

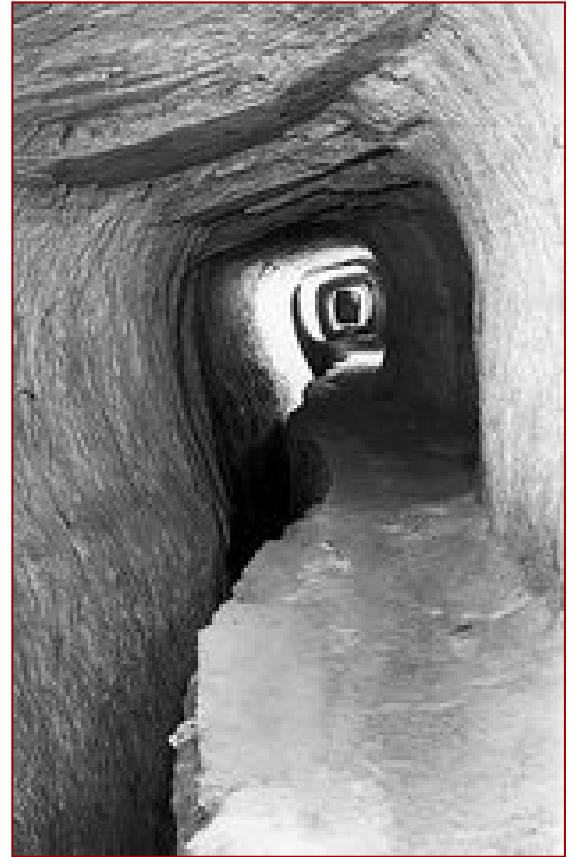
THE TUNNEL OF EUPALINOS (PYTHAGOREIO - SAMOS ISLAND)

Engineering geological conditions and problem:

- The aqueduct of the ancient city of Samos (Pythagoreio), called the "two-mouthed tunnel" by Herodotus, is one of the most significant technical achievements of Greek antiquity.

- It is a tunnel 1036 m long, hewn from the rock through Mt. Kastron, starting from the north side and ending to the south. It is located 55 m. above sea level and 180 m. below the top of the mountain. The dimensions of the tunnel are 1.80 x 1.80 m. Inside it, at a depth of 2-9 m. is the channel that carried the water to the city. Two architectural phases have been distinguished: a) the Archaic, with the polygonal masonry and the pointed roof and b) the Roman, with a barrel-vaulted roof.

- The aqueduct was the work of Eupalinos, son of Naustrophos, an engineer from Megara. Its construction started in 550 B.C., during the tyranny of Polycrates and lasted for ten years. Many Lesbian prisoners were used by the Samians for the completion of the work.



Protection measures already have been taken or have to be taken:

- The inhabitants of Samos attempted to use the aqueduct in 1882 but their effort was not successful.

- Ninety years later, between 1971 and 1973, the German Archaeological Institute of Athens undertook the task to finally uncover the tunnel.

- Tunnel stabilization



References on studies already performed:

- 21th EPHORATE OF PREHISTORIC AND CLASSIC ANTIQUITIES: Reports on excavation and restoration activities