

STP 1100

*Extending the
Life of Bridges*

*G. W. Maupin, Jr., Bernard C. Brown, and Abba G. Lichtenstein,
editors*



ASTM
1916 Race Street
Philadelphia, PA 19103

Contents

Overview	1
Selecting Rehabilitation and Replacement Bridge Projects—J. WEISSMANN, R. HARRISON, N. H. BURNS, AND W. R. HUDSON	3
Retrofit of Cracked Welded Steel Bridge Girders—J. J. PULLARO	18
Neoprene in Bridge Bearing Pads—The Proven Performance—J. S. BURPULIS, J. R. SEAY, AND R. S. GRAFF	32
A Concept for Preventing Repeated Weld Repairs of Bridge Structures— W. H. WELSCH	44
Strength Evaluations of Bridges—T. THARMABALA	53
Designing Bridge Decks to Match Bridge Life Expectancy—N. H. BETTIGOLE	70
Elastomeric Concrete: Observations and Recommendations Based on a Decade of Installation History in the United States—R. J. WATSON	81
Performance of Bridge Deck Concrete Overlays—K. BABAEI AND N. M. HAWKINS	95
Orthotropic Steel Plates for Bridge Deck Replacement—F. L. STAHL	109
Fourteen Years' Service with Deep Impregnation of a Reinforced Concrete Bridge Deck—R. E. WEYERS, P. D. CADY, M. A. FEENEY, AND S. F. HOW LUM	121