

Table of contents

	Page
Introduction	1-4
Design criteria	1-7
Cross section design	1-11
Inflexion points	1-12
Traffic lanes	1-12
Loads on exterior girder	1-14
Effective slab widths	1-16
Slab reinforcement	1-18
Section properties	1-24
Load effects during slab casting	1-31
Moment resistance before composite action	1-33
Forces in cross frames during slab casting	1-38
Simplified method of analysis - Live load amplification factors	1-39
Vertical reactions	1-41
Moments after composite action, ULS	1-42
Moments after composite action, SLS / FLS	1-44
Shear forces after composite action	1-45
Resistance of composite sections - Positive moment	1-47
Resistance of composite sections - Negative moment	1-52

Table of contents (cont'd)

	Page
Shear resistance of anchor panels	1-57
Intermediate transverse web stiffeners	1-59
Control of cracking, SLS	1-62
Camber	1-63
Superstructure vibrations	1-66
Fatigue	1-69
Shear studs	1-72
Longitudinal shear in the concrete slab	1-75
Wind loads	1-77
Seismic loads	1-84
Field splice design	1-89
Overall bridge design efficiency	1-107
Finite element analysis results - Comparison	1-108
References	1-117