

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". The user assumes all liability for any and all consequences resulting from its use. No warranty is made by TxDOT for any particular design or construction. TxDOT assumes no responsibility for any errors or omissions or for damages resulting from its use.

LEVELS DISPLAYED

BOX DATA

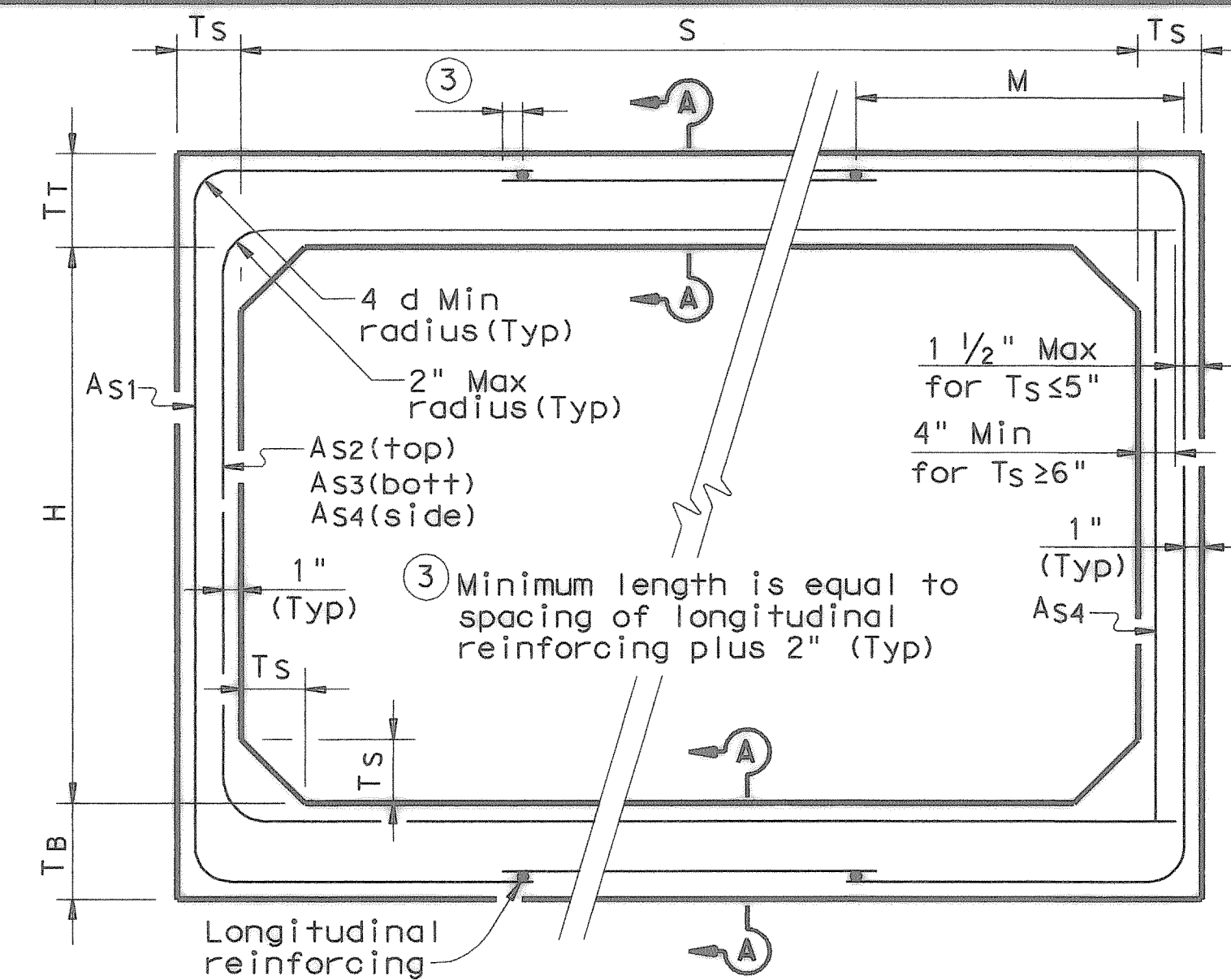
SECTION DIMENSIONS					Fill Height (ft)	M (in)	REINFORCING (in ² /ft) ②								Lift Weight (Tons) ①	Governing ASTM Standard
S (ft)	H (ft)	T _T (in)	T _B (in)	T _S (in)			A _{S1}	A _{S2}	A _{S3}	A _{S4}	A _{S7}	A _{S8}	A _{S5}	A _{S6}		
7	4	8	8	8	< 2	-	0.32	0.45	0.24	0.19	0.19	0.19	0.19	0.19	10.4	C 850
7	4	8	8	8	2	32	0.30	0.34	0.25	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	3	27	0.21	0.23	0.21	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	4	27	0.19	0.20	0.20	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	5	26	0.19	0.20	0.21	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	6	26	0.19	0.20	0.21	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	8	26	0.20	0.22	0.23	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	10	25	0.23	0.25	0.26	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	12	25	0.25	0.29	0.29	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	14	25	0.28	0.32	0.33	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	16	25	0.31	0.36	0.36	0.19	-	-	-	-	10.4	C 789
7	4	8	8	8	18	25	0.34	0.39	0.40	0.19	-	-	-	-	10.4	C 789
7	5	8	8	8	< 2	-	0.29	0.48	0.27	0.19	0.20	0.19	0.19	0.19	11.2	C 850
7	5	8	8	8	2	32	0.27	0.37	0.28	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	3	28	0.19	0.26	0.23	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	6	27	0.19	0.22	0.23	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	8	26	0.19	0.24	0.25	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	10	25	0.20	0.27	0.29	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	12	25	0.22	0.31	0.32	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	14	25	0.25	0.35	0.36	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	16	25	0.27	0.38	0.40	0.19	-	-	-	-	11.2	C 789
