## Roman Rock Lighthouse

Roman Rock is a pinnacle located approximately 2.2 kilometers (1.4 miles) from the entrance to the Simon's Town Harbor. Named after a fish commonly found in these waters (the Red Roman), the rock presented a navigational hazard to all vessels that had been using the port since the 18th century. The need for a lighthouse was first proposed in the early 1820s by Joseph Nourse, the Commodore of the Royal Navy, who insisted that it was required to ensure additional safety for ships that sailed in the area at night or during storms. Because of logistical difficulties and expense, it was eventually decided to supply a lightship to provide this service, which started on the 10th of January 1845. But the HMS Thunderbolt proved to be ineffective and costly to maintain, so the Lord's Commissioners reluctantly agreed to build a permanent lighthouse.

Plans for the lighthouse were drawn up by Alexander Gordon of the British Lighthouse Authority, and the lighting mechanism was designed by London-based lamp manufacturer James De Ville. It consisted of a revolving platform that carried 8 single-wick oil burners set in polished metallic reflectors, with a complete rotation every 4 minutes. The tower was prefabricated in cast iron sections, and then shipped out from England to be bolted together on top of a base which had a solid foundation provided by 3 meters (10 feet) of concrete fill.

Construction began in 1857, but turned out to be far more difficult and time-consuming than anyone could had imagined. This was because of the unique location, rough seas, bad weather, and the fact that the rock was only accessible at low tide in calm water. It would eventually take more than 4 years to complete the build, and the lamp was lit for the first time on the 16th of September 1861.

There were some questions about the stability of the structure, so the colonial government refused to assume control and responsibility for manning the lighthouse until their engineers were satisfied with its integrity. After some debate, the base was further reinforced with a 4-foot granite wall cladding and a granite and cement fill, and the lighthouse was finally handed over to the department of public works on the 28th of February 1867.

The lighthouse's head keeper and his two assistants were paid higher-than-average salaries because of the hardships of working on Roman Rock. Two of the men would routinely man the lighthouse while the third remained on shore, with one of them trading places every 7 days. Relief keepers were required to take with them oil to power the light, as well as food and water. Transport between the shore and the lighthouse was usually by means of a small rowing boat, which could be particularly dangerous in heavy weather.

The lighthouse became fully automated on the 25th of March 1919, with the installation of an acetylene gas apparatus controlled by a sun valve. This modification removed the need for permanent lighthouse keepers, and the station was unmanned from this date onwards. On the 5th of March 1992, at the request of the South African Navy, the entire lantern was replaced with a new lightweight reinforced plastic structure containing low voltage quartz-halogen lamps in a rotating array. Power was obtained from the East Dockyard via an undersea cable, but this turned out to be problematic and unreliable, and was changed over to batteries charged by solar panels in 1994. A helipad was also constructed at the same time, mounted on an adjacent rock on top of a stainless-steel tower with a 13-meter walkway. A weather station was installed in April 2002, and the lighting and battery system was upgraded in 2015.

## Roman Rock Lighthouse Fact File

LSA Number	19
Name	Roman Rock
Province	Western Cape
Location	Simon's Town
GPS Coordinates	S34.181207 E18.460142 34°10'52.4"S 18°27'36.5"E
ARLHS Number	SAF-024
Admiralty Number	D6140
NGA Number	32280
Active	Yes
First Established	1861
Commission Date	16 September 1861
Decommission Date	Not applicable
Construction Type	Cast iron tower mounted on a circular stone pedestal
Daymark	Entire structure painted white.
Tower Height	14 meters (46 feet)
Focal Plane	17 meters (56 feet)
Luminous Intensity	147,656 candelas
Nominal Range	20 nautical miles
Characteristic	FI.W.
Period	6 seconds
Pattern	Fl. 0.1s, ec. 5.9s
Pattern Description	1 quick white flash every 6 seconds.
Manned	No
Site Open	No
Fenced	No
Tower Open	No
Accommodation	No
Access Method	Boat
Access Notes	ТВС