

# Wick Harbour Authority

## Disposal of Dredged Material – Beach Replenishment Option

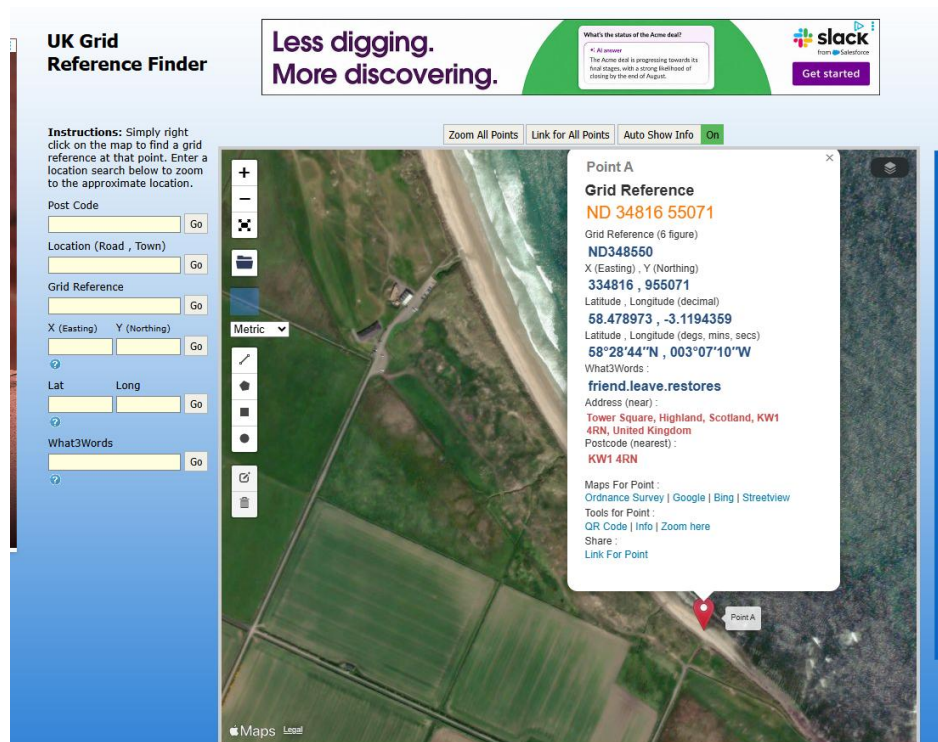
### 1. Introduction

Wick Harbour has identified the requirement to undertake a maintenance dredge of the Outer Harbour Entrance to ensure continued safe navigation for all vessels.

The adverse wave and tidal conditions experienced in early 2026 resulted in an accumulation of sand within the harbour entrance, which has impacted on the current charted depths for safe navigation at all states of tide. All vessels using the harbour are affected by the issue causing delayed sailings and lost days at sea. Vessel traffic affected includes windfarms vessels, fishing vessels and other commercial vessels along with leisure craft.

Following initial discussions with the Marine Directorate, and given the limited scale of the proposed dredging works, permission is requested to undertake dredging within this area and to bring the recovered sand ashore for beach replenishment purposes.

The beach identified as benefiting from replenishment is Reiss Beach, located approximately four miles west of Wick. During the winter storms of 2026, sand was displaced from sections of the beach. An area at Grid Reference ND 34816 55071 has therefore been identified as suitable for beach replenishment works.



**UK Grid Reference Finder**

Instructions: Simply right click on the map to find a grid reference at that point. Enter a location search below to zoom to the approximate location.

Post Code:  Go

Location (Road, Town):  Go

Grid Reference:  Go

X (Easting) Y (Northing):   Go

Lat Long:   Go

What3Words:  Go

Less digging. More discovering.