7	5	8	8	8	18	25	0.30	0.42	0.43	0.19	-	-	-	-	11.2	C 789
7	6	8	8	8	< 2	-	0.27	0.51	0.29	0.19	0.20	0.19	0.20	0.19	12.0	C 850
7	6	8	8	8	2	38	0.24	0.39	0.31	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	3	31	0.19	0.27	0.26	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	4	29	0.19	0.24	0.25	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	5	28	0.19	0.23	0.25	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	6	27	0.19	0.24	0.25	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	8	26	0.19	0.26	0.27	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	10	26	0.19	0.29	0.30	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	12	26	0.20	0.33	0.34	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	14	25	0.22	0.36	0.38	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	16	25	0.25	0.40	0.42	0.19	-	-	-	-	12.0	C 789
7	6	8	8	8	18	25	0.27	0.44	0.46	0.19	-	-	-	-	12.0	C 789
7	7	8	8	8	< 2	-	0.25	0.53	0.32	0.19	0.23	0.19	0.21	0.19	12.8	C 850
7	7	8	8	8	2	55	0.22	0.42	0.33	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	3	38	0.19	0.29	0.27	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	6	33	0.19	0.25	0.27	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	8	28	0.19	0.27	0.29	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	10	27	0.19	0.30	0.32	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	12	27	0.19	0.34	0.36	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	14	27	0.21	0.37	0.39	0.19	-	-	-	-	12.8	C 789
7	7	8	8	8	16	27	0.23	0.41	0.43	0.19	-	-	-	-	12.8	C 789
7	8	8	8	8	< 2	-	0.35	0.43	0.28	0.17	0.19	0.17	0.19	0.19	8.6	C 850
7	8	8	8	8	18	23	0.37	0.27	0.28	0.19	-	-	-	-	9.6	C 789

