunteering still in place and amount of money raised has increased over the last three years.
C1.3 Establish active community partnerships	**C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups**	Create a 'sustainability working group'	The club hosts several charity tournaments to raise funds for the local community. No change from 2020 reported. The club operates an industry-university collaboration program with two local universities. They have hired internship students from them.

C2 Golfers & Employees

	C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		
	C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	No change from 2020 reported but female ratios has increased (+4%)
	C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	Follow all relevant national legislation and best practice for employment, health & safety etc	2020: The club invests significantly in employee education and operates various education programs during golf off-season. No change from 2020 reported.
	C3 Communications			
	C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Provide information on the facility's sustainability commitments, actions, or achievements	Very active highlight page. No major change in website and no important communication campaign reported apart from article on Bubo Bubo. **CIP: Please continue efforts to promote sustainable practices amongst visitors and members through various local activations and communication campaigns.**
	C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	Provide evidence of external communications and community engagement	Active with publishing highlights. Website refers to the club commitment to sustainability. CIP: Please promote and celebrate the club's commitment to sustainability more widely through newsletters, social media, local communication channels and on site.

Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value – strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf