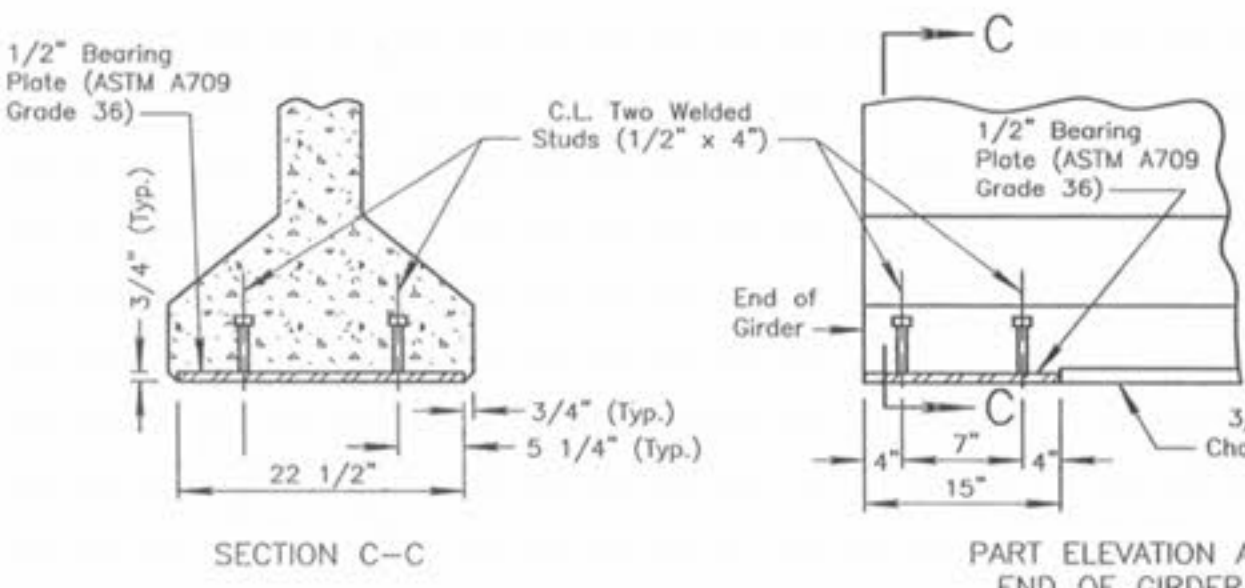


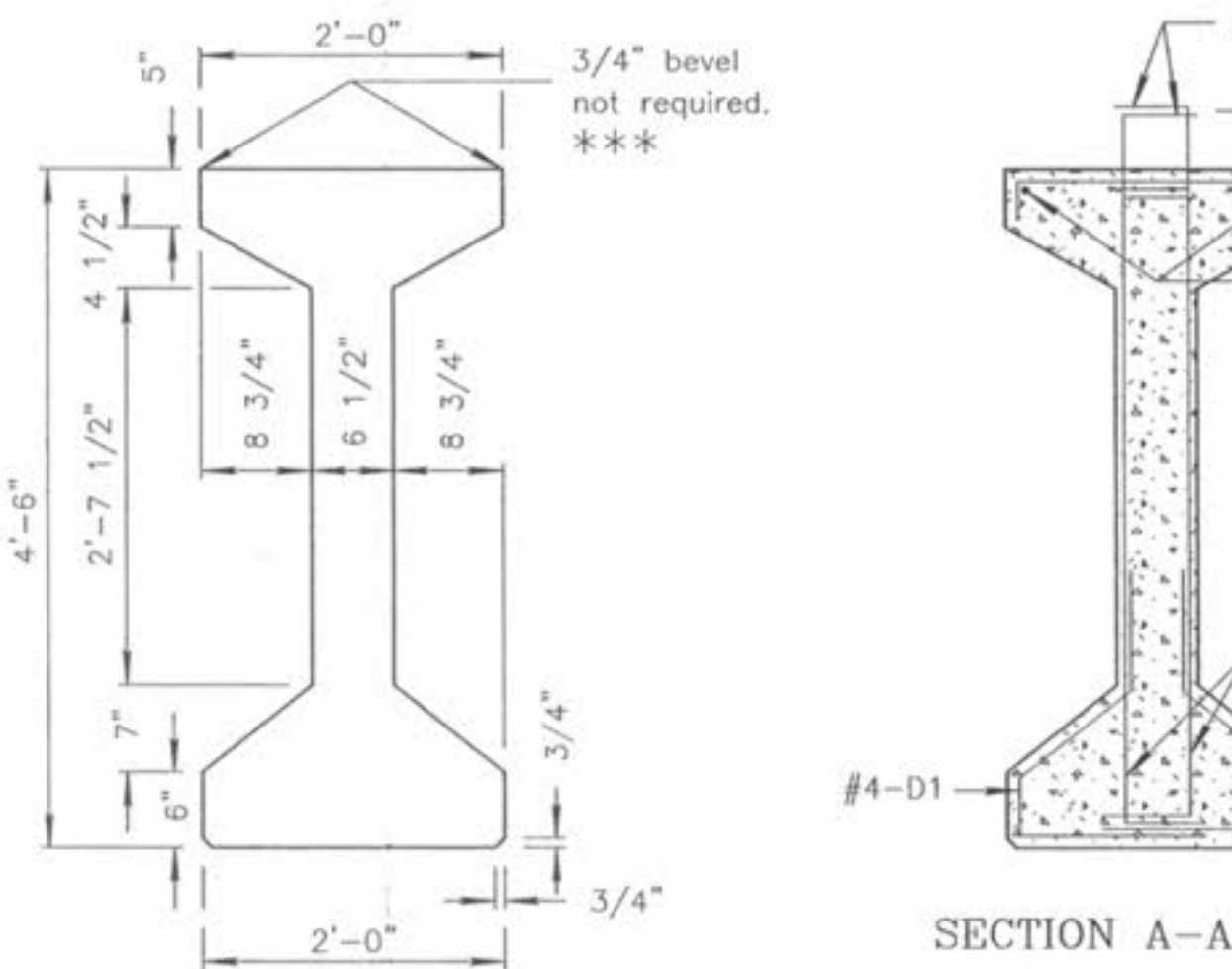
At C.L. Girder
30 STRAND ARRANGEMENT (ALL GIRDERS)
(INITIAL PRESTRESS FORCE OF 930 KIPS)



