Designation Report of Handling

HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

Case information

Case ID	300046562
Name of Site	Rose Ness Lighthouse, Holm, Mainland, Orkney
Postcode (if any)	KW17 2SD

Local Authority	Orkney Islands Council
National Grid Reference	ND 52125 98669
Designation Type	Listed Building
Designation No. and category of listing (if any)	N/A
Case Type	Designation

Received/Start Date	2020 [Lighthouses Review Project]
Decision Date	11/12/2020

1. Decision

Previous Statutory Listing Address	N/A	**Previous category of listing**	N/A
New Statutory Listing Address	Rose Ness Lighthouse, Holm	**New category of listing**	C

An assessment using the selection guidance shows that Rose Ness Lighthouse meets the criteria of special architectural or historic interest. The decision is to list the building at category C.

2. Designation Background and Development Proposals

2.1 Designation Background

Rose Ness Lighthouse has not previously been designated.

2.2 Development Proposals

There are no known development proposals.

3. Assessment

3.1 Assessment information

Rose Ness Lighthouse was considered for designation as part of the 2020 Lighthouses Review Project. The lighthouse has not been visited. The present assessment is desk-based, using available information and has included reference to recent photographs.

3.2 Assessment of special architectural or historic interest

Rose Ness Lighthouse was found to meet the criteria for listing. An assessment using the selection guidance to decide whether a site or place is of special architectural or historic interest was carried out. See **Annex A**.

The listing criteria and selection guidance for listed buildings are published in Designation Policy and Selection Guidance (2019), Annex 2, pp. 11-13, https://www.historicenvironment.scot/designation-policy.

4. Consultation

4.1 Consultation information

Consultation period: 22/10/2020 to 12/11/2020. We have consulted with the owner and the planning authority. The consultation report of handling is published on our portal for comment from interested parties.

4.2 Consultation summary

We received two responses to the consultation. The Northern Lighthouse Board highlighted some errors in the proposed listing which have been corrected. The responses to consultation raised no issues that put into question the special architectural or historic interest of the building.

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ANNEX A
Assessment of special architectural or historic interest

1. Statutory Address

Rose Ness Lighthouse, Holm

2. Description and historical development

2.1 Description

Rose Ness is a solar-powered minor light (light beacon) dating from 1983. Standing on an octagonal concrete base, Rose Ness is a cylindrical, GRP (glass reinforced plastic) tower with a metal gallery. It is topped by a conical-roofed lantern with triangular-shaped storm panes and astragal bars. The automatic LED light flashes white every six seconds and has a range of eight nautical miles.

The northern side of the lighthouse has two entrance doors, one at ground level and one at balcony level. There is an external metal ladder leading up to the balcony and solar panels attached to the southern side of the lighthouse.

The interior space is divided into two spaces. The lower section houses the electrical and communications equipment and banks of batteries. It has small porthole windows. The upper section houses the light.

2.2 Historical development

A stone beacon (Canmore ID 74470) was built at Rose Ness in 1867 designed to be visible on the clifftop during the day. In 1905 a cast-iron light beacon was built to the southwest by David A and Charles Stevenson (The Orcadian). This minor light remained in use for much of the 20th century and was powered by acetylene gas (as shown on the Ordnance Survey map of 1965). Before solar power, cylinders of acetylene gas were supplied to lighthouses to power the lights, creating a significant maintenance programme made difficult by the remote location of many of Scotland's lighthouses.

During the 1980s there was a transition from older designs of minor light to new gas-powered and solar-powered examples intended to reduce costs. In 1983 the 1905 cast-iron light was replaced with the current GRP tower at Rose Ness, originally gas-powered.

3. Assessment of special architectural or historic interest

To be listed a building must be of 'special architectural or historic interest' as set out in the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. To decide if a building is of special interest for listing we assess its cultural significance using selection guidance which has two main headings – architectural interest and historic interest (see Designation Policy and Selection Guidance, 2019, Annex 2, pp. 11-13).

The selection guidance provides a framework within which judgement is exercised in reaching individual decisions. The special architectural or historic interest of a building can be demonstrated in one or more of the following ways.

3.1 Architectural interest

The architectural interest of a building may include its design, designer, interior, plan form, materials, regional traditions, and setting and the extent to which these characteristics survive. These factors are grouped under two headings:

3.1.1 Design

Rose Ness is a minor light of a GRP tower construction. The use of glass reinforced plastic (fibreglass) is indicative of its late-20th century date. Fibreglass has been used in lighthouse construction in the United States since around the 1960s and was first used in Scotland's lighthouses in the early 1980s (Lighthouse Preservation Society).

GRP is a strong but flexible, non-corroding material moulded in or around the shape it is required to take. It is also highly resistant to long-term wear and tear, low maintenance and quick to construct in comparison with more traditional materials such as stone, cast iron or concrete. Rose Ness was one of the first glass reinforced lighthouses erected in Scotland, alongside Ruadh Sgeir on Jura (1983).

GRP towers are visually similar to 'traditional' lighthouses and usually have a base, tower, lantern and gallery. However, most of these features are now purely decorative and are added for aesthetic reasons. For example, the beacon at Rose Ness has a conical cap topped with a vent-shaped finial, visually mimicking the storm-proof ventilators of earlier lighthouses. Generally, the form of GRP towers retains the look of a typical lighthouse and is in direct contrast with the slightly later solar powered lattice aluminium tower (SPLAT) design.

The compact, practical plan-form of Rose Ness is representative of an automated minor light of a GRP tower design. Its internal space was designed to house and protect the gas-powered lighting apparatus used in its original form, although they have since been converted to solar powered LED lighting. Since automation, living accommodation is no longer required on site and lighthouse complexes can be much smaller because large machinery for large, rotating optics, fuel tanks and long-term storage are no longer required.

3.1.2 Setting

The location of any lighthouse is critical to its function. Rose Ness lighthouse occupies a clifftop position 24 metres above sea level at the southeastern point of Mainland Orkney overlooking Holm Sound, to the east of the important natural harbour of Scapa Flow. In 1905, provision of a light at Rose Ness would have guided vessels entering and leaving Scapa Flow through the channels that separated the islands of South Ronaldsay, Burray, Glimps Holm and Lamholm from Mainland. These channels were closed to navigation during the First World War by use of blockships, and since the Second World War, by the construction of the Churchill Barriers. The lighthouse at Rose Ness continues to play an important role in guiding vessels in transit along the east coast of Orkney.

Rose Ness lighthouse is intervisible with the earlier rubble-built stone beacon to the northeast, topped by a large, timber cross. Together, these buildings form an important grouping of navigational aids which add to the special interest of the lighthouse. Furthermore, the lighthouse occupies roughly the same footprint as the 1905 cast iron beacon (as evidenced by two redundant square concrete bases that appear on aerial photographs close by to the southwest of the lighthouse).

Rose Ness lighthouse has not significantly changed since its construction in 1983 and it retains its isolated and prominent position.

3.2 Historic interest

Historic interest is in such things as a building's age, rarity, social historical interest and associations with people or events that have had a significant impact on Scotland's cultural heritage. Historic interest is assessed under three headings:

3.2.1 Age and rarity

Rose Ness is of interest as it belongs to the earlier phase of transitioning to new designs of gas and solar powered electric lights in Scotland since around 1980. It is one of the first low maintenance, glass reinforced plastic (GRP) towers built in Scotland. There are currently 13 of these GRP towers in the estate of the Northern Lighthouse Board. Only a small number were built because as the process of solarisation developed in the mid to late 1980s the solar-powered, light aluminium towers (SPLAT) became the more economically viable option for replacing the remaining gas-powered minor lights in Scotland. The last GRP tower was erected in 2010 at Crammag Head, and all 13 examples have been converted to solar power in place of the original gas-powered apparatus.

There are over 200 operational Northern Lighthouse Board lighthouses in Scotland, with many other examples either decommissioned or operated by other organisations and groups. They range from elegant stone pinnacles on remote reefs far out to sea, to small navigational beacons and modern modular lights. Of these, around 150 lighthouses of various shapes, sizes and types are currently designated as either listed buildings or scheduled monuments, representing a wide range of specific navigational dangers that required illumination at night.

3.2.2 Social historical interest

Social historical interest is the way a building contributes to our understanding of how people lived in the past, and how our social and economic history is shown in a building and/or in its setting.

Rose Ness is of social historical interest as it belongs to the most recent phase of lighthouse construction in Scotland. It was built in response to advancements in technology and is directly related to the programme of solarisation implemented since the 1980s. It is a contemporary version of its earlier automated cast iron structure of 1905.

The significance of Scotland's lighthouse network to the country's history is high. As an island nation with over 18,000 kilometres of coastline and over 900 islands, maritime industries such as fishing, coastal trade and transportation have long been significant social and economic factors. Scotland's coasts are also located on international sea-routes linking northern Europe with the rest of the world. The use of lighthouses was therefore vital to the safety of shipping in Scottish waters. Prior to the construction of Scotland's lighthouses, most navigation markers were landmarks visible only during daylight, and so nautical navigation at night or in poor conditions was a highly dangerous but sometimes unavoidable undertaking. This is reflected in the large numbers of records of ships and sailors lost in wrecking incidents around the coasts of Scotland during the 19th and 19th centuries.

The first lighthouse in Scotland was established on the Isle of May (SM887) in 1636. This light aided navigation into the many harbours around the Firth of Forth and took the form of a stone tower mounting a coal fired brazier. Although the Isle of May beacon was far from as bright as later examples, in good weather it good be seen from as far as the entrance to the Tay, and it would remain operational for 180 years. The Isle of May was followed by several other lighthouses and beacons being built from the late 17th century, improving navigation for the Tay, the Solway and the Clyde.

