Extraction of Beach Sand from West Sands, St Andrews for Use on St Andrews Links Golf Courses
Method Statement 2024 (Including Operations Method, Investigations and Assessments)

Background and Purpose for Sand Harvesting
The harvesting and application of sand is crucial to the effective and sustainable maintenance of the Links as it enables the indigenous grass species to flourish. The practice of taking sand from the West Sands beach has been employed by green-keepers since the time of Old Tom Morris in the 1850s and has become synonymous with the Old Course. In that time, the Old Course has staged 30 Open Championships.
Working closely with the independent Sports Turf Research Institute and the R&A, both have recognised the excellent condition of the Old Course on annual inspections.
This is due, in no small part, to the application of locally harvested beach sand, recognised as one of the most effective techniques for Links courses. The sand is used to top-dress the turf and for course improvement projects such as building new tees and repairing bunkers

Investigation and Consideration of Alternative Sources of Sand
Particle size and texture of the sand is extremely important. Over the years we have investigated other sources and the closest we can find comes from a quarry in Ayrshire.
Transporting large quantities of sand across Scotland on a regular basis would be impractical, expensive and damaging to the environment. Using other types of sand in the growing medium will result in root break and drainage issues which in turn will lead to a change in species composition and degraded playing conditions. It would also badly affect the experience of playing out of the bunkers which golfers have come to associate with the Old Course.

Marine Licence 0008986 (Previous licence history)

Application for a licence to harvest sand from West Sands was made in 2020, this was accepted and a 3 year licence applied to St Andrews Links Trust to harvest 1700tons of wet sand per annum over this period.
All expected and necessary licence constraints and advisory notes were abided by and the following reports on this licence activity.

Licence Constraints Addressed (Under 8986)

3.3.1 The Licensee must ensure that any debris or waste materials arising during the course of the Licensed Activity are removed for disposal at an approved location above the tidal level of Mean High Water Springs.

- No waste material produced and sand sediment is the only activity material.

3.3.2 The Licensee must ensure appropriate steps are taken to minimise damage to the foreshore and seabed by the Licensed Activity.

- Sandbars are selected within the licence area for additional natural height, scrapes of no deeper than 250mm are made. These scrapes are in pure lower beach sand with minimal biodiversity or ecological mass.

3.3.3 The Licensee must ensure the foreshore and seabed are returned to the original profile, or as close as reasonably practicable, following the completion of the Licensed Activity.

- These scrapes are edge softened with excavator prior to leaving site and are usually infilled on the next high tide by natural processes and always infilled naturally within 4 days of harvesting.

3.3.4 Any person authorised by the Licensing Authority must be permitted to inspect the site at any reasonable time.

3.3.5 The Licensee must ensure no Licensed Activities take place within 2km of the designated St Andrews (West Sands) Bathing Waters during the bathing season (01 June to 15 September inclusive) without prior approval of the Licensing Authority.

- All sand harvesting during this licence period has taken place within the agreed timeframes held within the licence with February/March being the prime months.

3.3.6 The Licensee must ensure that an ecologist with ornithological expertise is present during the Licensed Activity from January 2022 onwards. The ecologist must record the number and activity of qualifying bird species of the Firth MS-00008986 26 February, 2021 of Tay and Eden Estuary Special Protection Area present 30 minutes prior to, during and 30 minutes after the
Licensed Activity to record any disturbance and displaced of birds within the site and its vicinity.

- Monthly shorebird surveying has taken place during this licence period, additional shorebird surveys are conducted prior to, during and post operation activity as per licence. This is conducted by West Sands Ranger Service lead staff member whom is an experienced bird surveyor with significant bird reserve management skills and BTO methodology surveying practice.

3.3.7 The Licensee must ensure that the records required by condition 3.3.6 are provided to the Licensing Authority on an annual basis from January 2022 onwards.

- All bird survey records are supplied on annual report and attached with final licence report.

