TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF FIGURES

LIST OF FIGURES (Continued)

LIST OF FIGURES (Continued)

LIST OF ABBREVIATION

As	=	area of tension reinforcement or rebar
b	=	width of slab
d	=	distance from extreme compression fiber to centroid of tension reinforcement
E_s	=	modulus of elasticity of steel
f_c ‘	=	compressive strength of concrete
f_s	=	tensile stress of reinforcement
f_y	=	yield strength of reinforcement
Fy	=	yield strength of checkered plate
FEM	=	finite element analysis method
h	=	sag distance of cable at mid span
H	=	horizontal force component of reaction, T
L	=	span length
Mc	=	moment capacity at balance strain condition
Ms	=	resisting moment of slab
Mu	=	ultimate moment
s	=	cable length
t	=	slab thickness
T	=	reaction force of cable
Tx	=	tensile force in cable at distance x
w	=	uniform load applied to cable
w_c	=	uniform load resisted by cable
w_s	=	uniform load resisted by slab
w_t	=	total uniform load resisted by specimen, $w_t = w_c + w_s$
x	=	horizontal distance from left support
y	=	sag distance of cable at distance x
ρ	=	ratio of tension reinforcement, ρ = As/bd
ρ_b	=	reinforcement ratio of producing balanced strain condition
θ	=	angle between horizontal line to connected line between supports
Φ	=	strength reduction factor, Φ = 0.90 for flexure
β_1	=	factor, β_1 = 0.85 for concrete strength up to and including 280 ksc.