

8. Development of Precast Concrete Rigid Protective Fences for Replacement for Protective Fences on Reinforced Concrete Viaducts - Performance Evaluation by Static Loading Tests and Iron Ball Impact Tests -

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Some of the expressways have been in service for more than 40 years in Japan. Renovating the expressways in service by closing them to traffic for a long time is expected to have grave social impact as they will induce congestions on ordinary highways. We have been making researches on the technology for partly renovating deteriorated structures. If structures can be renovated while keeping the structures in service, economic loss due to traffic regulations can be reduced and the life-cycle cost for improving infrastructure can be minimized. This paper describes the high performance of a precast reinforced concrete rigid protective fence that we developed to renovate the protective fences on deteriorating viaducts.

Key words: expressways, renovation technology, precast reinforced concrete, protective fences, iron ball impact tests