Bridge Column Design Based on AASHTO 17th & ACI 318-14

INPUT DATA & DESIGN SUMMARY

Concrete Strength
- $f'_c = 5$ kip
- $f'_y = 60$ ksi

Section Size
- End = 12 in
- $\phi = 48$ in

Factored Axial Load
- $P_x = 8000$ kip

Factored Magnified Moment
- $M_{x,y} = 10000$ kip-ft

Factored Shear Load
- $V_{x,y} = 30$ kip

Column Vert. Reinforcement
- 15 @ 18 in.
- (Total 40 @ 18 in)

Lateral Reinforcement Option
- 3 straight legs

Analysis
- The column design is adequate.

Purchaser’s LOGO

Project:

Client:

Date:

Page:

Design By:

Review By:

[Diagram of a bridge column with dimensions and calculations, including concrete strength, section size, and reinforcement details.]