

PRESTRESSED GIRDER NOTES

FABRICATION TOLERANCES, STRESSING AND DETENSIONING OF THE PRECAST-PRESTRESSED CONCRETE GIRDERS SHALL BE AS SPECIFIED IN THE "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF STRUCTURAL PRECAST CONCRETE PRODUCTS (MNL-116, LATEST EDITION)" PUBLISHED BY PCI.

PRESTRESSING STEEL SHALL BE 1/2" NOMINAL DIAMETER, UNCOATED, SEVEN-WIRE STRANDS, GRADE 270, CONFORMING TO ASTM DESIGNATION A 416M. THE STRANDS SHALL BE LOW-RELAXATION WITH AN INITIAL APPLIED FORCE OF 30,980 POUNDS.

CONCRETE IN PRECAST-PRESTRESSED CONCRETE GIRDERS SHALL BE EITHER CLASS P CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 P.S.I. AT RELEASE OF STRANDS AND 5,000 P.S.I. AT 28 DAYS, OR CLASS P(M) CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 P.S.I. AT RELEASE OF STRANDS AND 6,000 P.S.I. AT 28 DAYS, OR CLASS P(X) CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,500 PSI AT RELEASE OF STRANDS AND 7,500 PSI AT 28 DAYS, OR AS CALLED FOR IN THE PLANS.

THE CONTRACTOR SHALL SUBMIT A METHOD OF HOLDING DRAPED STRANDS IN PLACE AND SHALL SUBMIT METHOD AND SCHEDULE FOR RELEASE OF HOLD-DOWNS AND CABLE STRAND TO THE BRIDGE DESIGN ENGINEER FOR APPROVAL. PRESTRESSED GIRDERS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES DURING STORAGE AND HANDLING AND MUST BE SUPPORTED FROM POINTS WITHIN 3'-0" OF GIRDER ENDS. DISREGARDING THIS REQUIREMENT MAY LEAD TO COLLAPSE OF THE MEMBER.

DIMENSIONS SHOWN ON REINFORCING BAR DETAILS ARE OUT-TO-OUT OF BAR. REINFORCING STEEL FOR PRECAST-PRESTRESSED CONCRETE GIRDERS SHALL BE FABRICATED TO CLOSE DIMENSIONAL TOLERANCES TO PROVIDE ONE (1) INCH MINIMUM CLEARANCE FROM EDGE OF BAR TO FACE OF GIRDER.

CONTRACTOR SHOULD NOTE THAT THE CAMBER SHOWN ELSEWHERE IN THE PLANS IS APPROXIMATE AND ASSUMES DECK PLACEMENT 90 DAYS AFTER STRAND RELEASE. THE CONTRACTOR SHOULD ATTEMPT TO HAVE THE GIRDERS CAST NO MORE THAN 90 DAYS BEFORE DECK PLACEMENT. ANY ADJUSTMENTS TO THE PROJECT THAT ARE REQUIRED DUE TO AN INCREASE IN CAMBER FROM THE VALUES SHOWN IS THE CONTRACTOR'S RESPONSIBILITY AND COST.

