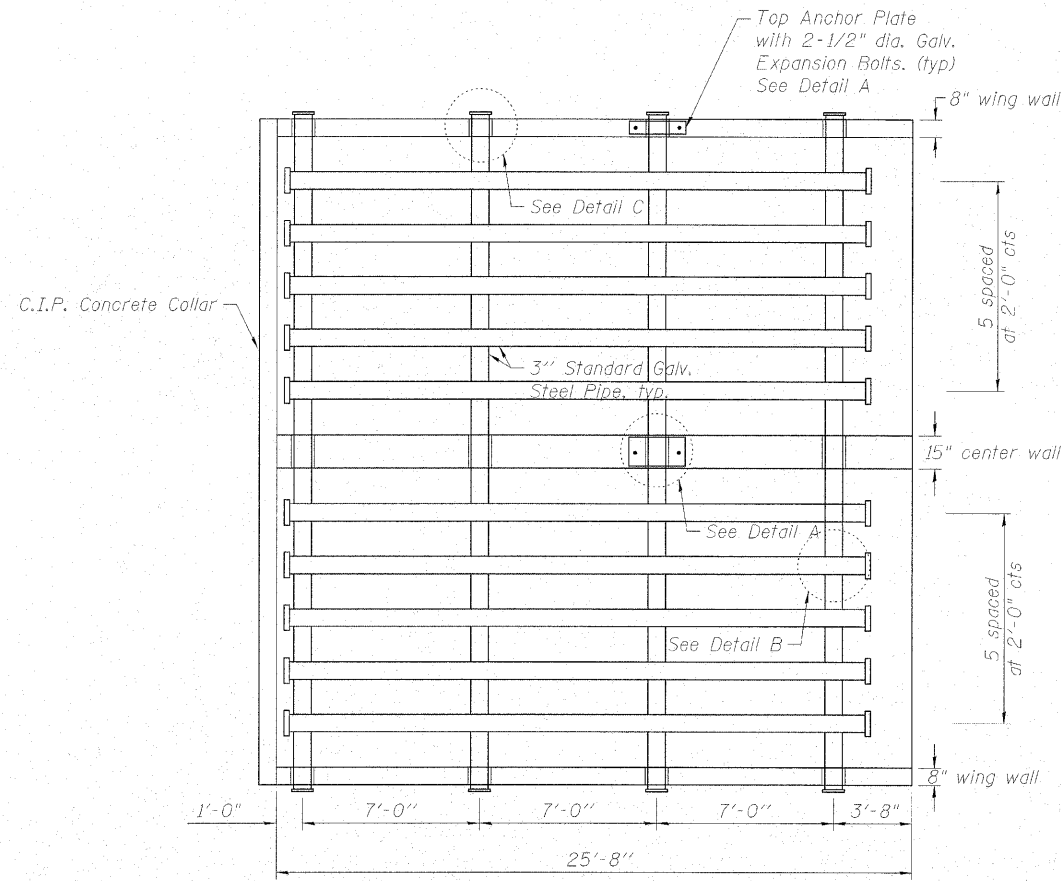


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**GRATING NOTES**

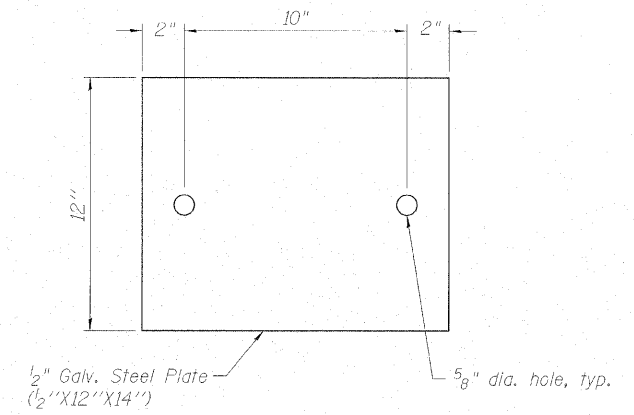
Grating shall include the pipes, plates, pipe caps, and expansion bolts as shown for one end section and shall be included in the contract unit price per Cu. Yd. for Concrete Box Culverts.

