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# ST JOHN'S POINT

# WORK PROGRAMME 2021/23



During 2022, Irish Lights personnel will be completing engineering works at St John's Point Lighthouse, Co. Down.

**This Factsheet** outlines the extent of the works and is being issued as part of a consultation with the local community.

# St John's Point Proposals

The engineering works planned for St. John's Point will deliver a better quality, environmentally superior solution which meets modern health and safety requirements. With respect to heritage, proposals for St. John's Point have been significantly changed since 2015, following consultation with the local community and technological research.

In preparation for these works Irish Lights has recently completed a successful three year trial of an innovative bearing system which will allow retention of the First Order rotating Fresnel lens and sweeping beam.

#### The project at St John's Point will:

- Retain the use of the existing rotating historic lens and sweeping beam
- Change the power system to mains with battery backup
- Remove mercury and diesel generator
- Replace filament lamps (1,000 watts) with LED (90 watts)
- Retain auxiliary light with LED equivalent



- ✓ Reduce the range of the light to 18 miles, as per 2010 and 2015 Aids to Navigation Reviews
- Remove interior wall lining and expose the original masonry of the lighthouse tower
- Provide opportunities for alternative use of buildings
- Reduce cost and maintenance requirements at the lighthouse
- Provide full range (18 mile) emergency lanterns

#### Statutory Approvals and Work Timing

During 2019/20 Irish Lights will consult with stakeholders and seek any statutory approvals required. Procurement for the project will commence in 2021 with work on site being completed in 2022.

Local residents will be kept informed of progress throughout the project.

#### 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. Mercury is recognised as a highly toxic substance. 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 been working to develop a system that will allow retention of the historic lenses, while still delivering the required safety and environmental benefits.

The mechanical bearing pictured below has been trialled over the last three years and will deliver the reliable service required.



The lens is rotated on a ball bearing race using a specially designed brushless motor. This design will be used 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.

# IRISH LIGHTS AND ST JOHN'S POINT





### Our Vision - Next Generation Maritime Services

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

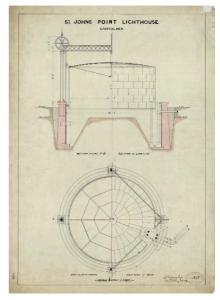


## Our Mission - Safe Navigation at Sea

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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