



Northern  
Lighthouse  
Board

**MARINE LICENCE APPLICATION**  
**Northern Lighthouse Board**  
**Calf of Eday Upgrade & Refurbishment**



84 George Street  
Edinburgh EH2 3DA

Tel: 0131 473 3100

Website: [www.nlb.org.uk](http://www.nlb.org.uk)  
Email: [enquiries@nlb.org.uk](mailto:enquiries@nlb.org.uk)

**MARINE LICENCE APPLICATION**  
**Northern Lighthouse Board**  
**Calf of Eday Upgrade & Refurbishment**

**CONTENTS**

<b>Executive Summary</b>	<b>3</b>
<b>Site Location Plan</b>	<b>4</b>
<b>Proposed Works</b>	<b>5</b>
<b>Method Statement</b>	<b>6</b>
<b>Photographs</b>	<b>7</b>
<b>Marine Policy Statement and the Scottish National Marine Plan</b>	<b>8</b>
<b>Annexe 1: Marine Licence Application for Construction Projects</b>	<b>9</b>

## EXECUTIVE SUMMARY

This Application Document contains the relevant information required to support NLB's marine licence application for the upgrade and refurbishment project at Calf of Eday Lighthouse. Marine Scotland has advised NLB to use the 'Marine Licence Application for Construction Projects' form, (see copy attached at Annex 1).

The Commissioners of Northern Lighthouses are appointed as the General Lighthouse Authority for Scotland and its adjacent seas and islands, in addition to the Isle of Man. We are vested with responsibility for the superintendence and management of all associated lighthouses, buoys and beacons. We have provided a vital safety service to mariners since 1786 and are responsible for the superintendence and management of all lights, buoys and beacons within Scottish and Isle of Man waters. Our service makes a significant contribution to the prevention of accidents and incidents around the coastline, safeguarding not only lives and property, but also protecting our precious marine environment.

We currently operate and maintain 206 lighthouses and 170 buoys as well as providing radio aids to navigation (AtoN). Calf of Eday Lighthouse sits at the northern end of the island of Eday, in the Orkney archipelago. The lighthouse was built in the early 20<sup>th</sup> century, and is formed of cast iron octagonal tower with a modern mild steel replacement lightroom, access ladder and balcony. This arrangement sits on a concrete plinth below the high tide line. The lighthouse is accessed at high tide by a multi span footbridge, which is formed of modern galvanised steel and sits on original stone piers.

During a survey in 2023, it was discovered that the lightroom, which was replaced 23 years ago, was corroding heavily, and required replacing. To facilitate this work, temporary scaffolding will be required, which due to the location of the structure, will be founded within the intertidal zone.

As part of the same survey, voids were found at the base of the stone piers which carry the bridge. These voids are small, but require to be infilled in order to prevent them getting bigger and possibly affecting the structural stability of the piers.

The stone piers and scaffold footings will be situated partly below Mean High Water Springs (MHWS) and therefore a marine licence is required for its maintenance.

SITE PLAN



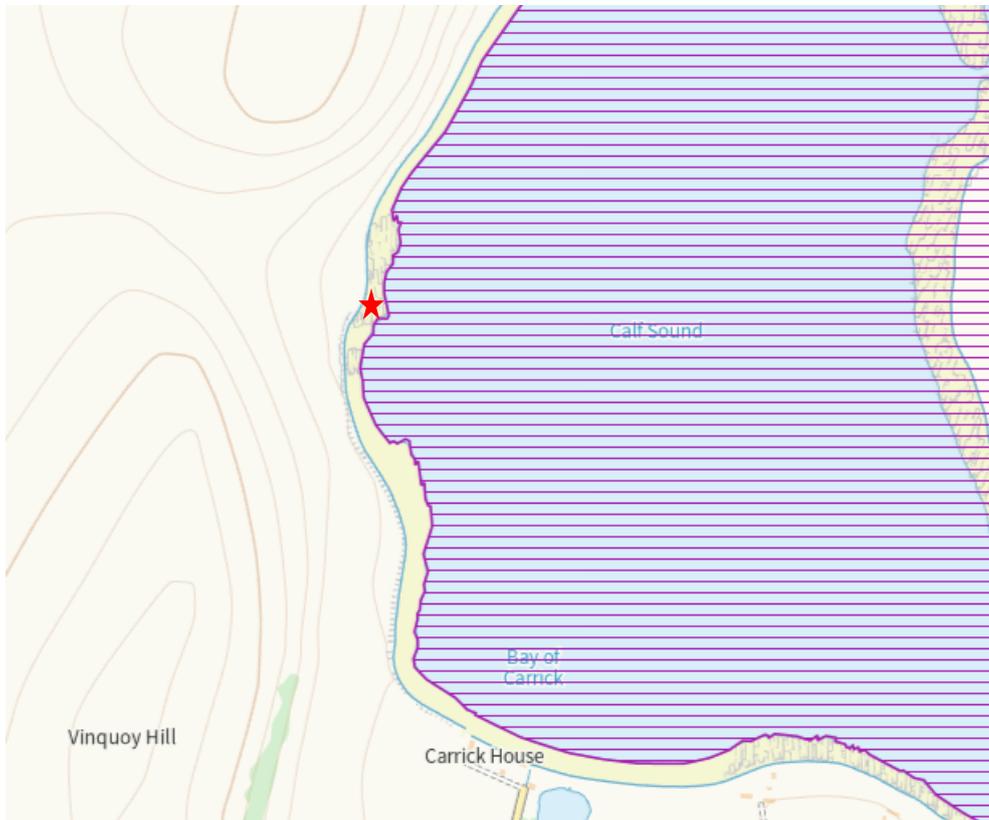
1000m

Licence site shown in red  
 MLWS and MHWS shown in blue

Site co-ordinates 59.237055°N, -2.7631345°W; 59.236728°N, -2.7633495°W  
 59.236812°N, -2.7637770°W; 59.237147°N, -2.7635851°W  
 Maps reproduced in accordance with our OS Licence No.100059198

## CALF OF EDAY SPECIAL PROTECTED AREA

The proposed works sit at the very edge of the Calf of Eday Special Protected Area (SPA). An excerpt from NatureScot's map of this area is shown below with the lighthouse site shown denoted by the ★.



