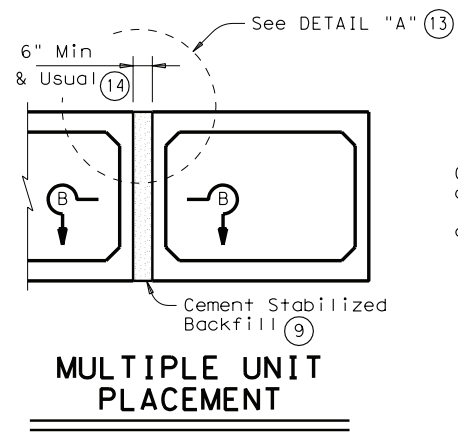
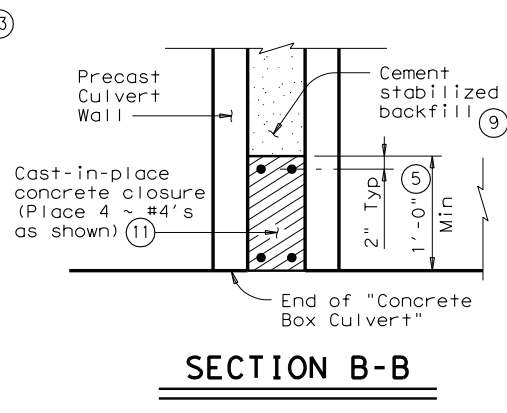


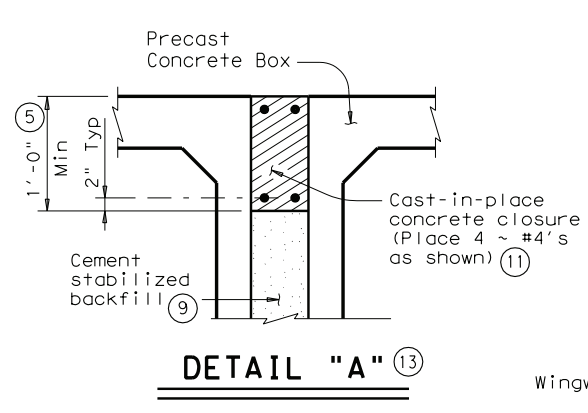
DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



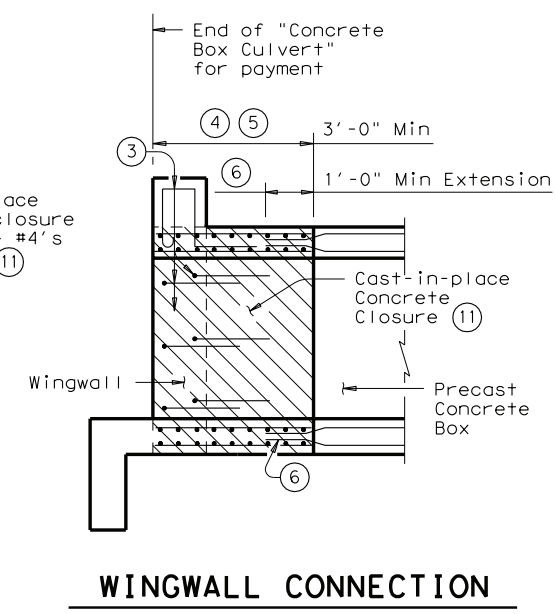
MULTIPLE UNIT PLACEMENT



SECTION B-B

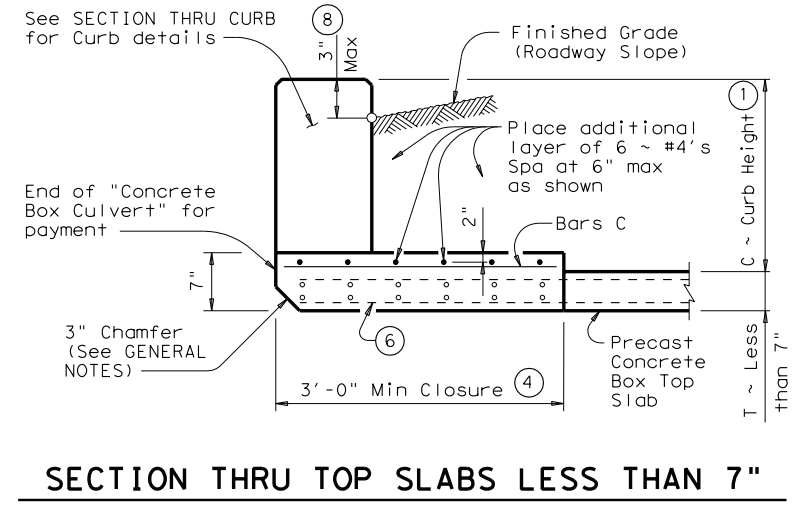


DETAIL "A" (13)

