

Concrete for prestressed girders shall be Class A-1 with $f'_c = 8000$ psi and $f'_ci = 6500$ psi.

(+) indicates prestressing strand.

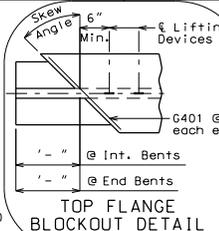
Use strands with an initial prestress force of kips.

Prestressing tendons shall be uncoated, seven-wire, low-relaxation strands, 0.6 inch diameter in accordance with AASHTO M 203, Grade 270. Pretensioned members shall be in accordance with Sec 1029.

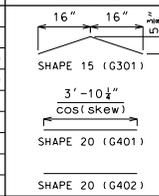
Girders shall be lifted by devices designed by the fabricator.

** At the contractor's option the location for bent-up strands may be varied from that shown. The total number of bent-up strands shall not be changed. One strand tie bar is required for each layer of bent-up strands except at end bents which require one bar on the bottom layer of strands only. No additional payment will be made if additional strand tie bars are required.

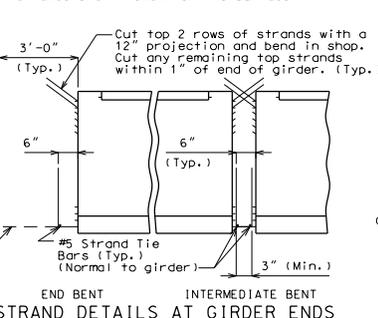
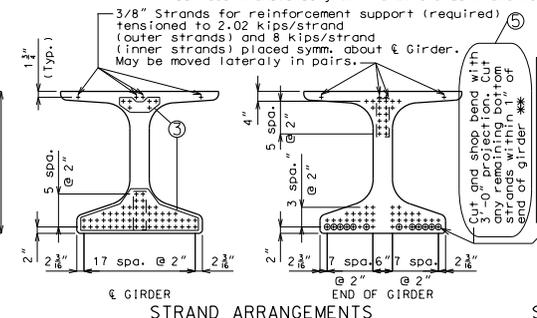
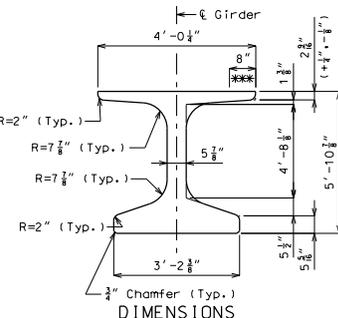
*** Girder top flange shall be steel troweled to a smooth finish for 8" at the edges, as shown. Apply two layers of 30-lb roofing felt as a bond breaker to this region only excluding where joint filler is applied. The center portion shall be rough finished by scarifying the surface transversely with a wire brush, and no laitance shall remain on the surface.



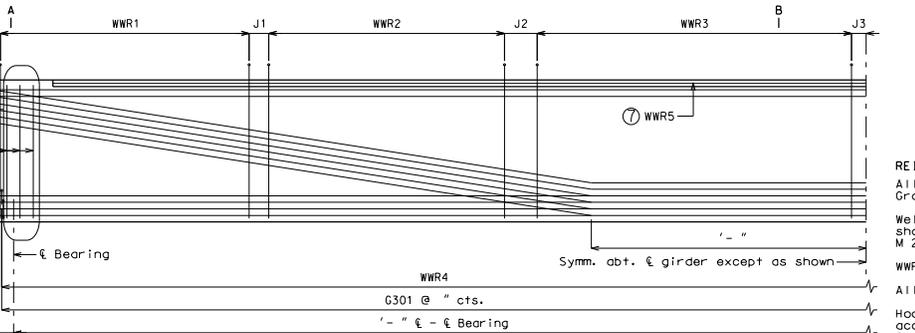
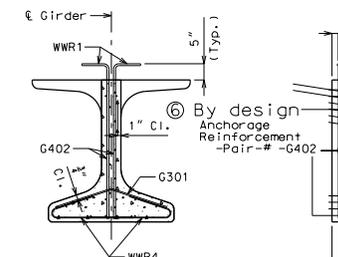
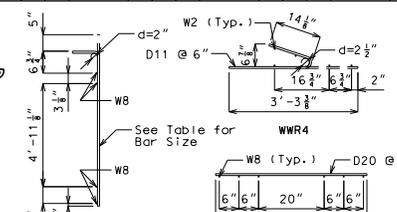
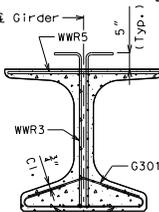
BILL OF REINFORCING STEEL - EACH GIRDER			
NO.	SIZE & MAX. SKEW	ACTUAL LENGTH	SHAPE
XXX	3 G301	2'-11 3/4"	15
XXX	4 G401	XX'-XX"	20
XXX	X G402	5'-8"	20