3.4.1 The Licensee must, no later than 14 days following the Completion of the Licensed Activity notify the Licensing Authority.

- This is done annually and for final reporting on licence.

Extraction Method
The method St Andrews Links Trust employ to extract sand has been practiced over the years and minimises any environmental and public access impact.
Harvesting takes place during the lowest tidal state and shallow scrapes are excavated to a depth not exceeding 250mm over a large area of notable high point sand bars below MHWM.
Sand is extracted using a tracked, 360 degree, 7 tonne extractor feeding 3 and 6 tonne trailers and dumpers. Additional excavator may be used to speed the process on occasion.
The extraction depth is limited to 150 – 250 mm.
All sand is removed to above MHWM with no deposits below MHWM.
Harvest site is partially restored by softening edges and the current natural infill rate is between 4 and 7 days.

Timing of Extraction
The main periods of extraction are February/March for topping up bunkers and occasionally October/November for rebuilding bunkers. We do not stockpile large quantities of sand to avoid loss due to wind blow.
Extraction is generally carried out during inclement weather at low tidal states and when the beach has low visitor numbers. (5am-12 noon)
There have been no notable impacts nor complaints or enquiries regarding this activity over the licenced periods and Fife Council and Nature Scot have been fully aware and supportive regarding the need and method.

Volumes
1700 tonnes per annum. Totally 5100 tonnes (approx. 3400m3) over 3 years.

Erosion/Accretion Investigations, Observations and Beach Levels
There is good evidence to suggest that more sand is accumulating at certain points on the beach. Photographs taken by Professor Jack Jarvis over the past 40 years show that the sand is accumulating around the harvest site. This evidence has been submitted in previous licence reports.

Dynamic Coast 2 2022 (Nature Scot/Scot Govt) reported findings that evidenced accretion around the harvest site of 10,000m3 per annum. Our ranger service monitor the beach weekly and also provide shorebird surveying monthly. They observe a general trend of accretion in the sand bars used for harvesting up until October 2023. The sites beach level dropped notably on storm impact around late

October 23 and have remained lower through the winter of 23/24 due to storm increases. Tides are expected to return the beach levels through the summer months as in previous years. This is detailed within MS licence 8986 final report, included with this application.

Beach Level Monitoring 2024 Onwards:
SALT conducted levels and topographical monitoring and comparison vegetation edge data for 2021-2024 and this is included within the MS Licence 8986 final report. SALT will secure annual beach level surveys across the beach site and focused on the Outhead harvest zone and associated shoreline and will carry out levels monitoring during any future licence period.

Shorebird Surveys:
Experienced and trained ornithologist staff will continue shorebird monitoring through monthly vantage point surveys. They will also survey daily during licenced activity.

Archaeological Protocol
SALT apply a protocol for operations staff addressing finds during activity.

SSSI/SAC/SPA Impact Assessment
This activity has been undertaken for 150 years predating all natural heritage designations. The action is also in support of a historic and designed landscape of world importance.
SALT have applied good stewardship across the areas of the SSSI/SAC/SPA through its ranger service whom monitor daily the site, carry out ecological monitoring and implement supporting projects designed to protect and enhance the habitats and wildlife of the notifications.
There have been many surveys and studies in recent years such as Dynamic Coast (Nature Scot), Outhead Peninsular Dune Recharge Feasibility study and associated EIA and RIAA, which have reached the conclusion sand harvesting at West Sands Outhead provides no notable or significant ecological impact. We would accept the longevity of the activity and these reports as evidence there is no requirement to determine this outcome again for the purpose of this application, however of course it is accepted that consultation would include as standard an appropriate assessment of this activity.

