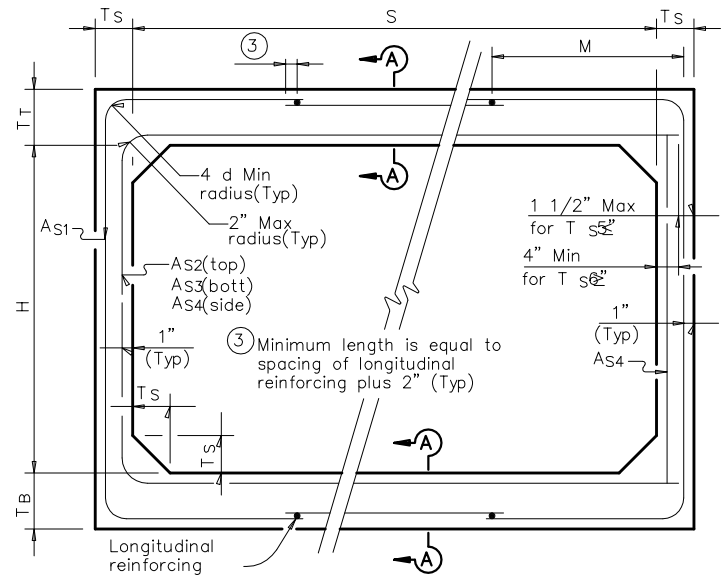
BOX DATA

SECTION DIMENSIONS S (ft)	H (ft)	T_T (in)	T_B (in)	T_S (in)	Fill Height (ft)	M (Min) (in)	REINFORCING (in²/ft) (2) A_{S1}	A_{S2}	A_{S3}	A_{S4}	A_{S5}	A_{S6}	A_{S7}	A_{S8}	(1) Lift Weight (Tons)
7	4	8	8	8	<2	– 0.21	0.34	0.25	0.19	0.19	0.19	0.19	0.19	10.4	
7	4	8	8	8	2<3	43 0.23	0.28	0.28	0.19	–	–	–	–	10.4	
7	4	8	8	8	3–5	43 0.19	0.22	0.19	0.19	–	–	–	–	10.4	
7	4	8	8	8	10	43 0.19	0.23	0.23	0.19	–	–	–	–	10.4	
7	4	8	8	8	15	41 0.24	0.30	0.30	0.19	–	–	–	–	10.4	
7	4	8	8	8	20	41 0.31	0.38	0.39	0.19	–	–	–	–	10.4	
7	4	8	8	8	25	41 0.38	0.47	0.48	0.19	–	–	–	–	10.4	
7	4	8	8	8	30	41 0.46	0.57	0.57	0.19	–	–	–	–	10.4	
7	5	8	8	8	<2	– 0.19	0.36	0.27	0.19	0.19	0.19	0.19	0.19	11.2	
7	5	8	8	8	2<3	47 0.21	0.31	0.31	0.19	–	–	–	–	11.2	
7	5	8	8	8	3–5	43 0.19	0.24	0.21	0.19	–	–	–	–	11.2	
7	5	8	8	8	10	43 0.19	0.25	0.26	0.19	–	–	–	–	11.2	
7	5	8	8	8	15	41 0.21	0.32	0.33	0.19	–	–	–	–	11.2	
7	5	8	8	8	20	41 0.27	0.41	0.42	0.19	–	–	–	–	11.2	
7	5	8	8	8	25	41 0.33	0.51	0.52	0.19	–	–	–	–	11.2	
7	5	8	8	8	30	41 0.40	0.61	0.62	0.19	–	–	–	–	11.2	
7	6	8	8	8	<2	– 0.19	0.38	0.30	0.19	0.19	0.19	0.19	0.19	12.0	
7	6	8	8	8	2<3	59 0.19	0.33	0.34	0.19	–	–	–	–	12.0	
7	6	8	8	8	3–5	47 0.19	0.25	0.23	0.19	–	–	–	–	12.0	
7	6	8	8	8	10	43 0.19	0.26	0.27	0.19	–	–	–	–	12.0	
7	6	8	8	8	15	41 0.19	0.34	0.35	0.19	–	–	–	–	12.0	
7	6	8	8	8	20	41 0.24	0.43	0.45	0.19	–	–	–	–	12.0	
7	6	8	8	8	25	41 0.29	0.53	0.55	0.19	–	–	–	–	12.0	
7	6	8	8	8	30	41 0.35	0.64	0.65	0.19	–	–	–	–	12.0	
7	7	8	8	8	<2	– 0.19	0.40	0.33	0.19	0.19	0.19	0.19	0.19	12.8	
7	7	8	8	8	2<3	59 0.19	0.36	0.37	0.19	–	–	–	–	12.8	
7	7	8	8	8	3–5	59 0.19	0.27	0.25	0.19	–	–	–	–	12.8	
7	7	8	8	8	10	47 0.19	0.27	0.29	0.19	–	–	–	–	12.8	
7	7	8	8	8	15	43 0.19	0.35	0.37	0.19	–	–	–	–	12.8	
7	7	8	8	8	20	43 0.22	0.44	0.46	0.19	–	–	–	–	12.8	
7	7	8	8	8	25	43 0.27	0.54	0.57	0.19	–	–	–	–	12.8	
7	7	8	8	8	30	41 0.32	0.65	0.67	0.19	–	–	–	–	12.8	
7	3	8	8	8	<2	– 0.28	0.36	0.24	0.19	0.21	0.19	0.19	0.19	9.6	(5)
7	3	8	8	8	30	58 0.53	0.49	0.50	0.19	–	–	–	–	9.6	(5)

