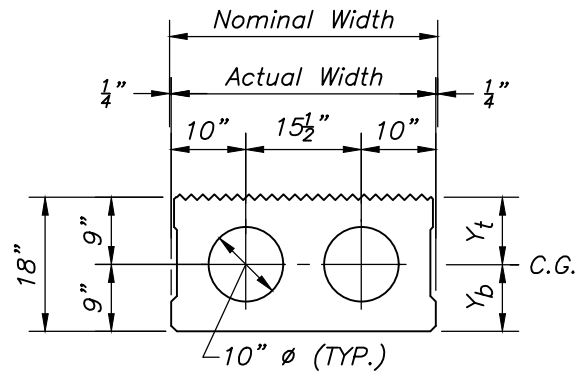
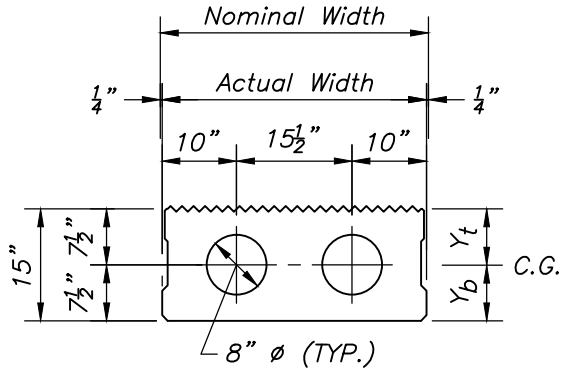


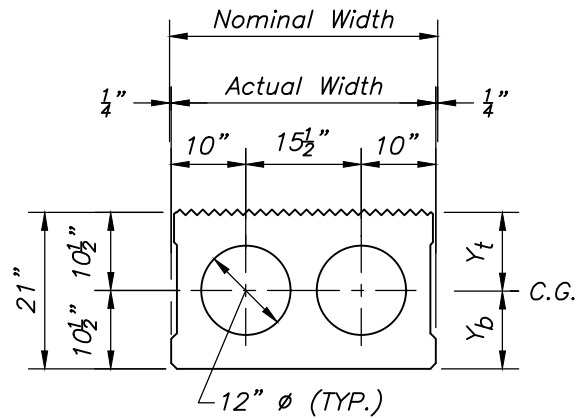
**S36-12**



**S36-18**



**S36-15**



**S36-21**

## BEAM PROPERTIES

BEAM TYPE	WIDTH (in)		DEPTH (in)	AREA (in <sup>2</sup> )	I (in <sup>4</sup> )	Y <sub>b</sub> (in)	Y <sub>t</sub> (in)	S <sub>b</sub> (in <sup>3</sup> )	S <sub>t</sub> (in <sup>3</sup> )	WEIGHT (lbs/ft)	MAX. SPAN (ft)
	Nom.	Act.									
S36-12	36.0	35.5	12	417	5033	5.98	6.02	842	836	434	39
S36-15	36.0	35.5	15	419	9419	7.47	7.53	1261	1251	436	47
S36-18	36.0	35.5	18	464	15963	8.96	9.04	1782	1766	483	54
S36-21	36.0	35.5	21	497	24827	10.45	10.55	2376	2353	518	61

### NOTES:

- Above drawing is not to scale.
- See Dwg. No. 4.1.8 for shear key details.
- Maximum Span lengths are approximate and are based on the following assumptions:
  - $f'_c = 6500$  psi (Precast)
  - $f'_{ci} = 4500$  psi (Precast)
  - $f'_c = 4000$  psi (5" thick Cast-in-Place Composite Deck)
  - Final Allowable Tension at bottom of beam is equal to  $0.0948\sqrt{f'_c}$  ksi.
  - HL-93 Live Load
  - Time-Dependent Losses of Article 5.9.5.3 of the AASHTO-LRFD were used.
  - The CP-PL2 Barrier was assumed on the bridge.
  - 3.5" thick HMA wearing surface.
  - 0.6" diameter low relaxation strands.
  - The factor "k" in the Live Load distribution factor equation was taken as 1.5
- Weight of beams does not include the weight of the solid sections located at the transverse ties. Include the weight of the solid sections for design.



LRFD BRIDGE  
MANUAL, PART II

## STANDARD 36" WIDE BEAMS

PRECAST CONCRETE DECK BEAMS

DATE OF ISSUE  
JUNE 2013

DRAWING NUMBER

**4.1.3**