Steel pipes shall conform to ASTM A53, Grade B, Schedule 40, and shall be galvanized conforming to ASTM A120.

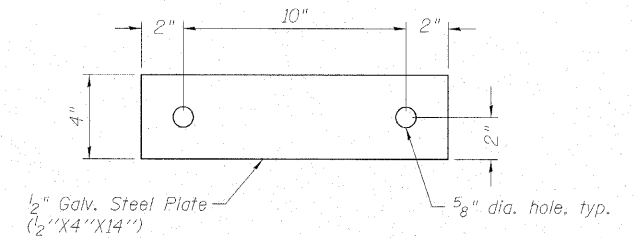
Steel plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Bolts, nuts, and washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.

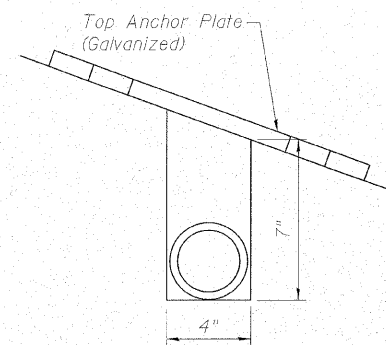
Contractor shall provide galvanizing for holes, threads, ect. for field-fabricated grate assembly.



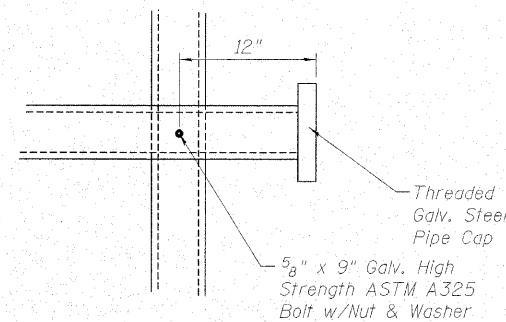
**TOP ANCHOR PLATE @ CENTERWALL**



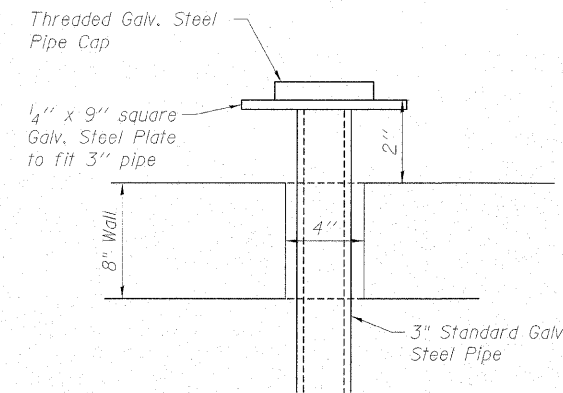
**TOP ANCHOR PLATE @ WINGWALLS**



**DETAIL A**



**DETAIL B**



**DETAIL C (TYP. PIPE END)**

**\*\*\*GRATING BILL OF MATERIAL  
EACH END SECTION**

Item	No.	Length	Unit	Quantity
3" Std. Galv. Steel Pipe	4	26'-11"	Foot	107'-8"
3" Std. Galv. Steel Pipe	10	23'-8"	Foot	236'-8"
Threaded Galv. Steel Pipe Caps			Each	28
1/4"x9" Square Galv. Steel Plate			Each	8
1/2"x4"x14" Galv. Steel Plate			Each	8
1/2"x12"x14" Galv. Steel Plate			Each	4
1/2" dia. Galv. Expansion Bolts			Each	24
5/8" dia. x 9" Galv. High Strength Bolts			Each	40

\*\*\* For information only.



DESIGNED -	BAB
CHECKED -	KEF
DRAWN -	LAD
CHECKED -	GBM

**GRATE DETAILS**

**IL. RTE. 251 OVER UNNAMED TRIBUTARY TO KILBUCK CREEK**

SHEET NO. 4	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1042	107T-1	OGLE	53	29
5 SHEETS	STRUCTURE NO. 071-2027		CONTRACT NO. 64B09		
	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				