MODIFYING STRUCTURE OF PIER JETTY PT. PETROKIMIA GRESIK WITH PRECAST CONCRETE METHOD

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Abstract
The workmanship upper structure of jetty pier casting process in which the ocean with a relatively high degree of difficulty that require innovative and solution-based methods to improve the work efficiency even higher without reducing the quality that has been planned. Precast concrete method is one alternative to casting pier construction. In principle, the use of precast concrete method is to move most of the work carried out at sea casting being on land.

This final project explores the structure of the jetty pier modifications PT. Petrokimia Gresik with precast concrete method on the element plate, beam and pile cap, while the pile foundation using steel piles. Precast concrete method used in this final project are a half-slab, u-shell precast beam and pile cap.

From the analysis of the author, it could be concluded that the cost required for existing jetty pier is Rp. 102,495,269,312.00, to the existing jetty pier foundation equalization safety factor (SF = 3) was Rp. 136,344,750,283.54 and costs for pier jetty modified author is 134,861,585,580.01. With these data it is with the same safety factor (SF = 3) jetty modifications require a lower cost than the existing jetty pier.

Keywords: Precast Concrete, Half Slab, Jetty, Precast Pile Cap, Safety Factor of foundation, U-Shell Beam, Upper Structure
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