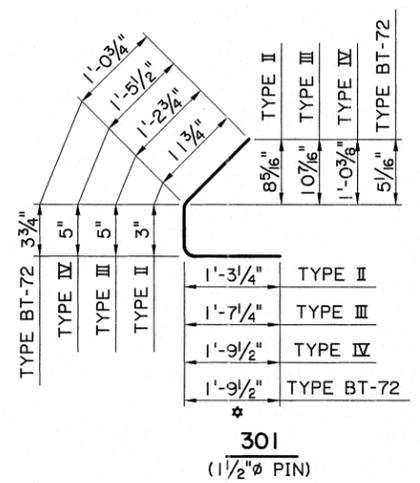
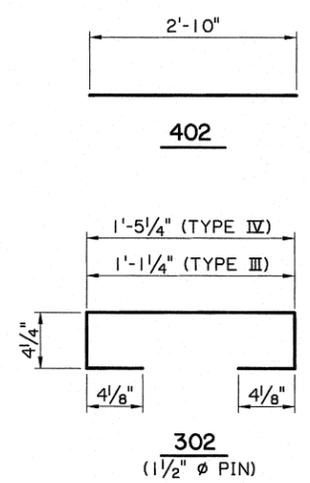
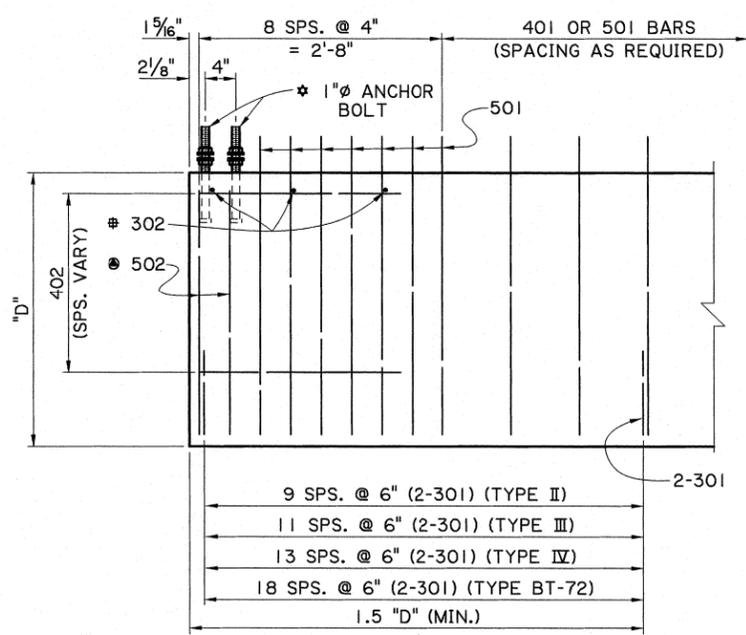
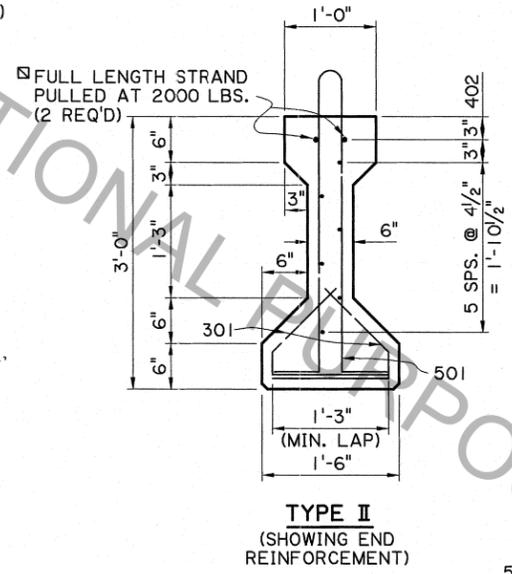
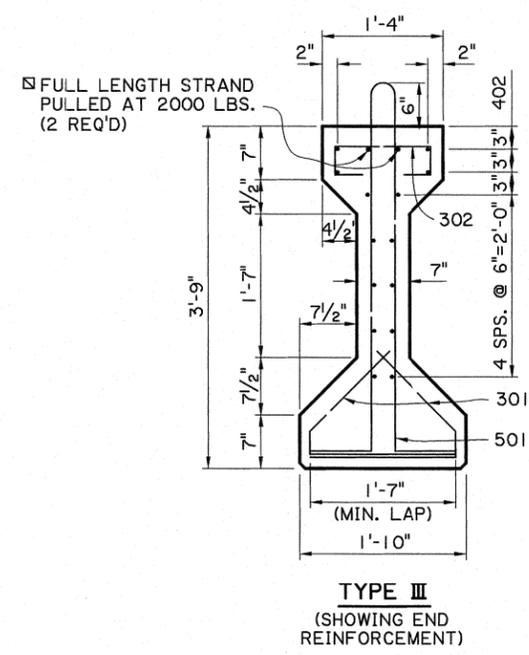
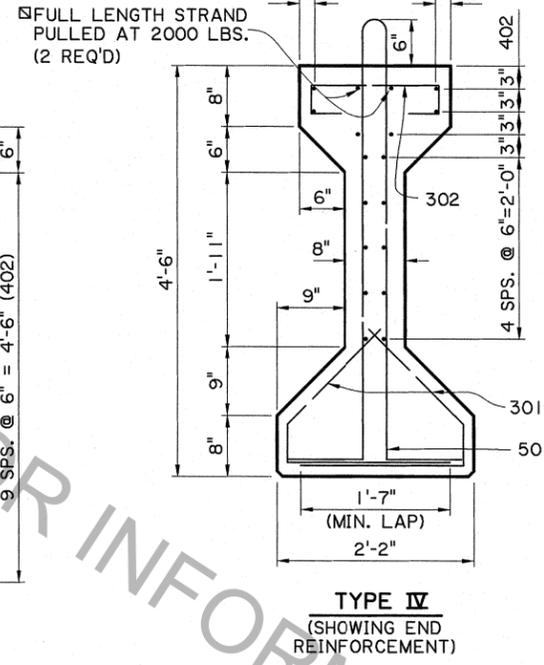
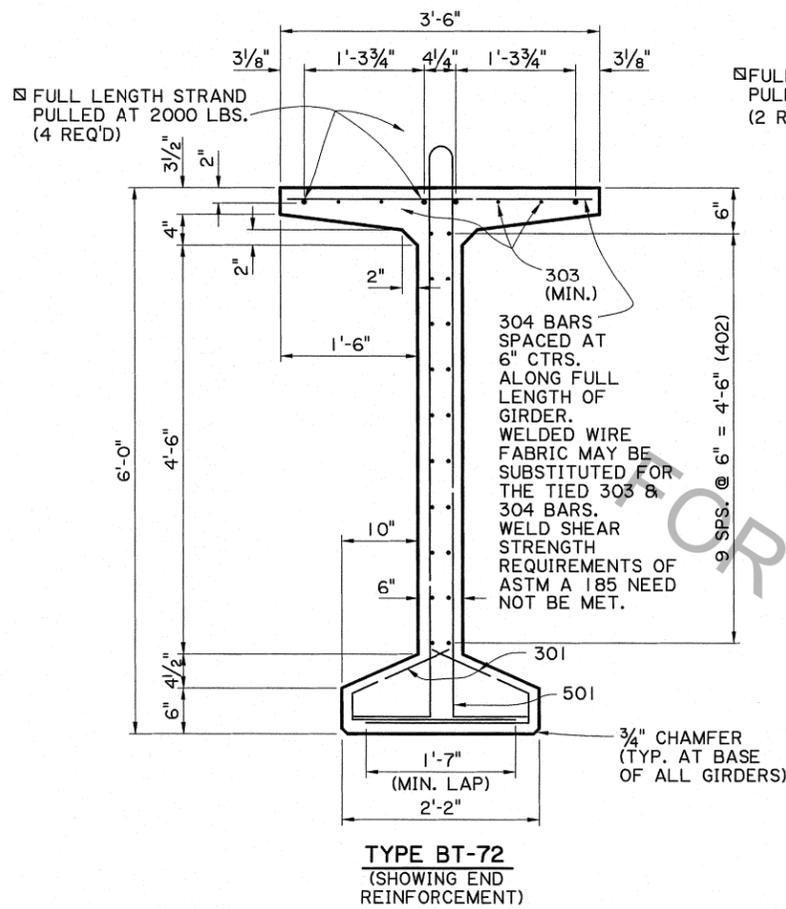
BIDS WILL BE TAKEN PER LINEAR FOOT OF PRECAST-PRESTRESSED CONCRETE GIRDER IN PLACE. THE BID PRICE PER LINEAR FOOT OF GIRDER IN PLACE SHALL INCLUDE THE COST OF ALL MATERIALS AND LABOR REQUIRED TO MANUFACTURE AND ERECT THE GIRDER AS SHOWN ON THE DESIGN DRAWINGS. THE FOLLOWING MATERIALS ARE TO BE PAID FOR IN THE PRICE BID PER LINEAR FOOT OF GIRDER:

