

1 2 3 4 5 6 7 8 9
 10 11 12 13 14 15 16 17 18
 19 20 21 22 23 24 25 26 27
 28 29 30 31 32 33 34 35 36
 37 38 39 40 41 42 43 44 45
 46 47 48 49 50 51 52 53 54
 55 56 57 58 59 60 61 62 63

DGN-SPEC
 DATE

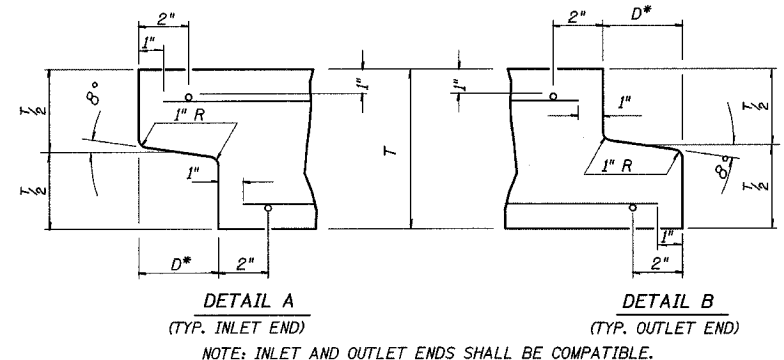
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
774	107 WRS-2, L	EFFINGHAM	127	69
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 74130

DETAIL OF PRECAST CONCRETE BOX CULVERT M259

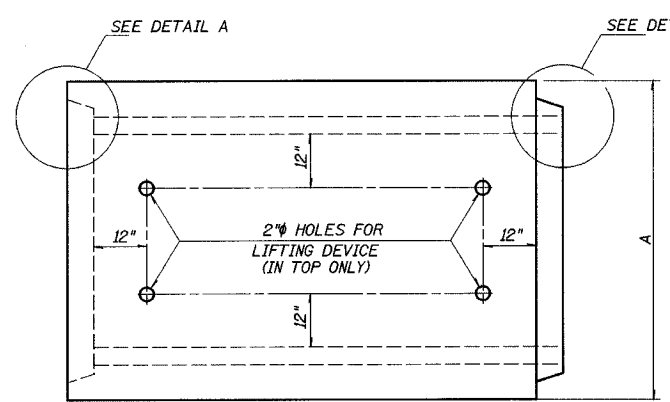
(WITH EQUAL TO OR GREATER THAN 2 FEET OF COVER)

AASHO DESIGNATION M259
 (ASTM DESIGNATION C-789)
 DESIGN LOADING = HS20-44



DETAIL A (TYP. INLET END)
 DETAIL B (TYP. OUTLET END)
 NOTE: INLET AND OUTLET ENDS SHALL BE COMPATIBLE.

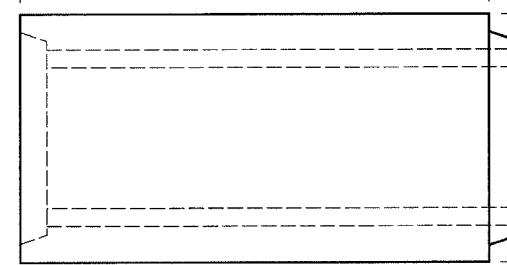
* THE D DIMENSION SHALL CONFORM TO THE MANUFACTURER'S STANDARDS.



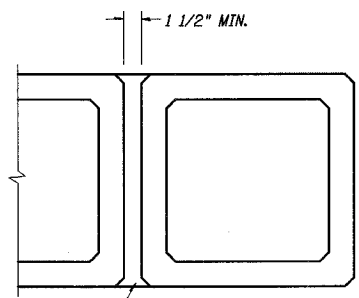
PLAN
 LOCATION OF LIFTING HOLES MAY BE VARIED AS NEEDED TO CLEAR REINFORCEMENT.

SECTION LENGTH

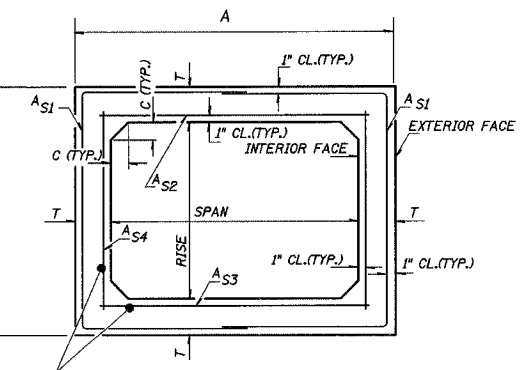
WHEN EXTENDING AN EXISTING BOX, PLACE THIS END AGAINST THE EXISTING HEADWALL.



ELEVATION



CLASS SI CONCRETE
 MULTIPLE UNIT PLACEMENT



LONGITUDINAL REINFORCEMENT
 CROSS SECTION

GENERAL NOTES

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

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED IN ACCORDANCE WITH ARTICLE 542.04(d) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS A_{SI} , A_{S2} , AND A_{S4} DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN ASSHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO ASSHTO M55.

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

DRAINAGE OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 503.12 OF THE STANDARD SPECIFICATIONS. LOCATION AND SPACING OF THE OPENINGS SHALL BE SHOWN ON THE SHOP DRAWINGS.

CULVERT SIZE	DIMENSIONS			
	T (INCHES)	A FT-IN	B FT-IN	C (INCHES)
SPANxRISE (FOOT)				
2x2	4	2-8	2-8	4
3x2	4	3-8	2-8	4
3x3	4	3-8	3-8	4
4x2	5	4-10	2-10	5
4x3	5	4-10	3-10	5
4x4	5	4-10	4-10	5
5x2	6	6-0	3-0	6
5x3	6	6-0	4-0	6
5x4	6	6-0	5-0	6
5x5	6	6-0	6-0	6
6x2	7	7-2	3-2	7
6x3	7	7-2	4-2	7
6x4	7	7-2	5-2	7
6x5	7	7-2	6-2	7
6x6	7	7-2	7-2	7
7x4	8	8-4	5-4	8
7x5	8	8-4	6-4	8
7x6	8	8-4	7-4	8
7x7	8	8-4	8-4	8
8x4	8	9-4	5-4	8
8x5	8	9-4	6-4	8
8x6	8	9-4	7-4	8
8x7	8	9-4	8-4	8
8x8	8	9-4	9-4	8
9x5	9	10-6	6-6	9
9x6	9	10-6	7-6	9
9x7	9	10-6	8-6	9
9x8	9	10-6	9-6	9
9x9	9	10-6	10-6	9
10x5	10	11-8	6-8	10
10x6	10	11-8	7-8	10
10x7	10	11-8	8-8	10
10x8	10	11-8	9-8	10
10x9	10	11-8	10-8	10
10x10	10	11-8	11-8	10
11x4	11	12-10	5-10	11
11x6	11	12-10	7-10	11
11x8	11	12-10	9-10	11
11x10	11	12-10	11-10	11
11x11	11	12-10	12-10	11
12x4	12	14-0	6-0	12
12x6	12	14-0	8-0	12
12x8	12	14-0	10-0	12
12x10	12	14-0	12-0	12
12x12	12	14-0	14-0	12

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PRECAST CONCRETE BOX CULVERT DETAILS
 SHEET 2 OF 3
 DATE REVISED: 05/28/99
 DRAWN BY DIST. 7
 CHECKED BY BWC