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Challenges of Design, Cost and Surveying in Dams

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Abstract : The construction of Embankment dams is considered one of the most challenging construction projects, for which several main reasons can be mentioned. Excavation and embankment must be done in a large area, and its design is based on preliminary studies, but at the time of construction, it is possible that excavation does not match with the stability or slope of the rock, or the design is incomplete, and corrections should be made in order to be able to carry out excavation and embankment. Also, the progress of the work depends on the main factors, the lack of each of which can slow down the construction of the dams, and lead to an increase in costs, and control of excavations and embankments and calculations of their volumes are done in this collection. In the following, we will investigate three Embankment dams in Iran that faced these challenges and how they overcame these challenges. KHODA AFARIN on the Aras River between the two countries of IRAN and AZARBAIJAN, SIAH BISHEH PUMPED STORAGE on CHALUS River and GOTVAND on KARUN River are among the most important dams built in Iran.

Keywords: section, data transfer, tunnel, free station

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