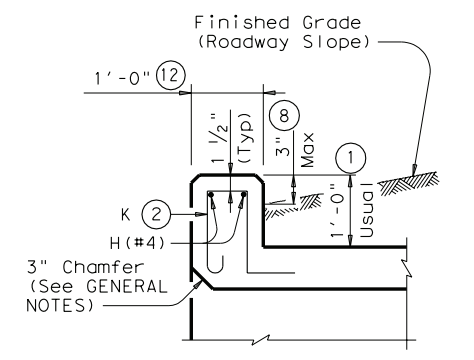


WINGWALL CONNECTION

(Also applies to Safety End Treatment)

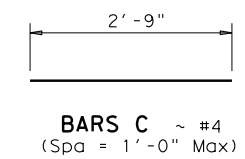


SECTION THRU TOP SLABS LESS THAN 7"

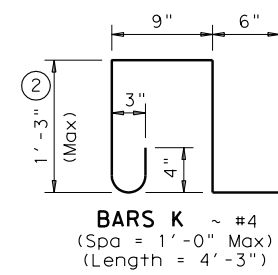


SECTION THRU CURB

| (10) QUANTITIES PER FOOT OF CURB | |
|----------------------------------|----------|
| Reinforcing Steel | 4.18 Lb |
| Concrete | 0.037 CY |



BARS C ~ #4
(Spa = 1'-0" Max)



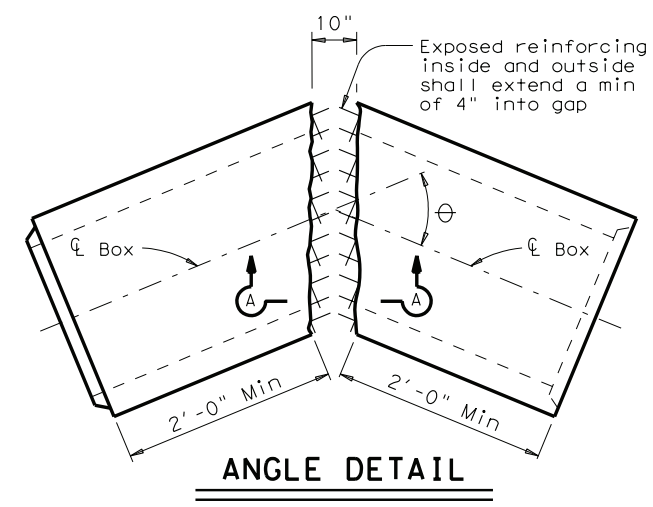
BARS K ~ #4
(Spa = 1'-0" Max)
(Length = 4'-3")

- 1) 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with bridge rail, other than T6, refer to RAC standard.
- 2) For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.
- 3) Curb, Wingwall or Safety End Treatment reinforcing shall extend into concrete closure. Any reinforcing that does not fit into the closure shall be bent or trimmed as necessary.
- 4) Cast-in-place concrete closure shall be 3'-0" min. Boxes shall be cast short or broken back in the field. All reinforcing in the closure shall be the same size and spacing as in the precast box section. Except where shown otherwise, the cast-in-place closure shall be flush with the inside and outside faces of the precast box section.
- 5) For multiple unit placements the length of the closure for the interior walls may be adjusted as necessary. The length of the top slab, bottom slab, and exterior wall closure shall not be less than 3'-0". See Section B-B detail when interior walls are cast full length.
- 6) Precast box reinforcing shall extend a minimum of 1'-0" into concrete closure (Typ).
- 7) Bands of reinforcing matching the inside and outside face reinforcing shall be placed in the gaps of the top and bottom slabs. A band matching the outside face reinforcing of the wall shall be placed in the gaps of the walls (placed in the outside face only). The bands shall be tack welded to the exposed reinforcing at each point of contact.
- 8) For vehicle safety, the following requirements must be met:
 - For structures without bridge rail, curbs shall project no more than 3" above finished grade.
 - For structures with bridge rail, curbs shall be flush with finished grade.
 Curb heights shall be reduced, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- 9) Cement Stabilized Backfill between boxes is considered part of the Box Culvert for payment.
- 10) All curb concrete and reinforcing is considered part of the Box Culvert for payment.
- 11) Any additional concrete and reinforcing required for the closures shall be considered as subsidiary to the Concrete Box Culvert.
- 12) 1'-0" typical. 2'-0" when RAC standard is referred to elsewhere in the plans.
- 13) For multiple unit placement with overlay, with 1 to 2 course surface treatment, or with the top slab as the final riding surface, provide wall closure as shown in DETAIL "A".
- 14) This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked in accordance with Item 476, "Jacking, Boring, or Tunneling Pipe or Box". No payment will be made for any additional material in the gap between adjacent boxes.

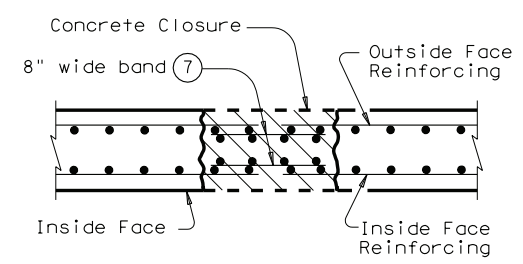
GENERAL NOTES:

Designed according to current AASHTO Standard and Interim Specifications.
 All closure concrete shall be Class "C" with a minimum compressive strength of 3600 psi and shall be placed according to the Item, "Concrete Structures".
 Any additional concrete required for the closures shall be considered as subsidiary to the Concrete Box Culvert.
 Refer to the Single Box Culverts Precast standard for details not shown.
 The bottom edge of the top slab closure shall be chamfered 3 inches at the entrance.

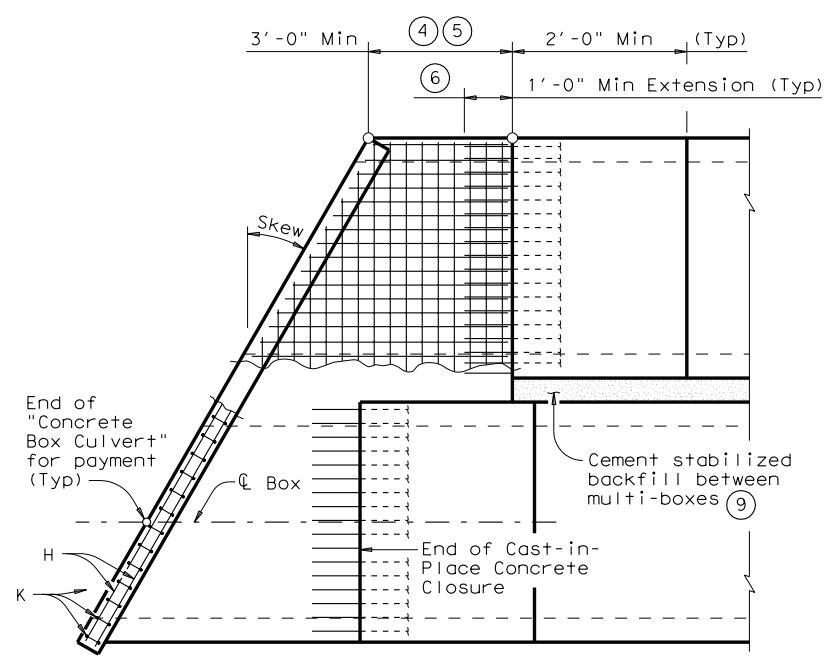
HS20 LOADING



ANGLE DETAIL



SECTION A-A



PLAN OF SKEWED ENDS

(Showing multi-box placement)

| | |
|------------------|------|
| LEVELS DISPLAYED | ACC: |
| 1 | |

Texas Department of Transportation
 Bridge Division
**BOX CULVERTS
 PRECAST
 MISCELLANEOUS DETAILS**
SCP-MD

| | | | | |
|---------------------|----------|---------------------|---------------|-------------|
| FILE: scpmdste.dgn | DN: GAF | CK: LMW | DW: BWH/TxDOT | CK: GAF |
| © TxDOT May 2005 | DISTRICT | FEDERAL AID PROJECT | | SHEET |
| REVISIONS | | | | |
| 08-07: Bars H size. | COUNTY | CONTROL | SECT | JOB HIGHWAY |