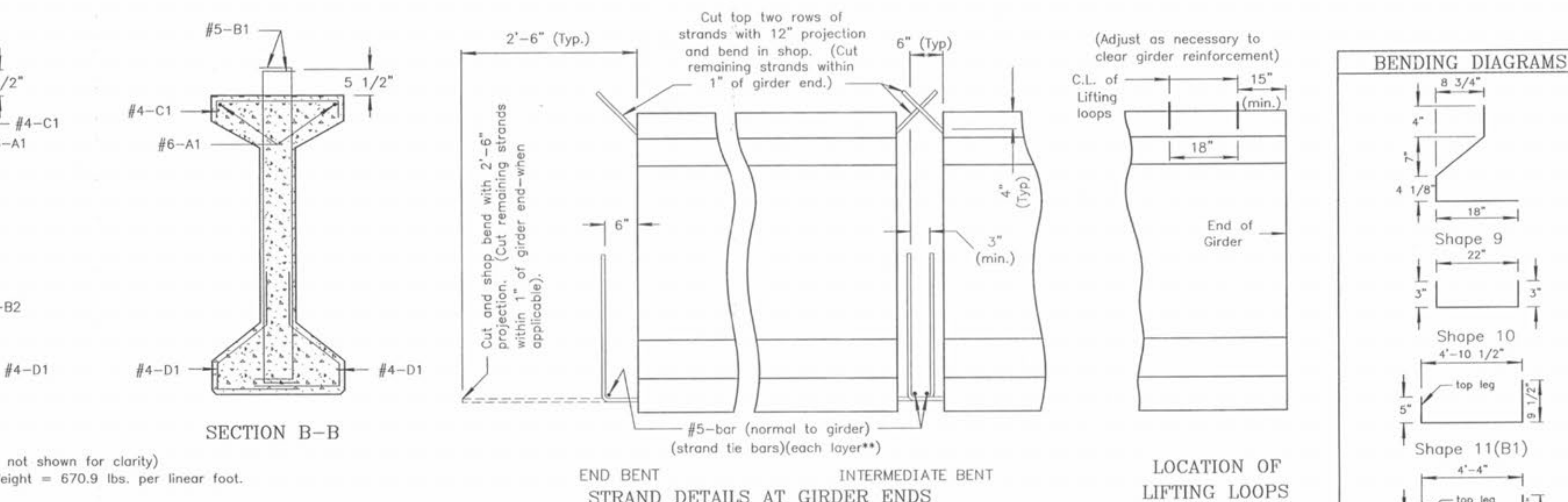
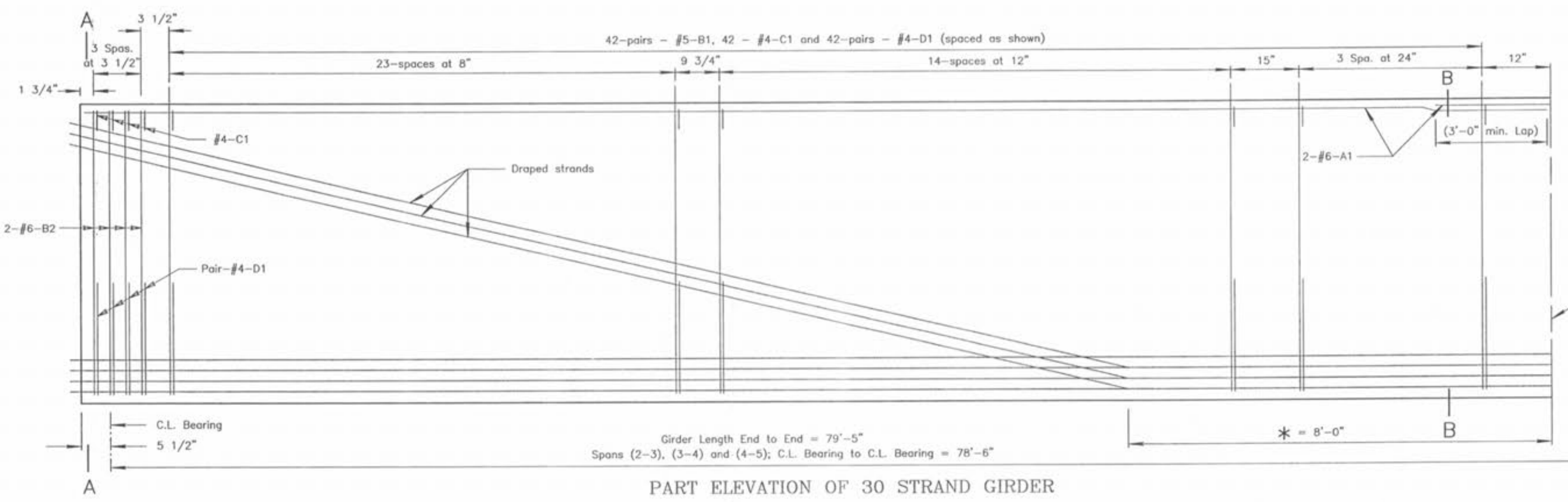
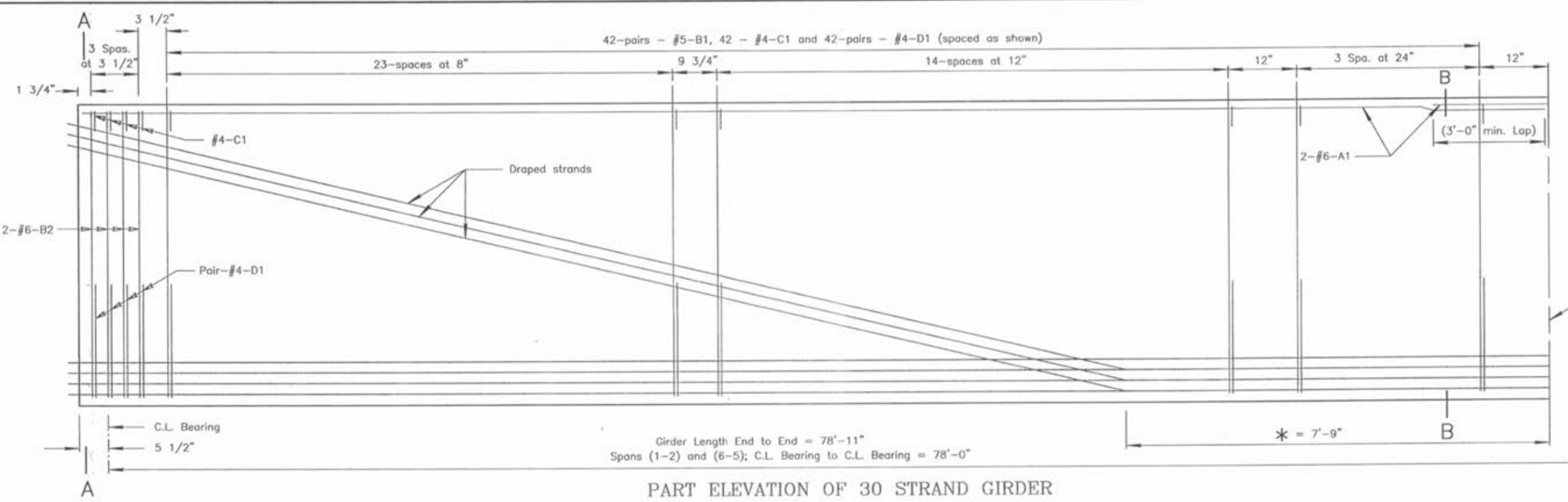
Galvanize the 1/2" bearing plate (ASTM A709 Grade 36) in accordance with ASTM A123.
Cost of furnishing, galvanizing and installing the 1/2" bearing plate (ASTM A709 Grade 36) and welded studs in the prestressed girder shall be included in the price bid for Prestressed Concrete I-Girder per each.

