

The bridge form evaluation at the initial stage Design proposal in pavement space of bridge Consideration by which case study is passed

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Abstract

In this research the No 36 Highway line in Okinawa Prefecture is taken to be the case study. The pavement space design and the bridge form evaluation are the items of the research.

Keywords

Landscape design, Universality, Characteristic region.

To Infer the Shape Development by Using Regression Analysis

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Abstract

Form usually reflects the appearance and functions of an object. Designers can therefore catch much more important design information from that specific form of the object for further design. Shape extrapolation is a useful method to infer the next generation shape for series products. In this study, we used the side contours of 1981, 1985, 1989, 1992 and 1996 Honda Accord as examples to analyze the trends between these shapes. For accurately investigating each point's change from the shape, we used regression analysis to calculate these position data and to generate the regression equation to infer the next generation shape. We defined six meaningful feature points from side contours of each generation for regression analysis. The result showed two further generation shapes and the comparison between the inferential shape and each generation shape. The inferential method can predict the accurate position that contains in visual line, however it cannot determine the crucial factors in design. We also propose an idea to transfer the perceptive feeling to shape adjustment that base on the regression model.

Keywords

shape extrapolation, regression analysis, inferential shape, perceptive feeling