道路橋の耐久性の信頼性向上に関する研究

Research on Reliability Improvement of Road Bridge Durability

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概要

耐久性設計の信頼性を向上させるためには、構造物の各部での劣化要因やその影響の累積のばらつきを減らすことや、変状の兆候や要因を点検で確実に捉え、措置できるようするための構造上の工夫が不可欠である。しかし、これらの対応は経験的な対処によることがほとんどであるし、試行錯誤によることが多い。そこで、耐久性の局所的なばらつきを減らす効果が期待できそうな知見・事例を収集し、耐久性の信頼性向上策を体系化することを試みた。

キーワード:道路橋,耐久性,維持管理性,点検性

Synopsis

Life-cycle design is gaining more importance in design of road bridges and different approaches are applied at different bridges. Durability design has been much progressed for the last decades and bridge durability and service life should be improved averagely. However, deterioration often develops from part to part within a bridge, resulting in the wide variability in durability even within a bridge. Accordingly, structural details should be carefully arranged so that the variability of durability will be reduced and inspectability and maintainability should be ensured. So far such structural details have been sought and tackled at individual bridge projects and such case examples have not been gathered. According this cooperative research is aimed at putting together different structural details to find out better approaches that have been used so far at different bridges to improve bridge life-time, maintainability, and inspectability. In addition, some of the structural details for better durability, inspectability, and maintainability have been tested to propose standards.

Key Words: road bridge, durability, maintainability, inspectability