(1) For Box Length = 8'–0"

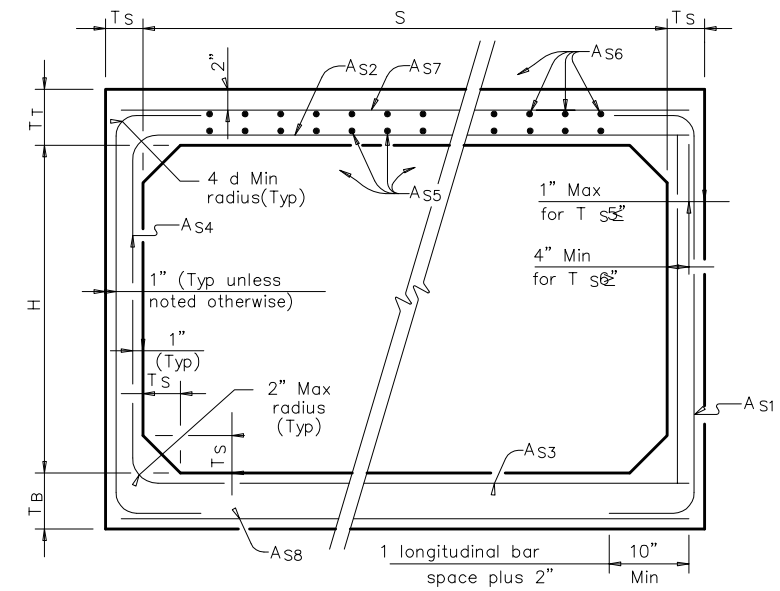
(2) A_{S1} thru A_{S4} and A_{S8} are minimum required areas of reinforcement per linear foot of box length. A_{S5} and A_{S6} are minimum required areas of reinforcement per linear foot of box width.

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



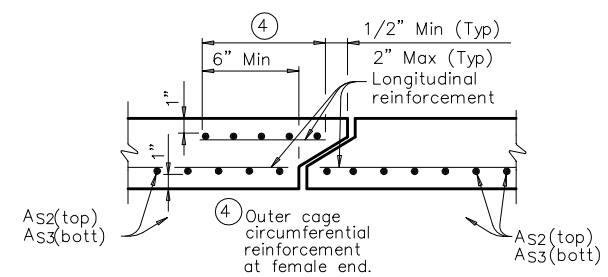
CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT



SECTION A–A

(TOP AND BOTTOM SLAB JOINT REINFORCEMENT)

GENERAL NOTES:

Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.

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

See SCP–MD standard sheet for miscellaneous details and notes not 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 Structural Members (Fabrication)".

HL93 LOADING

Texas Department of Transportation — Bridge Division Standard

SINGLE BOX CULVERTS PRECAST

7'–0" SPAN

SCP–7

FILE: scp07sts.dgn	DN: GAF	CK: LMW	DW: BWH/TxDOT	CK: GAF
©TxDOT February 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST		COUNTY	SHEET NO.

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.

DATE:
FILE: