



Commissioners of
IRISH LIGHTS

Navigation
and Maritime
Services

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If you notice any aid to navigation not functioning correctly please contact our 24 hour emergency number:
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ST JOHN'S POINT CAPITAL PROJECT



Engineering Upgrade at St John's Point Lighthouse, Co. Down.

This Factsheet outlines the extent of the works being undertaken as part of the proposed capital project.

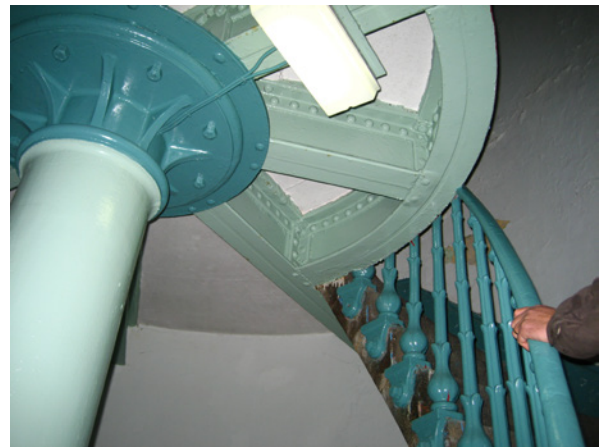
St John's Point Proposals

The engineering works planned for St. John's Point are necessary to ensure the reliable and safe operation of this essential Category 1 Aid to Navigation in a sustainable way. The proposed works will retain the rotating Fresnel lens and unique flash character of the light.

Irish Lights has completed similar projects at Tory Island, Rathlin West and Rathlin East Lighthouses and the project will utilise an innovative bearing system and light technology based on extensive research.

The project at St John's Point will:

- ✓ Improve the reliability and safety of the Aids to Navigation
- ✓ Reduce the range of the light to 18 miles, as per 2010, 2015 and 2020 Aids to Navigation Reviews
- ✓ Replace the existing metal halide light-source (1000 Watt) with LED (90 Watt)
- ✓ Retain auxiliary light with LED equivalent
- ✓ Provide full range (18 mile) emergency lanterns
- ✓ Retain the use of the existing rotating historic lens and unique flash character
- ✓ Remove mercury
- ✓ Install mechanical bearing
- ✓ Remove the operation of the diesel generator and fuel source
- ✓ Provide battery back-up system to replace the operation of the diesel generator
- ✓ Remove interior wall lining and expose the original masonry of the lighthouse tower
- ✓ Reduce cost and maintenance requirements at the lighthouse
- ✓ Provide opportunities for realising the tourism potential of the site



Statutory Approvals and Work Timing

Irish Lights is engaged in a Listed Building Consent Application process in order to ensure the necessary statutory approvals are in place. This process includes engagement with a wide variety of stakeholders and a Public Information Event.

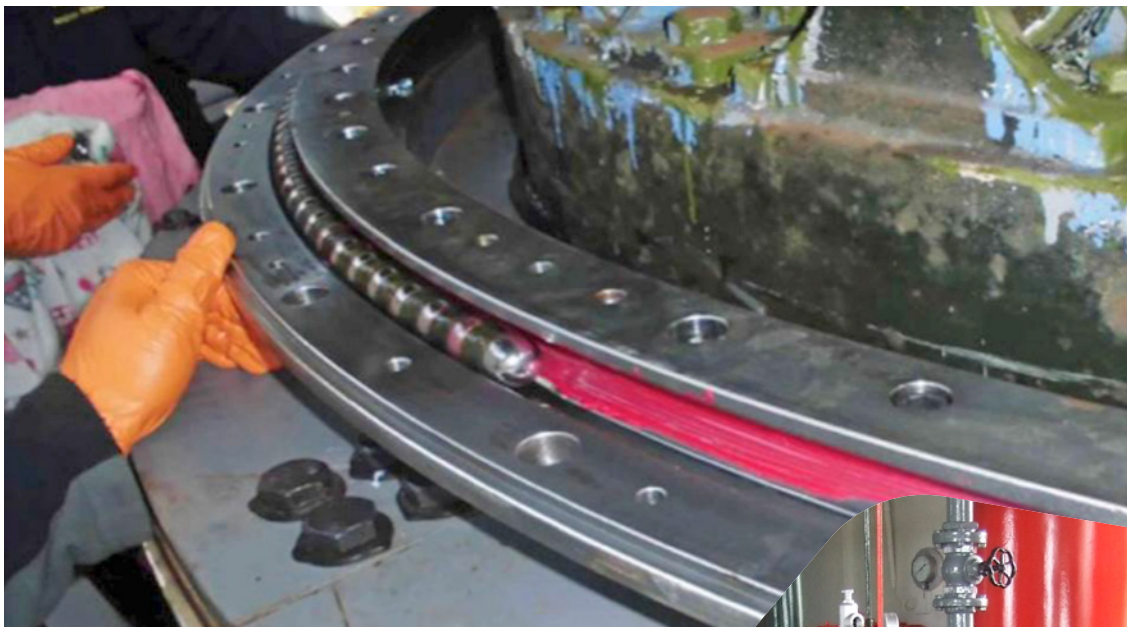
The work will take place once the statutory consent is in place.

First Order Lenses and Bearing System

The large First Order Fresnel lens at St John's Point is an exceptional work of engineering. The lens presently rotates on a bath of mercury. The current UK Regulations require organisations to put processes in place to protect human health and the environment from the adverse effects of mercury, including phasing out of its use where alternatives are available. Irish Lights and other Lighthouse Authorities are in the process of removing mercury from their lighthouses.

