

(1) Bars Z are required for beams topped with a cast-in-place concrete slab only.

2) Post-tensioning tendons are required for beams not topped with a Min 5" cast-in-place concrete slab. See span details for number and spacing of transverse tendons. Cast interior diaphragms in exterior beams and beams that serve temporarily as exterior beams in staged constructed bridges. See "Blockout, Interior Diaphragm, and Drain Details". Form 3" Dia holes in interior beams. See standard BBPT for details.

(3) Place drain holes (1" Dia PVC Sch 40 Pipe) as shown in all beam void corners including each side of interior diaphragms. See "Blockout, Interior Diaphragm, and Drain Details".

(4) Blockouts required at ends of all beams. Extend beam reinforcement into blockouts.

(5)90° at conventional Interior Bents. Ends of beams shall be vertical at Abutment backwall and Inverted Tee Bent Stems.

(6) Showing void modification required in exterior beams not topped with a Min 5" cast-in-place concrete slab. See standard BBRAO for void modification dimensions.

(7)Based on 150 pcf weight density of concrete. Weight of end blocks and interior diaphragms is not included.

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications. Use Class H concrete. Use Class H (HPC) if required elsewhere in plans. All reinforcing steel must be Grade 60.

Two-stage monolithic casting is required. The concrete in the first stage cast (bottom beam flange) must remain plastic until the second stage cast (webs and top beam flange) is placed. Vibrate as required to ensure consolidation between the two

casts.

1 1/4" clear cover to reinforcement is required unless noted otherwise.
See standard BBRAS or BBRAO for railing

anchorage at bridge edges to be cast in beams. An equal area of welded wire reinforcement (WWR) meeting the requirements of ASTM A 497 may be substituted for Bars A, B, C, and D. These details are applicable for skews up to 30

degrees only. Chamfer bottom beam corners $\frac{3}{4}$ " or round to

a ¾" radius.



HL93 LOADING

SHEET 1 OF 3

Texas Department of Transportation Bridge Division

PRESTRESSED CONCRETE

BOX BEAM DETAILS (TYPE B28)

BB-B28 (MOD)

DN: TXDOT CK: TXDOT DW: TXDOT CK: TXDOT ILE: bbstde02.dqn C TxDOT December 2006 DISTRICT FEDERAL AID PROJECT S4-04