The SPA covers to MLWS, and therefore none of the works we are undertaken will infringe on it, but it is highlighted here for clarity of the situation. Nonetheless, we are committed to protecting and conserving the local environment in which our assets are sited, and have highlighted below our marine policy and how it relates to the Scottish National Marine Plan.

## METHOD STATEMENT

The contract for the works has not been awarded yet, but the successful tenderer will produce written detailed method statements covering all elements of the project and will update these ensuring they meet the required standards for environmental safety and the requirements stipulated by the marine licence. All works will be carried out in compliance with the pollution control information on SEPA's website <https://www.sepa.org.uk/regulations/water/pollution-control/>

### *Scaffolding*

The scaffolding will be founded on the exposed bedrock around the lighthouse site, upon timber or plastic bearers. The scaffold will be in place from early May 2026, until late August 2026, and is unlikely to move position once fully erected.

### *Void Filling*

The voids will be cleaned out using hand tools such as scrapers, chisels and brushes, on a dropping tide. If time permits, voids will be filled on the same dropping tide, or wait until the next suitable dropping tide.

Once cleaned, the voids in the piers will be filled with a ready mix marine grade quick set mortar (Cornerstone Marine P50). This will be mixed by hand at the contractors site compound on land, and then placed (again by hand) on a dropping tide. This mortar spec has a washout resistance time of 1 minute, being fully set within 48 minutes. This will ensure that once the tide has started to rise, there is no risk of the newly placed mortar being washed out. The repair will be monitored during the rising tide to ensure no washout is taking place.

## PHOTOGRAPHS



Example void to be filled on stone pier. This is typical, and is approx. 75mm deep, 35mm high and 300mm long. There are approx. 3 no. such instances of repair required.



Picture from 2002 showing scaffolding erected to carry out lightroom repairs at the time. Scaffolding for this project will be approx. the same extents.

## MARINE POLICY STATEMENT AND THE SCOTTISH NATIONAL MARINE PLAN

The works proposed do not generally impact on any of the policies outlined in Scotland's National Marine Plan, other than in supporting Section 3: Key issues for marine planning, and Section 13 Part 1; Objectives and marine planning policies, in regard to Objective 1: "Safeguarded access to ports and harbours and navigational safety".

It should be noted also that the Northern Lighthouse Board's main remit is to ensure that Aids to Navigation (AToNs) are maintained with the aim to: "Deliver in the most sustainable way practicable, a reliable, efficient and cost-effective Aids to Navigation service for the benefit and safety of all Mariners".

The works proposed do not constitute any new development but relate to the operation and maintenance of existing infrastructure and are consistent with Scotland's National Marine Plan ('SNMP'). The licensable activity which would be permitted by the proposed licence is low impact maintenance activity and is sustainable use of the marine environment which is consistent with the policies and objectives of the SNMP (GEN 1 'general planning principle').

The proposed maintenance activities provide the social benefit of a functioning Aid to Navigation service, promoting health and wellbeing that benefits not only coastal communities but also those who travel to and use the marine and coastal environment (GEN 3 'social benefit').

'Landscape and seascape are important elements of people's enjoyment of the coastal and marine environment. They are also important as the setting for coastal communities, contributing to sense of place, economic livelihoods and quality of life.' (GEN 7 'landscape/seascape'). It is not envisaged that the proposed maintenance activities would develop, change or adversely impact the landscape character and visual amenity of each site, as no new development is proposed as part of this marine licence application.

We have reviewed the site included in this application and identified it is located immediately next to a Special Protected Area, Calf of Eday Special Protected Area. This SPA has been designated to protect five species of breeding seabirds, and their supporting habitats. By doing so it contributes to the Scottish, UK and OSPAR MPA networks, the conservation of the wider marine environment around Scotland, and progress towards Good Environmental Status within the North-East Atlantic marine region. It is considered that this application will not impact the legally protected seabed and species in the marine environment (GEN 9 'Natural Heritage'), as works will take place exclusively outside the boundaries of the SPA. However, due to the proximity, we will ensure our Contractors comply with all legal duties and best practices relating to the impact of their works on the local environment.

The proposed maintenance activities should not result in a deterioration of the quality of water (GEN 12 'Water quality and resource'). The maintenance activities do not involve any new pathways that might introduce marine non-native species (MNNS) (GEN 10 'Invasive non-native species'). The proposed activities will not result in additional marine litter (GEN 11 'Marine litter') with all removed materials being recycled by the contractor.

As the proposed activities involve replacing small areas of lost mortar by hand, within its original location, it is not believed that the works will introduce significant man-made noise and vibration in the marine environment (GEN 13 'Noise'). Noise monitoring can be carried out throughout the works if the conditions of the licence deem it necessary. The maintenance activities proposed for the site in this licence application would not have a significant cumulative impact that would outweigh the benefit of the activities (GEN 21 'Cumulative impacts').

These are low impact activities that are essential to us being able to continue to maintain our Aids to Navigation for the benefit and safety of all Mariners.

## **Annexe 1: Marine Licence Application for Construction Projects**