BEARING PLATE DETAILS (ALL GIRDERS)

*** At contractor's option, a 1 1/2" to 1 3/4" smooth finish strip is permitted to facilitate placement of joint filler for prestressed panels.



Note: Concrete for prestressed girders shall be Class A1 with $f'_c = 6,000$ psi and $f'_ci = 4,500$ psi.
(+) indicates prestressed strand.
Cost of 3/4" dia. coil tie rods placed in diaphragms is included in contract unit price for prestressed concrete members.
Coil ties shall be held in place in the forms by slotted wire-setting-studs projecting thru forms. Studs are to be left in place or replaced with temporary plugs until girders are erected and then replaced by coil tie rods.



Note: Prestressing strands (AASHTO M203) (ASTM A416M) shall be Grade 270 uncoated seven-wire low relaxation; 1/2" nominal diameter; 0.153 sq. in. nominal area of strands; minimum ultimate strength of 41.3 kips; maximum prestress force of 31 kips. See Section 705.4.8 of the Missouri Standard Specifications.
Exterior and interior girders are the same except for coil ties.
NOTE: This drawing is not to scale. Follow dimensions.

Note: For definition of span length see "Part Plan of Bridge Showing Girder and Intermediate Diaphragm Layout" on Diaphragm Details sheet.
The 1 1/2" dia. holes for connection of steel intermediate diaphragm (when req'd) shall be cast in web. Drilling is not allowed.

REINFORCING STEEL (Each 30 Strand Girder)			
No.	Size & Mark	Actual Length	Shape
4	#6-A1	40'-11"	20
168	#5-B1	5'-11"	11
16	#6-B2	5'-4"	11
92	#4-C1	2'-2"	10
184	#4-D1	3'-2"	9

NOTE: The two D1 bars may be furnished as one bar at the fabricator's option.

