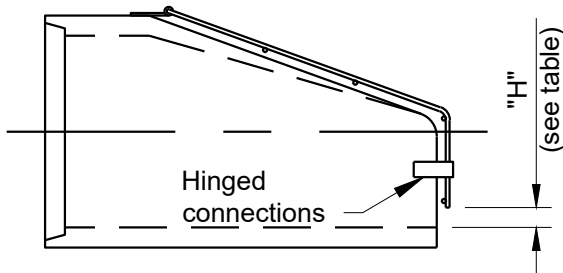
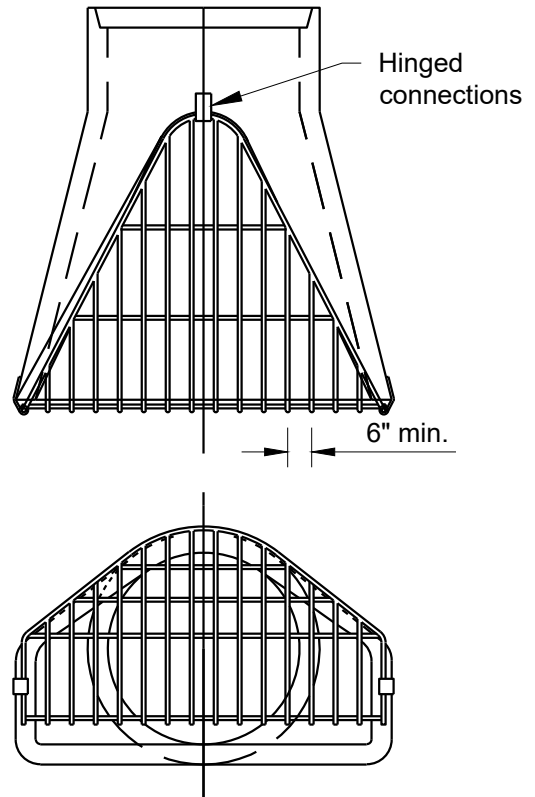


**Notes:**

1. All trash guards to have (1) cross bar 60" dia. and up to have (2) bars equally spaced.
2. Hot dip galvanized per MNDOT 3392 or ASTM-A153.
3. Tie last 3 pipe joints. Use 2 bolt fasteners per joint. Install at 60° from top of bottom of pipe.



BAR SIZES									
STANDARD DESIGN					HEAVY DESIGN				
	PIPE SIZE	HOLE DIA. REQ'D	BOLT DIA.	BAR SIZE		PIPE SIZE	HOLE DIA. REQ'D	BOLT DIA.	BAR SIZE
ROUND	12"-24"	3/4"	5/8"	5/8"	ROUND	12"-18"	3/4"	5/8"	3/4"
	27"-48"	7/8"	3/4"	3/4"		21"-42"	7/8"	3/4"	1"
	54"-90"	1 1/8"	1"	1"		48"-90"	1 1/8"	1"	1 1/4"
ARCH	22"-29"	3/4"	5/8"	5/8"	ARCH	22"	3/4"	5/8"	3/4"
	36"-59"	7/8"	3/4"	3/4"		29"-51"	7/8"	3/4"	1"
	65"-88"	1 1/8"	1"	1"		59"-88"	1 1/8"	1"	1 1/4"

BOLT LG. = PIPEWALL THICKNESS + 2 1/2"

VALUES FOR "H"			
ROUND PIPE		ARCH PIPE	
PIPE SIZE	H	PIPE SIZE	H
12"	2 1/2"	22"-29"	4"
15"	3"	36"-44"	5"
18"-24"	4"	51"-55"	6"
27"-36"	5"	73"-88"	7"
42"-54"	6"		
60"-72"	7"		
78"-90"	8"		

MASTANDARD SPECS & DETAIL S100191Detail PlatesSTO-10 FLARED END SECTION AND TRASH RACK.dwg

City Plate No.:  
STO-10  
Last Revision:  
4/10/2019  
File:  
STO\_10.dwg

**STANDARD DETAILS  
FLARED END SECTION  
AND TRASH RACK**

