Rehabilitation & Damage Restoration

- **Voudoros stream sea-outlet in Euboea, Greece (2024):** The study provided arrangement marine works for an unobstructed water flow of Voudoros stream in NE Euboea island. It formed part of a broader provision of services covering the northern expanse of the island hit by the devastating wildfires of 2021 and the associated floods of 2022. The proposed works included natural stone structures delineating the stream's banks over 190m (north leg) and 145m (south leg). A submerged detached breakwater was also provided to deflect waves from obstructing the land water outflow minimizing thus local sedimentation. To arrive at this proposal a coastal engineering study has been undertaken to investigate wave propagation under a range of metocean conditions along with sediment transport; Xbeach solver was used in that exercise. The views on the proposal of the local antiquities ephorate were suitably accommodated. The study was conducted on behalf of the contractor (SICAP).

- **Completion of Land based Works for Multi-purpose Section, Souda Port:** This study (final design and tender documents) involves:
  - Completion of the Multi-purpose Port Section (P.L.S.) pier with the construction of a 157m western quay extension, an approximately 330m southern quay, and approximately 64m of natural rock armouring extending from the southern quay to connect with the existing commercial port section.
  - Embankments and paving of the pier's land area.
  - Dredging of the seabed in front of the western and southern quays to -8m and -6m respectively, and to -4m in front of the armouring.
  - Infrastructure networks and electromechanical installations.

- **Technical Advisor Services, Rehabilitation of Argostoli Port, Kefalonia – Phase B (2022):** This project involves the rehabilitation of damages caused by the earthquakes of January 26 and February 3, 2014, at Argostoli Port. The scope includes reconstruction of the following:
  - Commercial Pier: Quay wall superstructure including two ramps and equipment, pier's land area up to existing buildings, construction of the pier's stormwater drainage and firefighting pumping station, limited dredging along the quay.
  - Pebble Quay: Pebble pavement including stormwater pipes, and construction of infrastructure for water and electricity supply to tourist vessels, and land area lighting.
  - Vegetable Market Pier: Quay wall superstructure including equipment, pier's land area and stormwater drainage system within that area.
  - Southern Quay: Quay wall, pier's land area up to the coastal road, construction of lighting infrastructure, stormwater drainage, and limited dredging along the quay.

  Client: Directorate of Port Infrastructure, Ministry of Infrastructure and Transport.

- **Damage Restoration in Ports of Argos-Mycenae and Ermionida Municipalities, Argolida Prefecture (2019):** This contract involves assisting the Directorate of Port Infrastructure in preparing the necessary studies and tender documents for the project "Damage Restoration in Ports of Argos-Mycenae and Ermionida Municipalities, Argolida Prefecture, from the storm of September 29, 2018." The proposed works are as follows.
  - Kiveri shelter: Interventions on both sides of the mole root, repair and scour protection of the low stream crossing, completion of mole armouring, dredging of the basin and

replenishment of the northern shore, and restoration of damages along the right bank of the stream, including a playground pavement.

- Costa Area, Coastal Retaining Wall: Excavation and placement of rockfill foundation, infilling of scour voids at the quay wall toe, and construction of toe armouring.
- Pigadia Thermisia Area, Coastal Quay Wall: Excavation and placement of rockfill foundation, and construction of toe armouring.

- **Study for the repair of the damages caused by the earthquake of 26 January and 3 February 2014 at the port of Argostoli, Kefalonia - 2nd Phase (2015):** This study included:
  - Final port design related to the new quay in Section I and the study and stability control of the quay walls in the three remaining sections (II, III, and IV). During the port study, a submarine inspection of quay walls was carried out.
  - Final design for the layout of the land area in the Commercial port (Section IV) behind the quays, including new asphalt pavements, and in the Lahanagora area (Section II) behind the quays, with new concrete pavements.