

DETAIL OF PRECAST CONCRETE BOX CULVERT SECTION

(WITH LESS THAN 2 FEET OF COVER
AASHTO DESIGNATION M273)
DESIGN LOADING: HS-20-44

GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 OF THE STANDARD SPECIFICATIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

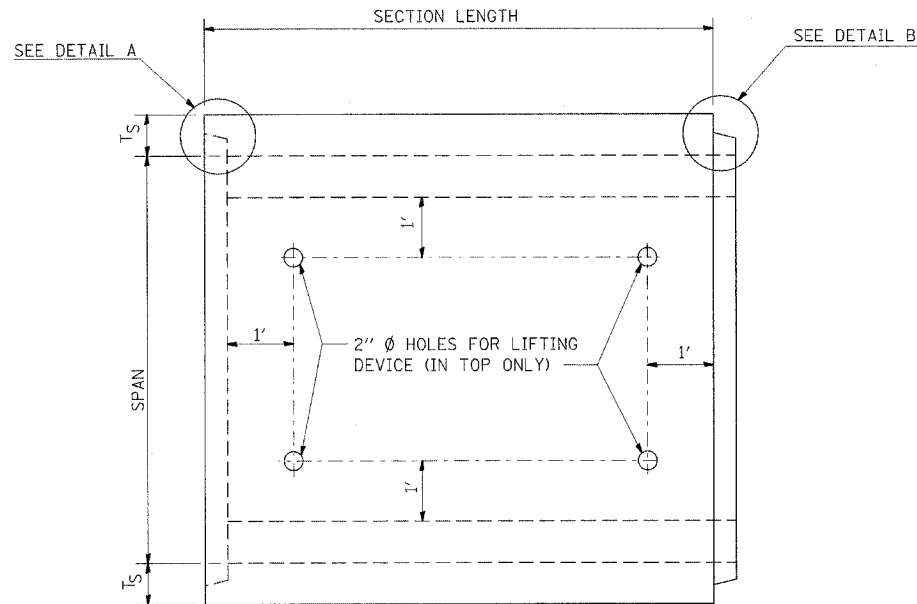
THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 1055.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE BOX SECTIONS ARE IN PLACE.

THE TERMS AS1, AS2, ETC. DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M273.

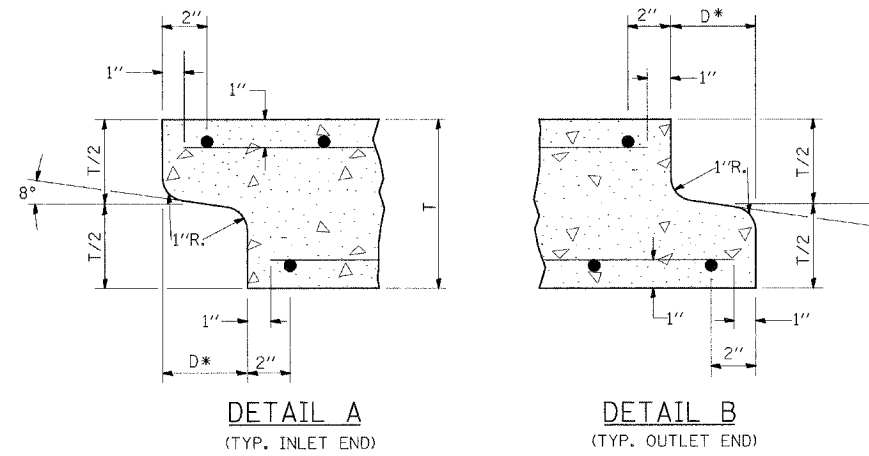
REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO ASTM SPECIFICATIONS A 185 OR A 497. LONGITUDINAL DISTRIBUTION REINFORCEMENT MAY CONSIST OF WELDED WIRE FABRIC OR DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M-31, M-42, GRADE 60.

DRAINAGE OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS. LOCATION AND SPACING OF THE OPENINGS SHALL BE SHOWN ON THE SHOP DRAWINGS.



PLAN

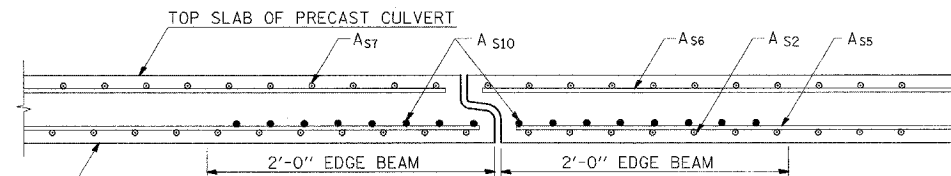
LOCATION OF LIFTING HOLES MAY BE VARIED
AS NEEDED TO CLEAR REINFORCEMENT.



