



## **REHABILITATION OF EXISTING SEAWALL IN FUJAIRAH TO WITHSTAND CYCLONE CONDITIONS**

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**Key Words** (Seawall, Cyclone Gonu, Overtopping, Rehabilitation).

### **Abstract**

*This paper presents the results of studies performed to rehabilitate an existing seawall in Fujairah to withstand cyclone Gonu condition. The existing section has not been designed for the cyclone Gonu condition. A desktop study was implemented to assess the functionality of the existing section by applying the methods recommended in the applicable standards and guidelines. This assessment showed that the existing seawall would be severely damaged and excessively overtopped during the cyclone wave condition. Some measures were implemented for the typical section of the seawall. The proposed improved sections were physical model tested and the results compared with the empirical methods.*

### **Introduction**

*The Fujairah F2 Plant is a power generation and seawater desalination plant located at Qidfa in the Emirate of Fujairah on the Gulf of Oman Sea (Fig.1). The layout of the shore protection is shown in Fig 2 and Fig.3.*



**Fig. 1) Location Plan**