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."
DATE PREPARED: 12/4/2012
ROUTE: MO
DISTRICT: BR
SHEET NO.:

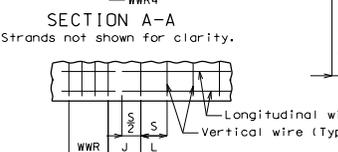


WELDED WIRE REINFORCEMENT (WWR4 & WWR5 as shown in Welded Wire Bending Diagrams)												
SPAN NO.	WWR1			WWR2			WWR3			WWR5		
	BAR NO.	SIZE	SPACING									
X	X	X"	X'-X"									
X	X	X"	X'-X"									



SECTION B-B
Strands not shown for clarity.

WELDED WIRE BENDING DIAGRAMS

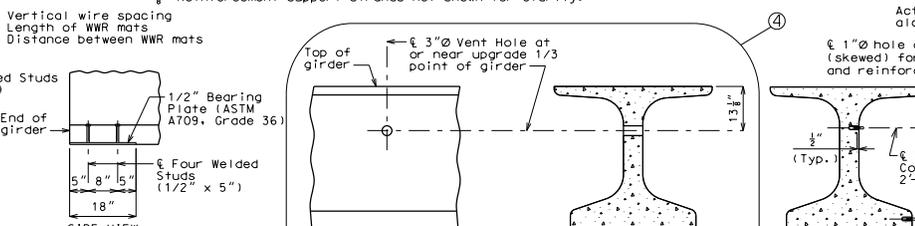
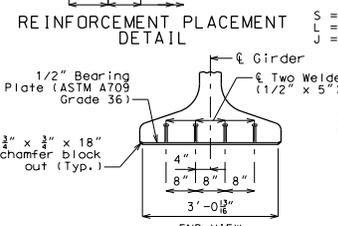


By design
Anchorage Reinforcement - Pair # G402

WWR4
G301 @ " cts.

Symm. abt. & girder except as shown.

REINFORCING STEEL NOTES:
All bar reinforcement shall be Grade 60.
Welded Wire Reinforcement (WWR) shall be in accordance with AASHTO M 221.
WWR shall not be epoxy coated.
All dimensions are out to out.
Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.
Minimum clearance to reinforcing shall be 1", unless otherwise shown.
Actual bar lengths are measured along centerline of bar.



Cost of 3/4" coil tie rods placed in diaphragms will be considered completely covered by the contract unit price for Prestressed Concrete NU-Girder.
Coil ties shall be held in place in the forms by slotted wire-setting studs projecting through forms. Studs are to be left in place or replaced with temporary plugs until girders are erected, then replaced by coil tie rods.
For location of coil inserts at slab drains, see Sheet No. & .
For location of coil ties and #6 bars, see Sheets No. & .
The 1 1/2" holes shall be cast in the web for steel intermediate diaphragms.
Drilling is not allowed.
For details of diaphragms, see Sheet No. .
For Girder Camber Diagram, see Sheet No. .
Alternate bar reinforcing steel details are provided and may be used. Same type of reinforcing steel shall be used for all girders in all spans.
* Length of coil tie rods at exterior girders at end bents.

Galvanize the 1/2" bearing plate (ASTM A709 Grade 36) in accordance with ASTM A123.
Cost of furnishing, galvanizing, and installing the 1/2" bearing plate (ASTM A709 Grade 36) and welded studs in the prestressed girder will be considered completely covered by the contract unit price for Prestressed Concrete NU-Girder.

REINFORCEMENT PLACEMENT DETAIL
S = Vertical wire spacing
L = Length of WWR mats
J = Distance between WWR mats

BEARING PLATE DETAILS
1/2" Bearing Plate (ASTM A709 Grade 36)
Two Welded Studs (1/2" x 5")
Four Welded Studs (1/2" x 5")

PART ELEVATION OF GIRDER
Place vent holes at or near upgrade 1/3 point of girders and clear reinforcing steel or strands by 1 1/2" minimum and steel intermediate diaphragm bolt connections by 6" minimum.

PART SECTION NEAR VENT HOLE
3" Ø Vent Hole at or near upgrade 1/3 point of girder
1" Ø hole cast horizontally in beam (skewed) for #6 bar 5'-6" long (Clear strands and reinforcing steel by 1 1/2" min.)
3/4" Ø (Min.) Coil Tie Rods 2'-6" long *

DETAILS OF COIL TIES
EXTERIOR GIRDERS AT INT. BENTS
EXTERIOR GIRDERS AT END BENTS
INTERIOR GIRDERS AT ALL BENTS

Detailed Checked

Note: This drawing is not to scale. Follow dimensions. Sheet No. of

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