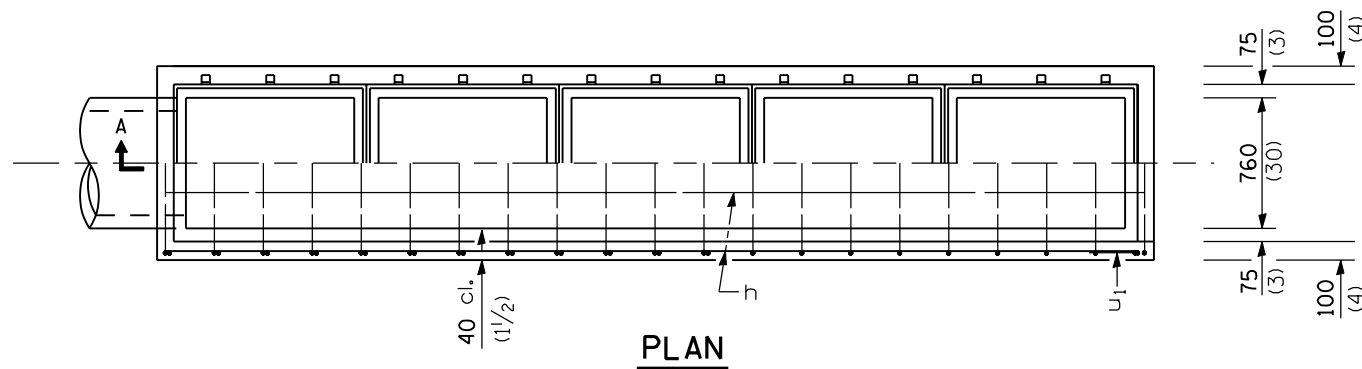
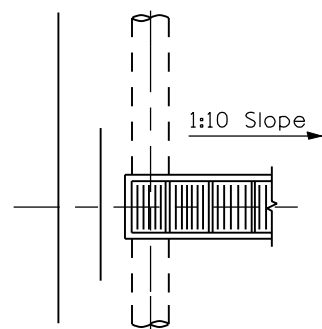


**SECTION A-A**

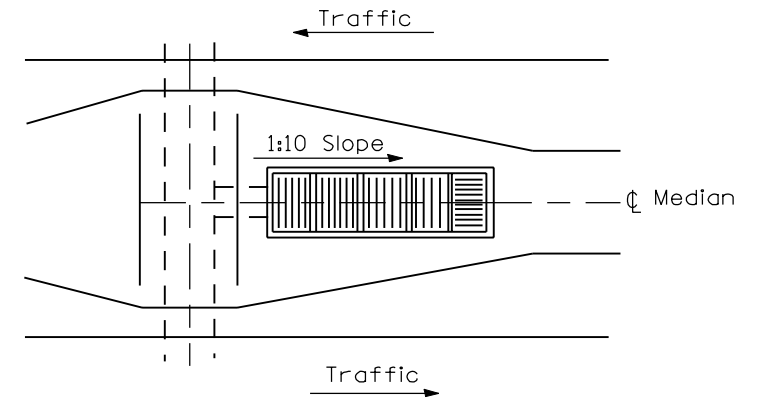
NOTE: Culvert pipe may exit from the side (or sides) by changing reinforcement bars in that area and in the headwall end of box.



**PLAN**



Detail showing exit from side (or sides)



Sketch showing location and direction of main bearing bars in relation to  $\zeta$  median (showing exit from end)

**GENERAL NOTES**

The dimensions of the steel angle frames shall be as shown except that the 89 mm (3 1/2") leg dimension may vary according to type of grating used. In all cases, the surface shall be flush with the top edge of frame, sidewalls, and headwall. All frames shall be galvanized and anchored in concrete. They shall be factory assembled and all joints shall be welded per detail.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in millimeters (inches) unless otherwise shown.

DATE	REVISIONS
1-1-98	Rev. metric value
	from "330" to "585"
	and "50" to "300".
1-1-97	Renum. Standard 2358-4.

**INLET BOX TYPE G**  
**600 mm (24")**

(Sheet 1 of 2)

