LIST OF CONTENS

LIST OF FIGURE

Figure Number Description Page

LIST OF ABREVITATIONS

℄ = Track

UIC = Union Internationale des Chemins de Fer

RPM = Rotary per Minute

m = Meters

mm = Milimeters

kg = Kilograms

cm = Centimeters

N = Newton

KN = Kilo Newton

MPa = Mega Pascal

kNm = Kilo Newton Meters

km = Kilo Meters

R = Radius

V = Velocity

I = Moment Inertia

^{o}c = Celcius

ƛ = Lamda

E = The Young Modulus Elestisitas

ϕ = Diameter of the Reinforcement

Kph = Kilo per hours

GPa = Giga pascal

A = Area

a = Distance of lenght between upper to bottom slab

G = Modulus Shear

g = Earth gravity acceleration (9.81 m/det2)

H = High box girder

h = High walls

M_{ET} = Moment due to temperature

M_{EW} = Maximum moment due to wind load

M_{LL} = Maximum moment due to live load

M_{MA} = Maxsimum moment due to superimposed dead load

M_{MS} = Maximum moment due to self weight construction

M_n = Nominal moment strength of setion
Mpa = Mega Pascal

M_{PR} = Moment due to prestress
M_R = The moment due to creep
M_{RS} = Moment due to shringkage and creep
M_S = The moment due to shringkage
M_{uk} = Ultimate moment capacity
M_{TD} = The maximum moment on beam due to "D" line load
Q_{TD} = Load evenly on the girder box

Q_{BS} = Self weight of box girder

Q_{EW} = Self weight due to wind load

Q_{MA} = Self weight due to superimposed dead load

Q_{MS} = Self weight construction

q = Load evenly

S = Longitudinal spacing of the web reinforcement
T = Average temperature

t' = Age of concrete hardening corrected when burdened

t_a = Thickness of slab

T_{EW} = Wind load

th = Thick puddle of rain

T_{ps} = Internal force of prestressed steel tendon
α = Change in the total angel of the tendon

β = Wobble coefficient

μ = Friction curvatur coefficient

$\sigma 1$ = Service stress due to self weight construction
$\sigma 2$ = Service stress due to dead load and superimposed dead load