What's the status of the Acme deal?

slack

Get started

Zoom All Points Link for All Points Auto Show Info On

Point A

**Grid Reference**  
**ND 34816 55071**  
Grid Reference (6 figure)  
**ND348550**  
X (Easting) , Y (Northing)  
**334816 , 955071**  
Latitude , Longitude (decimal)  
**58.478973 , -3.1194359**  
Latitude , Longitude (degs, mins, secs)  
**58°28'44"N , 003°07'10"W**  
What3Words:  
**friend.leave.restores**  
Address (near):  
**Tower Square, Highland, Scotland, KW1 4RN, United Kingdom**  
Postcode (nearest):  
**KW1 4RN**  
Maps For Point:  
[Ordnance Survey](#) | [Google](#) | [Bing](#) | [Streetview](#)  
Tools for Point:  
[QR Code](#) | [Info](#) | [Zoom here](#)  
Share:  
[Link For Point](#)



## 2. Sample Results & Analysis

In conformance with the Pre-Disposal Dredge Sampling Guidance ( Marine Scotland 2017) three samples were obtained in 2024 from the undernoted locations.

The samples were taken from locations representing the geographical spread of material within the Outer Harbour Entrance area

The three samples were analysed by SOCOTEC UK Limited in 2026 who offer UKAS accredited tests in

In addition to UKAS accreditation, SOCOTEC has over a decade of proven performance in the Quality Assurance for Marine Environmental Monitoring (QUASIMEME) scheme. These qualifications provide assurance of the technical competence of SOCOTEC's testing laboratory to undertake a comprehensive array of analyses. The SOCOTEC Marine Sediment analytical services are approved by all UK and Ireland regulators for dredging disposal applications, with all results conforming to Marine Management Organisation (MMO), Marine Scotland, Natural Resource Wales (NRW), Department of Agriculture, Environment and Rural Affairs (DAERA - Northern Ireland) and Marine Institute (Republic of Ireland Regulations).

Particle Size Distribution results from Outer Harbour Entrance and Reiss Beach demonstrate that the material is predominantly sand and gravel with less than 1% mud. Chemistry data for 3 samples taken at Harbour Entrance have been analysed by Socotec according to Marine Directorate specifications and the results have been submitted to Marine Directorate as part of the application process.

|                               | <b>OUTER HARBOUR<br/>ENTRANCE</b> | <b>REISS BEACH</b>     |
|-------------------------------|-----------------------------------|------------------------|
| Textural Group Classification | Slight Gravelly Sand              | Slight Gravelly Sand   |
| Folk and Ward Description     | Medium & Coarse Sand              | Medium Sand            |
| Folk and Ward Sorting         | Moderately sorted                 | Moderately Well Sorted |
| % Gravel                      | 0.78                              | 0.23                   |
| % Sand                        | 98.52                             | 99.77                  |
| % Mud                         | 0.69                              | 0                      |

## 3. Access

Access to the disposal area on the beach is through private land. Wick Harbour Authority have agreement in principle from the landowner to enable access to the site identified.

#### 4. Environmental Considerations & BPEO Statement

Section 34 of the Environmental Protection Act 1990 (as amended) makes it a duty to take all measures available as are reasonable in the circumstances to apply the waste hierarchy set out in Article 4(1) of the Waste Directive. The waste hierarchy ranks waste management options according to the best environmental outcome taking into consideration the lifecycle of the material. In its simplest form, the waste hierarchy gives top priority to preventing waste. When waste is created, it gives priority to reuse, then recycling, then other recovery, and last of all disposal (i.e. landfill). Following early discussions and guidance from the Marine Directorate it is clear that beach replenishment adheres to the waste hierarchy giving priority to reuse. We also recognise that for this particular area to be dredged, that the sand quality is almost identical to that found on the beach, therefore offering good reuse to replenish the beach which often suffers from winter storm erosion. The sand deposited at the site will replenish an area which had lost sand during the winter 2025/2026. This will result in providing new material to help prevent coastal erosion, it will assist with habitat recovery and regeneration and will provide opportunities for habitat creation. The spread of material will be done in a structured way to ensure the sand is distributed evenly.

The preferred dredging method is to use a Sennen Boggen and grab machine sited on Wick South Pier to extract material from the Outer Harbour Entrance. The material will then be transported to the replenishment site by lorry. As there will be no transit to a sea disposal ground there will be no carbon emissions from a vessel transiting to a sea disposal site. The transit to and from the replenishment site at Reiss Beach will be by lorry estimated to take up to a maximum of 3-4 days. Access to the site will be by way of an established private

The sand on the beach is constantly moving, and the relatively low volume proposed for deposition means there will be no significant increase in sand dispersion. Therefore, any potential impact on the **Noss Head Marine Protected Area Horse Mussel MPA**, located approximately 3 miles south of Noss Head, is considered negligible.