CLASS P, P(M), AND P(X) CONCRETE, REINFORCING STEEL AND PRESTRESSING STRANDS, BOLTS, NUTS AND WASHERS FOR END DAM ANCHORAGE, BEARING PADS, THREADED INSERTS, COIL INSERTS, WASHERS, CAP SCREWS AND L 5x5x1/2 AT BEARING ASSEMBLY.

PRESTRESSING STRANDS STRESSED TO A MAXIMUM OF 2,000 POUNDS MAY BE SUBSTITUTED FOR BARS 303.

FULL LENGTH STRANDS ARE GENERALLY PULLED TO 2,000 POUNDS BUT MAY BE PULLED UP TO 5,400 POUNDS TO REDUCE UNDESIRABLE SAG.

DETAIL SCALE: 1" = 1'-0"



- USE 501 IN LIEU OF 502 @ CONTINUITY ENDS OF GIRDERS.
- 3-302 REQUIRED AT EACH END OF GIRDER FOR TYPE III & IV
- ★ USE 1 (ONE) ANCHOR BOLT FOR END DAM TYPE JOINT USE 2 (TWO) ANCHOR BOLTS FOR STRIP SEAL TYPE JOINT OMIT ANCHOR BOLTS AT CONTINUITY ENDS

* MINIMUM LAP (SEE GIRDER SECTIONS) WILL REQUIRE ADJUSTMENT TO STANDARD BAR DIMENSIONS IN HIGH SKEW ENDS.