A common factor in all the lights established in the first 150 years was that they were conceived, built and operated by private interests and organisations, such as local magistrates, councils and individuals, supported by the king and parliament when necessary. By the early 1780s, however, there was a growing recognition that many shipping and navigational dangers existed far beyond the profitable harbours and estuaries that had driven the development of the early lights. To address this, in 1786 parliament passed "*An Act for erecting certain Light-houses in the Northern Parts of Great Britain*" and established a board of Commissioners (subsequently to become the Commissioners of the Northern Lighthouses and then the Northern Lighthouse Board), initially to undertake the work of building and maintaining lights at four locations, including Kinnaird Head (LB31888), Eilean Glas (LB13487), Mull of Kintyre (LB19874) and North Ronaldsay (SM6596). These lights were the work of the Board's first engineer, Thomas Smith, and his assistant Robert Stevenson, and

used improved lighting technology in the form of whale oil burners and mirrored reflectors to enhance the brightness.

Following the 1786 Act, the number of lighthouses around the coasts of Scotland began to rapidly grow, along with the technology and engineering skills employed. By the early 19th century oil lamps were replacing the earlier coal burners, and Robert Stevenson had been able to design and build a lighthouse on the Bell Rock (LB45197). Throughout the 19th and early 20th century, Robert Stevenson and his descendants continued to push the boundaries of technology and engineering to expand the network, including lights on Skerryvore (LB17489), Muckle Flugga (LB17479), Dhu Heartach (LB12320), and the Flannan Isles (LB48143). Throughout the 20th century, the Northern Lighthouse Board has continued this tradition of innovation in its later designs, as evidenced with the lighthouse at Rose Ness.

3.2.3 *Association with people or events of national importance*

There is no direct association with a person or event of national importance.

For over 150 years Robert Stevenson and his descendants designed many of Scotland's lighthouses. The efforts of the Stevenson family in designing and constructing the network of lighthouses around Scotland's coasts, often against seemingly overwhelming odds, led to their collective name the "Lighthouse Stevensons" and they are revered as some of Scotland's greatest engineering minds. Whilst little remains of David A and Charles Stevenson's earlier light at Rose Ness, the current lighthouse is a late-20th century structure that is testament to the legacy of the Stevensons' engineering skills and the modernisation and development of navigational aids in Scotland to this day.

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4. Summary of assessment

Rose Ness Lighthouse meets the criteria of special architectural or historic interest for the following reasons:

- It is a specifically late-20th century lighthouse structure, a tower constructed in glass-reinforced plastic (GRP).
- Its compact plan form is indicative of the automation and solarisation of lighthouses since the 1980s.
- The remote setting of the lighthouse is largely unchanged since it was built and its located in roughly the same footprint as the earlier cast iron beacon of 1905.
- It is important in helping us to understand how the operation of lighthouses changed in the late-20th century.

5. Category of listing

Once a building is found to be of special architectural or historic interest, it is then classified under one of three categories (A, B or C) according to its relative importance. While the listing itself has legal weight and gives statutory protection, the categories have no legal status and are advisory. They affect how a building is managed in the planning system.

Category definitions are found at Annex 2 of Designation Policy and Selection Guidance (2019) https://www.historicenvironment.scot/designation-policy.

5.1 Level of importance

The level of importance of Rose Ness Lighthouse is category C

Buildings listed at category C are defined as 'buildings of special architectural or historic interest which are representative example of a particular period, style or type.

Rose Ness Lighthouse is a representative example of a late-20th century lighthouse built in glass reinforced plastic (GRP) in response to the solarisation programme implemented from the 1980s onwards.

Category C is considered to be the most appropriate level of listing.

6. Other Information

N/A

7. References

Canmore: http://canmore.org.uk/ CANMORE ID 81145

Maps

Ordnance Survey (surveyed 1880, published 1881). Orkney CXXI.2 (Holm). 25 inches to the mile. 1st Edition. Southampton: Ordnance Survey.

Ordnance Survey (1965). 1:2,500. Southampton: Ordnance Survey.

Printed Sources

The Orcadian or Northern Counties Journal and Advertiser (07 October 1905) Intimations: Notice to Mariners - No.12, p.1.

Online Sources

The Lighthouse Preservation Society. History of the Lighthouse Service and Lighthouse Construction Types, at

https://www.nps.gov/maritime/nhlpa/handbook/HistoricLighthousePreservationHandbook_04_Part2.pdf, p.5.

Lighthouses of Scotland. Orkney, at https://www.ibiblio.org/lighthouse/ork.htm [accessed 30/09/2020].

Northern Lighthouse Board. NLB Visuals, at https://nlbvisuals.org.uk/ [accessed 30/09/2020].

Northern Lighthouse Board. Solarisation, at https://www.nlb.org.uk/history/solarisation/ [accessed 30/09/2020].

Scottish Assessors Association. Lighthouses and Lighthouse Stations, at https://www.saa.gov.uk/blog/document-search/lighthouses-and-lighthouse-stations/ [accessed 30/09/2020].