**STANDARD 542531-01**

Illinois Department of Transportation

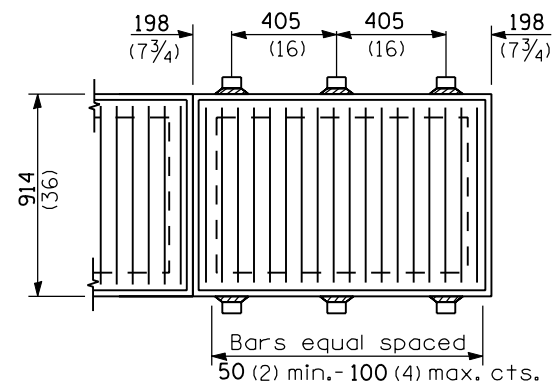
PASSED January 1, 1998

ISSUED 1-1-98

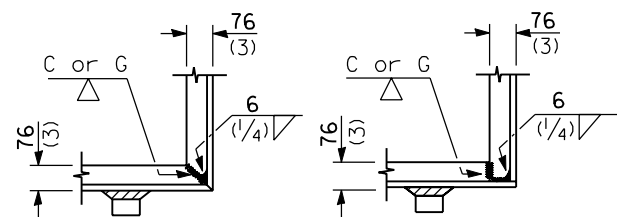
ENGINEER OF POLICE AND PROCEDURES

APPROVED January 1, 1998

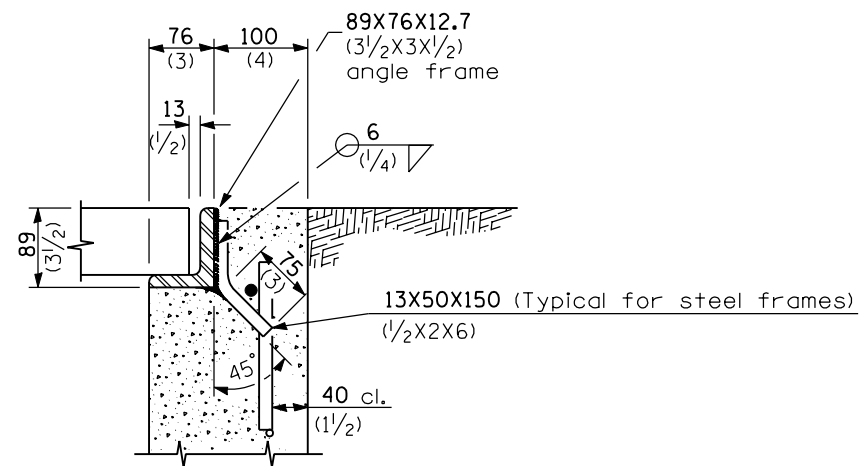
ENGINEER OF DESIGN AND ENVIRONMENT



**TYPICAL STEEL GRATING**



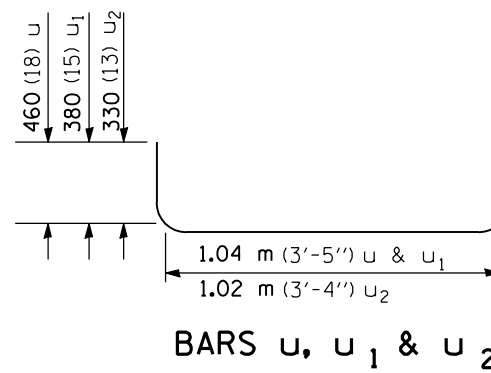
**TYPICAL CORNER of STEEL GRATING FRAME**



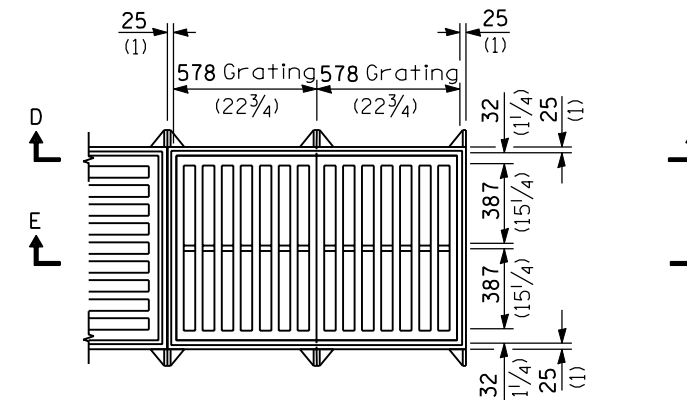
**SECTION B-B**

Material required for one inlet box

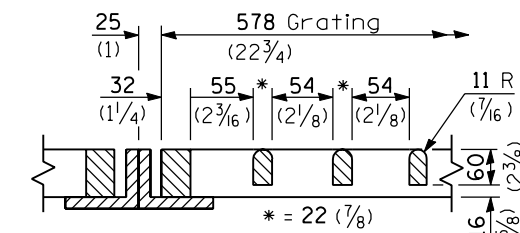
Bar	No.	Size	Length
h	10	No. 15 (No. 4)	6.10 m (20'-0")
u	17	No. 15 (No. 4)	1.96 m (6'-5")
u <sub>1</sub>	6	No. 15 (No. 4)	1.80 m (5'-11")
u <sub>2</sub>	1	No. 15 (No. 4)	1.68 m (5'-6")
v	2	No. 15 (No. 4)	840 (33)
v <sub>1</sub>	6	No. 15 (No. 4)	760 (30)
v <sub>2</sub>	10	No. 15 (No. 4)	610 (24)
v <sub>3</sub>	10	No. 15 (No. 4)	460 (18)
Concrete cast in place or precast		m <sup>3</sup> (cu. yds.)	2.45 (3.2)
Reinf. bars		kg (lbs.)	194 (270)
Grating		m <sup>2</sup> (sq. ft.)	5.20 (56.0)



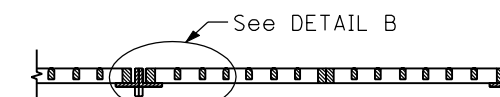
**BARS u, u<sub>1</sub> & u<sub>2</sub>**



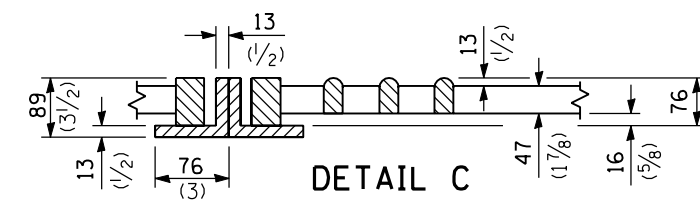
**TYPICAL CAST GRATING**



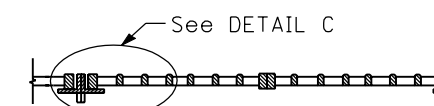
**DETAIL B**



**SECTION D-D**



**DETAIL C**



**SECTION E-E**

All dimensions are in millimeters (inches) unless otherwise shown.

**INLET BOX TYPE G**  
**600 mm (24")**

(Sheet 2 of 2)

**STANDARD 542531-01**

Illinois Department of Transportation  
 PASSED January 1, 1998  
 ENGINEER OF POLICE AND PROCEDURES  
 APPROVED January 1, 1998  
 ENGINEER OF DESIGN AND ENVIRONMENT