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THE EFFECT OF SUCTION ON THE FOUNDATIONS OF SUPER LONG SPAN BRIDGES DURING AN EARTHQUAKE

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A rational method for the design of deep-water foundations of super long span bridges is desired. Attention is paid to the suction acting on the foundation bottom, which resist the rise of an under-water foundation during an earthquake. The results of a laboratory model experiment conducted in order to grasp the characteristics of suction are presented, and a rational seismic design method considering the efiect of suction is proposed.

Key Words: super long span bridge, large depth foundation, suction, seismic design, model experiment

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