The Protected Sites - **East Caithness Cliff Special Area Conservation (SAC)**,  
**East Caithness Cliffs Special Protection Area (SPA)**, **East Caithness Cliffs Marine Protected Area (MPA) (NC)** are located 6 miles away from the replenishment site.



### Conservation Objectives for Noss Head Marine Protected Area

*The Conservation Objectives of the Noss Head MPA, are that the protected features:*

- *so far as already in favourable condition, remain in such condition;*

- *so far as not already in favourable condition, be brought into such condition, and remain in such condition.*

*“Favourable condition”, with respect to a marine habitat, means that: a) its extent is stable or increasing; and b) its structures and functions, its quality, and the composition of its characteristic biological communities are such as to ensure that it is in a condition which is healthy and not deteriorating. In paragraph (b) the reference to the composition of the characteristic biological communities of a marine habitat includes a reference to the diversity and abundance of species of marine flora and fauna forming part of, or inhabiting, that habitat. Any temporary deterioration in condition is to be disregarded if the habitat is sufficiently healthy and resilient to enable its recovery from such deterioration. For the purpose of determining whether a protected feature is in favourable condition any alteration to that feature brought about entirely by natural processes is to be disregarded.*

Horse Mussels are highly sensitive to sedimentation. However, given the separation distance from Reiss Beach replenishment site, it is unlikely that the dredged material will have any effect on the Horse Mussel beds.

## 5. Legislation

The following pieces of legislation have been identified and evaluated during the application process for a marine licence for this plough dredging activity.

Marine planning matters in Scotland's inshore waters are governed by the **Marine (Scotland) Act 2010**. A requirement of the Act is that Scottish Ministers must prepare and adopt a National Marine Plan covering Scottish inshore waters. **The Scottish National Marine Plan (2015)** covers both Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles). Sustainable development and use is presented as an overarching general planning principle of **The Scottish National Marine Plan (2015)**.

The General Policies and Objectives are considered necessary to achieve sustainable development and use, and they have been evaluated during the application process for plough dredging of the Wick Outer Harbour Entrance Channel.

### GEN 2 – Economic Benefits

**Sustainable development and use which provides economic benefit to Scottish communities is encouraged when consistent with the objectives and policies of this Plan**

The essential Outer Harbour Entrance dredging works will ensure continued safe navigation for all users and mitigate potential adverse impacts on harbour trade. This will ensure Wick Harbour can continue to support fishing, onshore and offshore wind, oil related industries, general cargo and other related business growth.

### GEN 3 – Social Benefits

**Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan**

Wick Harbour is located within an area of deprivation as detailed within the Scottish Multiple Index of Deprivation. Dredging Wick Outer Harbour Entrance will allow harbour business to continue, existing jobs to be retained and crucially wider social benefits arising from possible job creation, apprenticeships and training. A wide range of supply chain businesses are located close to the harbour and within the local area. The harbour activities feed directly into the supply chain with associated social effects of increased wealth, improved quality of life and health and well-being.

## **GEN 4 – Co-existence**

**Proposals which enable coexistence with other development sectors and activities within the Scottish marine area are encouraged in planning and decision making processes, when consistent with policies and objectives of this Plan.**

Wick Harbour Authority is used by a wide range of marine related industries which co-exist such as fishing, leisure, offshore renewables, onshore renewables, oil related fabrication . These works will ensure that this co-existence may continue.

## **GEN 5 – Climate Change**

**Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.**

The dredging works are of a small nature and we consider that they will not impact climate change in an adverse way.

## **GEN 8 – Coastal Process and Flooding**

**Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have unacceptable adverse impact on coastal processes or contribute to coastal flooding.**

The dredging of Outer Harbour Entrance brings depths back to within a safe navigable state. This will not result in any coastal change or additional flood risk.

