

NOTES:

Maximum span lengths are approximate and based on the following assumptions:

- $f'_c = 8000$  psi (Precast)
- $f'_{ci} = 6000$  psi (Precast)
- $f'_c = 4000$  psi (8" cast-in-place composite deck)
- Final allowable tension at bottom of beam is equal to  $0.0948 f'_c$  ksi.
- HL-93 Live Load
- Time-Dependent Losses of Article 5.9.5.3 of the AASHTO-LRFD were used.
- The S3-TL4 railing was assumed on the bridge with safety curbs.
- 3" thick HMA wearing surface.
- Four beam cross section with two design lanes was assumed for design of 96"-114" wide beams.
- Three beam cross section with two design lanes was assumed for design of 120"-144" wide beams.
- Interior beam with no skew.
- No utility loads.
- Load Distribution was calculated based on Section 3.5.4 of Part I of the Bridge Manual.
- 0.6" diameter low relaxation strands.



LRFD BRIDGE  
MANUAL, PART II

NEXT F BEAM SERIES  
DESIGN ASSUMPTIONS  
PRECAST CONCRETE NEXT F BEAMS

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