Note: For definition of span length see "Part Plan of Bridge Showing Girder and Intermediate Diaphragm Layout" on Diaphragm Details sheet.
The 1 1/2" dia. holes for connection of steel intermediate diaphragm (when req'd) shall be cast in web. Drilling is not allowed.

REINFORCING STEEL (Each 30 Strand Girder)			
No.	Size & Mark	Actual Length	Shape
4	#6-A1	41'-2"	20
168	#5-B1	5'-11"	11
16	#6-B2	5'-4"	11
92	#4-C1	2'-2"	10
184	#4-D1	3'-2"	9

NOTE: The two D1 bars may be furnished as one bar at the fabricator's option.

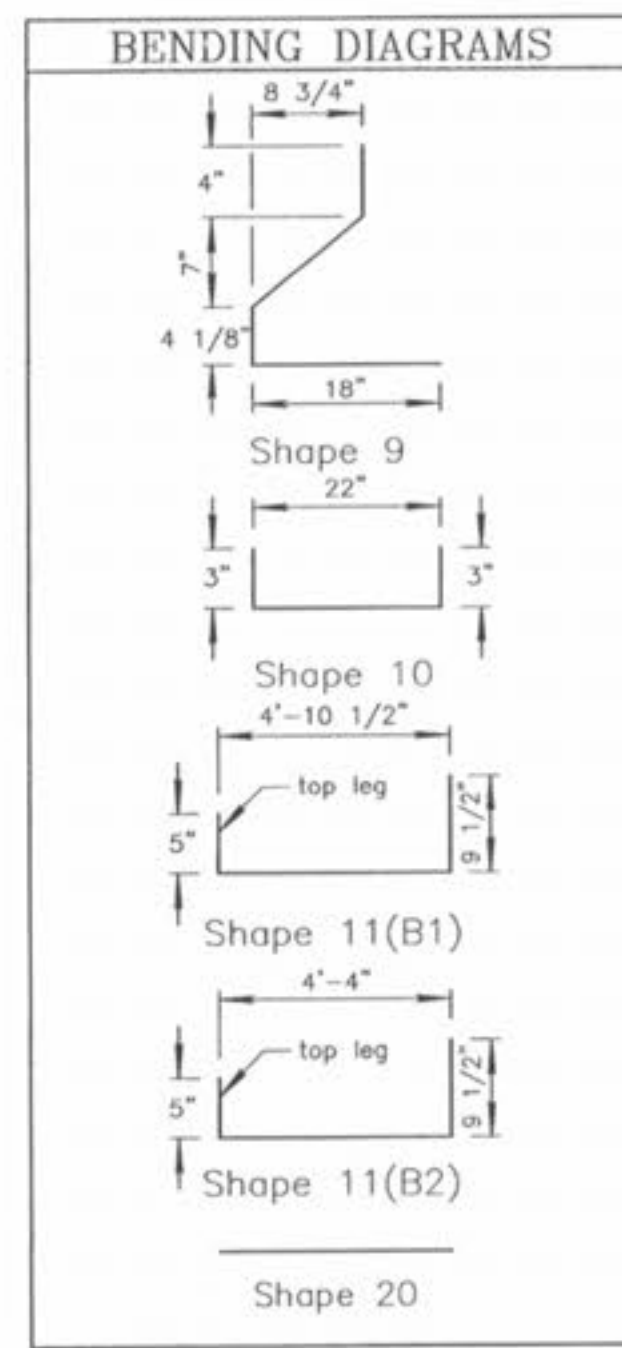
Note: All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual lengths are measured along centerline bar to the nearest inch.

Minimum clearance to reinforcing steel shall be 1".
All reinforcing steel shall be Grade 60.
All B1 bars shall be Epoxy Coated.

Where deflecting strands interfere with placement, some in-place bending may be necessary.



ENGINEER'S AUTHENTICATION: The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature and date hereto attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date, unless reauthenticated.