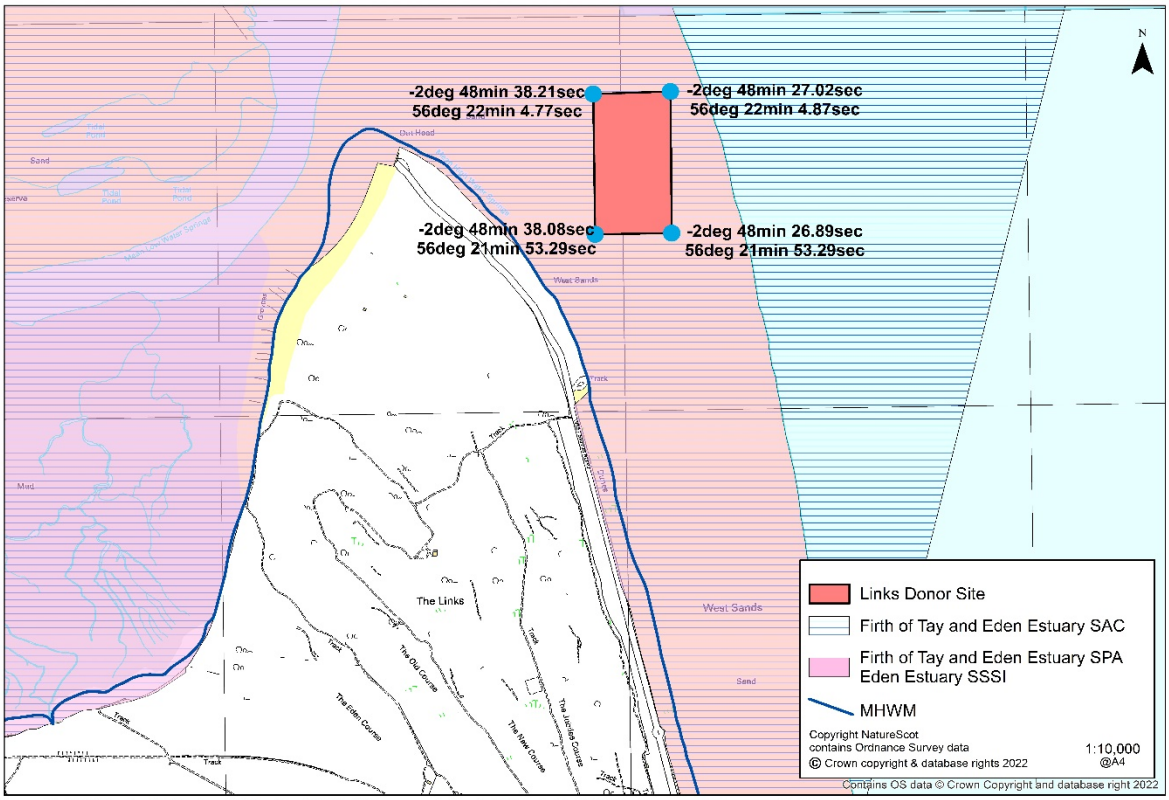
Impact Upon Fisheries and Marine Safety
This activity carries no risk to marine safety with minor volumes of sand being the only dredged material and the deposition is above MHWM. The historical application of this previously licenced activity should act as evidence of this assessment.
There is no recognised fishery or shellfish collection within the proposed harvest area and this portion of St Andrews Bay. There is minimal shellfish composition within the sediment seafloor excavated and any removal and disturbance is unintended and insignificant.

Use of the Extracted Sand
Due to the local nature, particle size and shape beach sand is ideal for course projects and is used to top dress the Old Course in the traditional method. This is vital to keep the style, condition and heritage of this world famous Open Championship course.

Small amounts of beach sand are ideal and appropriate for SSSI consented minor sand dune restoration projects. This has been vital in assisting with storm repair to the courses dune cordon. This sand is included in volume requests and not additional.

Conclusion
St Andrews Links Trust place a great deal of emphasis on employing the most sustainable methods of maintaining the historic Links courses. Becoming one of the first major golf destinations to undertake Golf Environment Organisation (GEO) accreditation and are generally recognised throughout the golf industry as an exemplar for sustainable practices. Using sand from the West Sands on the Old Course is at the heart of this approach.

Location of Sand Extraction



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