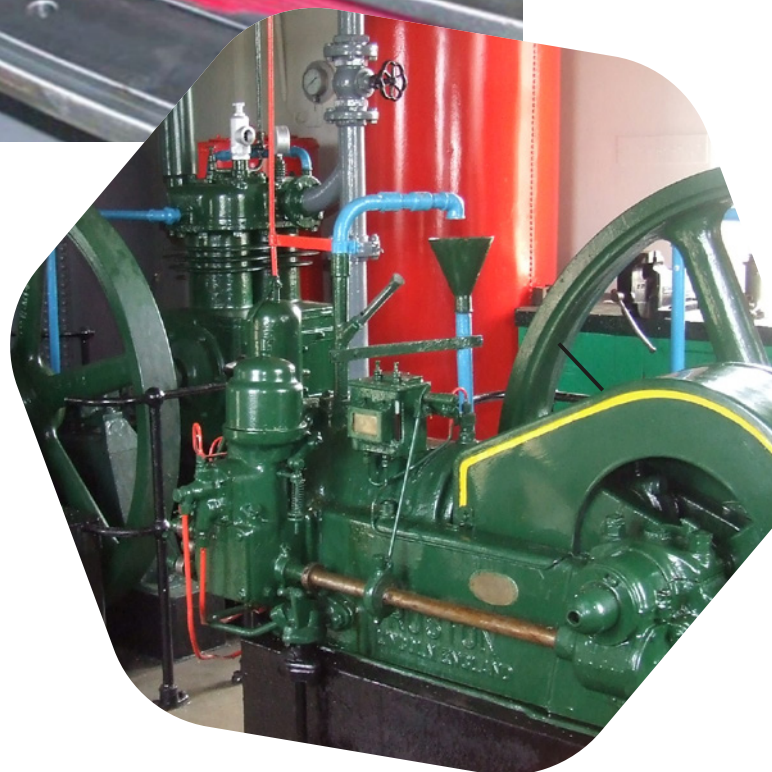
From an Aid to Navigation perspective, there are many alternative light sources available. However, from a heritage perspective, Irish Lights has developed a system that will allow retention of the historic lens, while still delivering the required safety and environmental benefits.

The mechanical bearing pictured below has been successfully installed and is in operation at a number of Irish Lights sites.



The lens is rotated on a ball bearing race using a specially designed brushless motor. This design is in use on a number of other onshore lighthouses with Fresnel lenses where mains electricity is available.

There are many other heritage features at St John's Point including houses, Gasometers and Fog Signal engines. Irish Lights looks forward to working with the local community and Northern Ireland state agencies to determine how best to protect the lighthouse and its heritage into the future.





Our Vision – Next Generation Maritime Services

Delivering Next Generation Maritime Services at the interface of navigation, technology, engineering and data management.

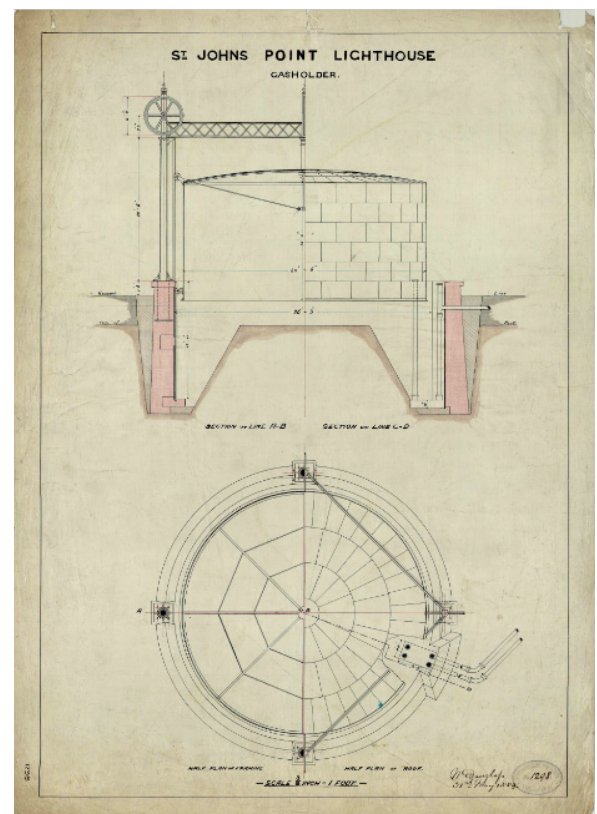


Our Mission – Safe Navigation at Sea

To be a leading and innovative provider of reliable, efficient and cost effective navigation and maritime services for the safety of all.

St John's Point Lighthouse Key Dates

1844	White 19 metre Tower and 12 mile light established
1860	Light changed from White to Red
1875	Change from oil to coal gas
1893	Tower increased to 36.5 metres, Auxiliary Light & Fog Signal established
1902	Three black bands added
1908	Present lens installed, converted from gas to paraffin. Light changed to White
1954	Tower changed to Black with Yellow Bands
1957	Auxiliary Light converted to electric
1981	Main Light converted to electric and automated; electric fog horn installed
2011	Fog Signal discontinued
2015	Two houses opened for public use operated by Irish Landmark Trust



Gasometer Drawing 1889

For further information:

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