## **GEN 9 – Natural Heritage**

**Development and use of the marine environment must:**

- (a) Comply with legal requirements for protected areas and protected species**
- (b) Not result in significant impact on the national status of Priority Marine Features.**
- (c) Protect and, where appropriate, enhance the health of the marine area.**

No Priority Marine Features are found within the area where the dredging works are planned. The dredge site is located at Wick Outer Harbour Entrance, it is nearby the East Caithness Cliffs Special Protection Area (SPA) and 2.7km east of the Noss Head Marine Protected Area. Early engagement with NatureScot suggests that potential impacts on the conservation objectives of the (SPA) & (MPA) are unlikely to result in adverse effects on protected species or their habitats, due to the location of the works and the short-term nature of the dredge activity. The same applies at the beach replenishment site located at Reiss Beach.

**GEN 13 Noise: Development and use in the marine environment should avoid significant adverse effects of man-made noise and vibration, especially on species sensitive to such effects.**

The dredging method will create minimal noise.

In consideration of this application, we have reviewed Chapter 11 and Chapter 13 of The Scottish National Marine Plan (2015) and present the information below.

**Chapter 11 Objective 2**

**Economic benefits from offshore wind, wave and tidal energy developments maximised by securing a competitive local supply chain in Scotland.**

**Chapter 11 Objective 5**

**Contribute to achieving the renewables target to generate electricity equivalent to 100% of Scotland's gross annual electricity consumption from renewables sources by 2020.**

Wick Harbour Authority is an important Scottish Port in the growing offshore renewables industry. We are home to an Operations and Maintenance Base and our facilities are used by various companies within the offshore wind supply chain. A number of local supply chain firms are located at Wick Harbour and within the wider Caithness area. The dredging works will enable safe navigation for larger vessels accessing the harbour and allow Wick Harbour Authority to continue to provide services to this industry helping to contribute to the renewables targets as set by government.

**Chapter 13 Objective 1**

**Safeguarded access to ports and harbours and navigational safety.**

**Chapter 13 Objective 2**

**Sustainable growth and development of ports and harbours as a competitive sector, maximising their potential to facilitate cargo movement, passenger movement and support other sectors.**

Wick Harbour is a Statutory Harbour Authority. The proposed works will ensure continued safe navigable access to Wick Harbour Outer and Inner Harbour basins for all users. Navigable depths are severely compromised, placing significant restrictions on harbour operations therefore these proposed works will help mitigate potential adverse impacts on harbour business. These works will enable

Wick Harbour to continue current operations, but crucially provides us with the opportunity to attract new business and therefore, the potential for increased harbour revenue and growth.

### **Chapter 13 Marine Planning Policies TRANSPORT 1**

**Navigational safety in relevant areas used by shipping now and in the future will be protected, adhering to the rights of innocent passage and freedom of navigation contained in UN Convention on the Law of the Sea (UNCLOS). The following factors will be taken into account when reaching decisions regarding development and use:**

Wick Harbour is a Statutory Harbour Authority. These proposed works will ensure continued safe navigable access to Wick Harbour for all users.

**As detailed in the Port Marine Safety Code Guide to Good Practice Section 7 Conservancy , “a harbour authority has a duty to conserve the harbour so that it is reasonably fit for use as a port, and a duty of reasonable care to see that the harbour is in a fit condition for a vessel to use it” .**

Conservancy involves a number of functions, which include hydrography; publishing and display of survey and navigation information; dredging; maintaining aids to navigation; managing wrecks; and regulating construction works.

### **Chapter 13 Marine Planning Policies TRANSPORT 4**

**Maintenance, repair and sustainable development of port and harbour facilities in support of other sectors should be supported in marine planning and decision making.**

Wick Harbour Authority is used by a wide range of marine related industries which co-exist such as fishing, leisure, offshore renewables, onshore renewables, oil related fabrication. The dredging works will ensure that this co-existence will continue.

## **Chapter 13 Marine Planning Policies TRANSPORT 6**

**Marine planners and decision makers and developers should ensure displacement of shipping is avoided where possible to mitigate against potential increased journey lengths (and associated fuel costs, emissions and impact on journey frequency) and potential impacts on other users and ecologically sensitive areas .**

Failure to undertake dredging of the Wick Outer Harbour Entrance Navigation will result in vessel traffic having to displace to other ports resulting in longer transit times and increased fuel costs and negative impacts on climate change and ecological habitat. It would also mean failure to comply with the Port Marine Safety Code conservancy obligations.