Review of repairing as well as reinforcing construction methods of bridge foundation

[Point]

Regardless that there was no significant example of earthquake affect in footing with earthquake resistant design against small-to-medium earthquake that had been traditionally considered, there were many cases in which bearing force of footing was significantly insufficient as a result of major revision in specifications for highway bridges in 1996. However, reinforcement of footing was not easy because it was in underground section, so it was urgently needed to establish rational bearing force assessment method. This study revealed load bearing mechanism of footing by conducting experimental review, and it suggested bearing force calculation method. The suggested method was adopted in specifications for highway bridges that were revised in 2002. Furthermore, design method and construction method, regarding earthquake resistant reinforcing method of the existing road bridge foundation, were studied and summarized.