DETAIL A
(TYP. INLET END)

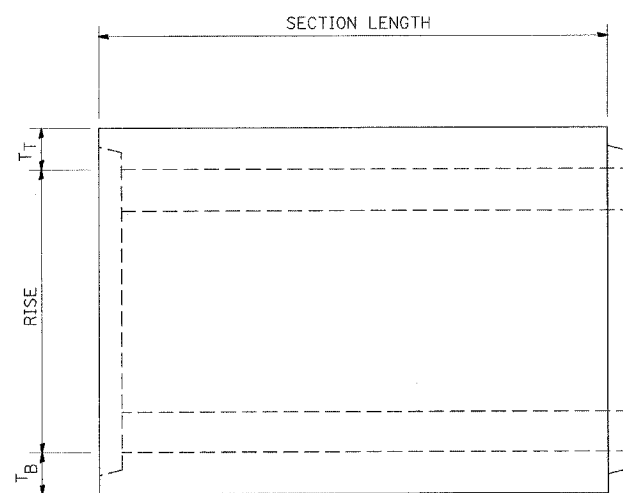
DETAIL B
(TYP. OUTLET END)

NOTE: INLET AND OUTLET ENDS SHALL BE COMPATIBLE.
* THE D DIMENSION SHALL CONFORM TO THE
MANUFACTURER'S STANDARDS.

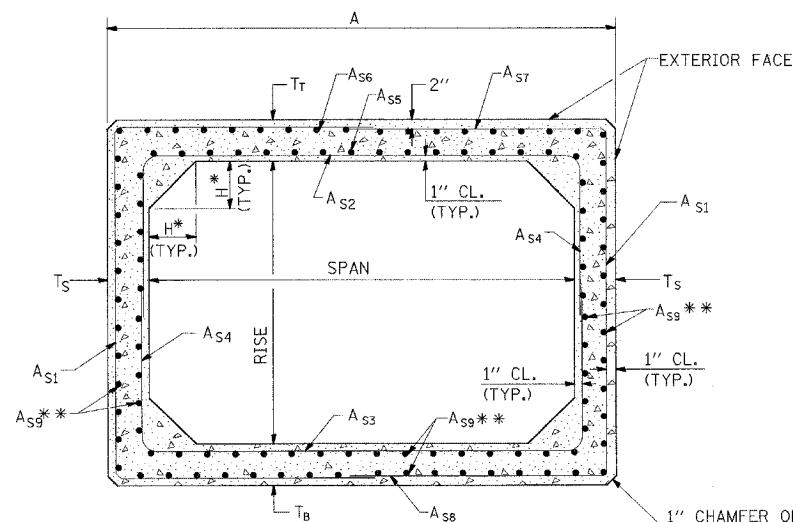


DETAIL OF EDGE BEAM

NOTE: THE A_{S10} REINFORCEMENT SHALL BE THE SAME LENGTH AS THE A_{S2}.



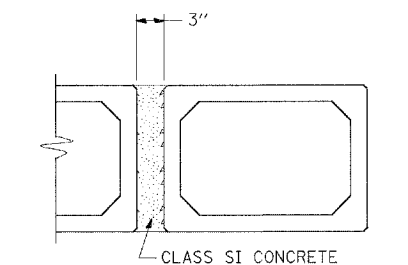
ELEVATION



CROSS SECTION

* THE HAUNCH DIMENSION, H, IS EQUAL TO THE
WALL THICKNESS, T_S.

** THE AREA OF A_{S9} REINFORCEMENT SHALL BE
BE A MINIMUM OF 0.12 SQ. IN./FT.



MULTIPLE UNIT PLACEMENT

DIMENSIONS & EDGE BEAM REINFORCEMENT

SPAN X RISE	DIMENSIONS (INCHES)			EDGE BEAM REINF. AREA (IN ² /FT.)
	T _T	T _B	T _S	A _{S10}
3' X 2'	7	6	4	0.42
3' X 3'	7	6	4	0.42
4' X 2'	7 1/2	6	5	0.59
4' X 3'	7 1/2	6	5	0.59
4' X 4'	7 1/2	6	5	0.59
5' X 3'	8	7	6	0.59
5' X 4'	8	7	6	0.59
5' X 5'	8	7	6	0.59
6' X 3'	8	7	7	0.73
6' X 4'	8	7	7	0.73
6' X 5'	8	7	7	0.73
6' X 6'	8	7	7	0.73
7' X 4'	8	8	8	0.85
7' X 5'	8	8	8	0.85
7' X 6'	8	8	8	0.85
7' X 7'	8	8	8	0.85
8' X 4'	8	8	8	1.00
8' X 5'	8	8	8	1.00
8' X 6'	8	8	8	1.00
8' X 7'	8	8	8	1.00
8' X 8'	8	8	8	1.00

FILE NAME =
c:\projects\901907\901907.d\l.m32

USER NAME = thomashf
PLOT SCALE = 50.0000' / IN.
PLOT DATE = 4/25/2009

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAIL: PRECAST CONCRETE BOX CULVERT SECTION

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 881	SECTION D9 SAFETY FY08-1	COUNTY VARIOUS	TOTAL SHEETS 64	SHEET NO. 26
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 78038	

REVISIONS
DRAWN 9-8-89 REVISED 12-17-01
REVISED 3-27-90 REVISED 01-10-07
REVISED 3-11-92 REVISED
REVISED 8-16-94 REVISED
STD. 9-49
MODIFIED