Note: ASTM C850 design shall be used for all direct traffic culverts.

① For Box Length = 8'-0"

② A_{S1} thru A_{S4}, A_{S7} and A_{S8} are minimum required areas of reinforcement per linear foot of box length. A_{S5} and A_{S6} are minimum required areas of reinforcement per linear foot of box width.

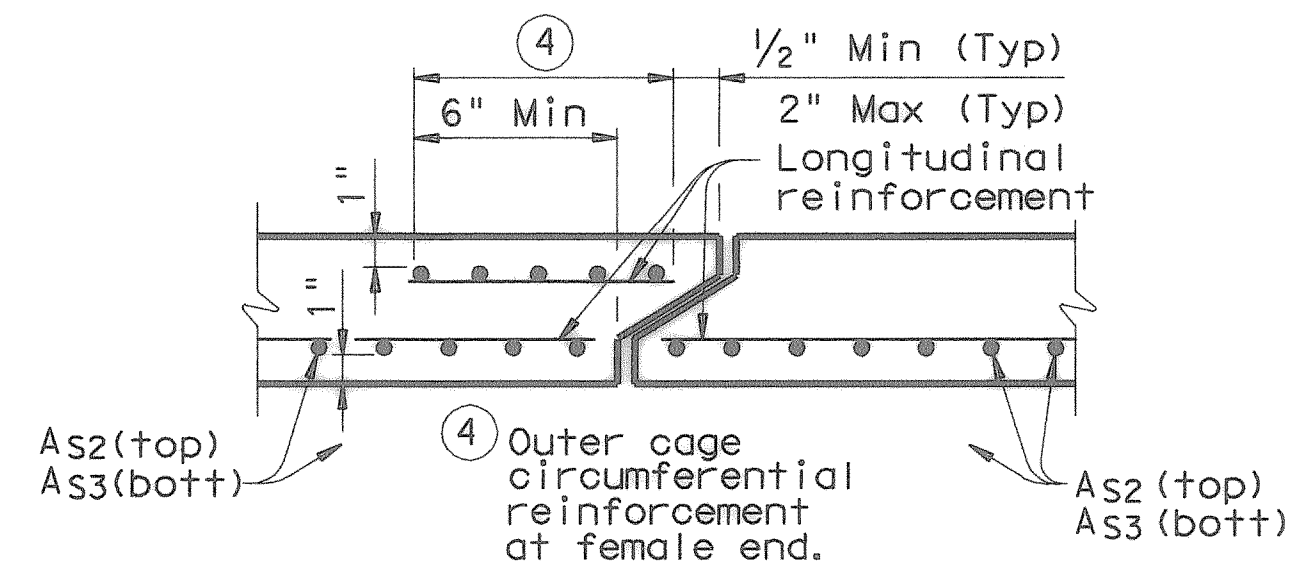
⑤ These designs were created by TxDOT and are not shown in the ASTM Specifications.



C789 CORNER OPTION "A"

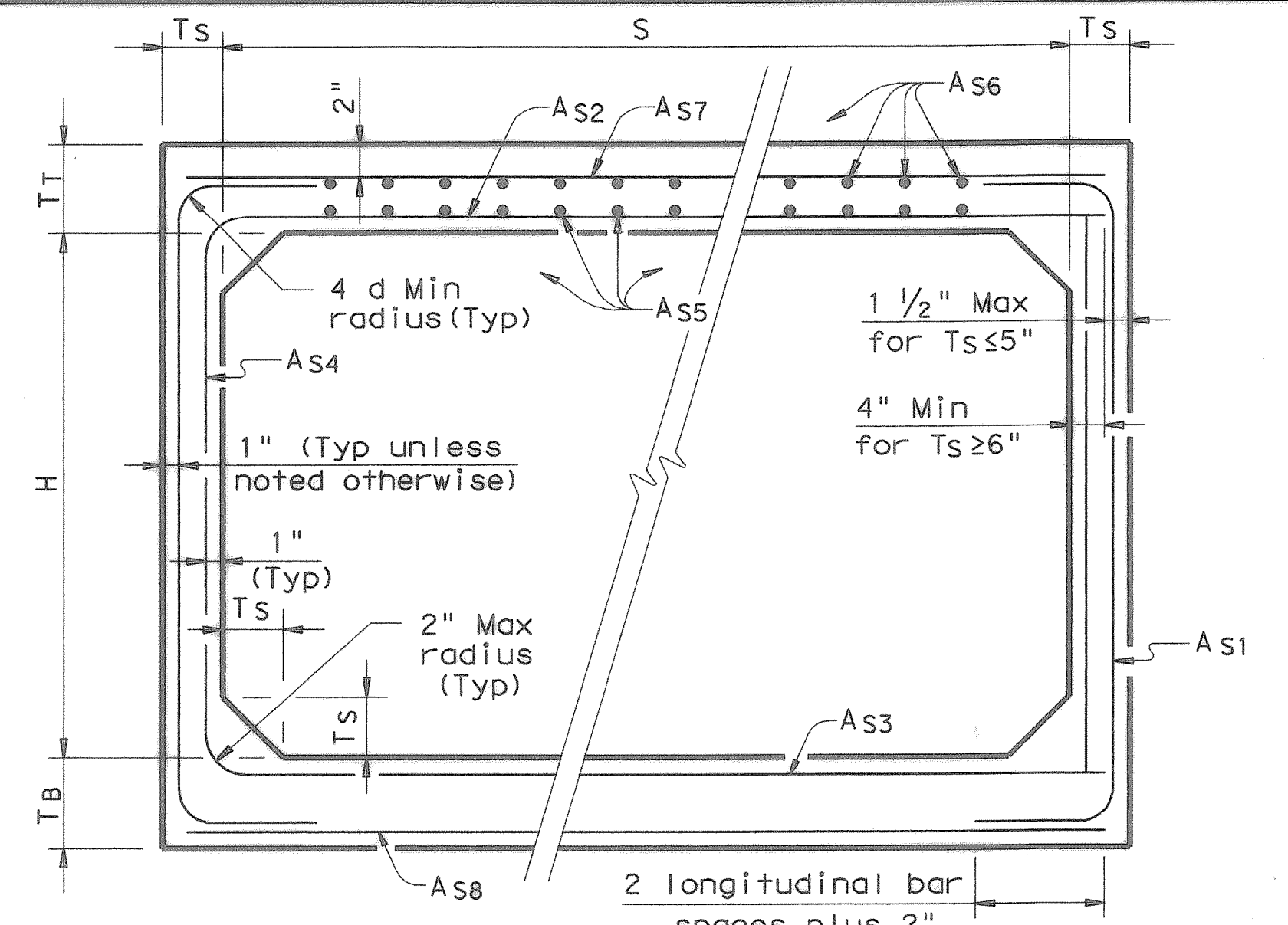
C789 CORNER OPTION "B"

ASTM C789 STANDARD



SECTION A-A

(TOP AND BOTTOM SLAB JOINT REINFORCEMENT)



C850 CORNER OPTION "A"

C850 CORNER OPTION "B"

ASTM C850 STANDARD

GENERAL NOTES:

Designs shown conform to ASTM C789 or ASTM C850. Refer to ASTM C789 or ASTM C850 for information or details not shown.

For ASTM C789 designs, all reinforcing steel shall have a minimum specified yield stress of 65 ksi.

For ASTM C850 designs, all reinforcing steel shall have a minimum specified yield stress of 60 ksi.

All concrete shall be Class "H" Concrete with a minimum 28 day compressive strength of 5,000 psi.

See SCP-MD standard sheet for miscellaneous details and notes not shown.

Designed for HS20 loading and to the maximum fill height shown.

In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Shop plans for alternate designs shall be submitted in accordance with Item "Precast Concrete Structures".

HS20 LOADING

Texas Department of Transportation
Bridge Division

SINGLE BOX CULVERTS PRECAST 7'-0" SPAN

SCP-7

FILE: scp07stc.dgn	DN: GAF	CK: LMW	DW: BWH	CK: LDS
© TxDOT September 2000	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	COUNTY	CONTROL	SECT	JOB
				HIGHWAY

REVISD SH. TO CHANGE "H" FROM 3' TO 2'



Michael S. Allen
2/20/03

RECORD DRAWINGS
AS PROVIDED BY:
I.C.S. COMMERCIAL

Michael S. Allen, P.E.
DATE: 9/25/03