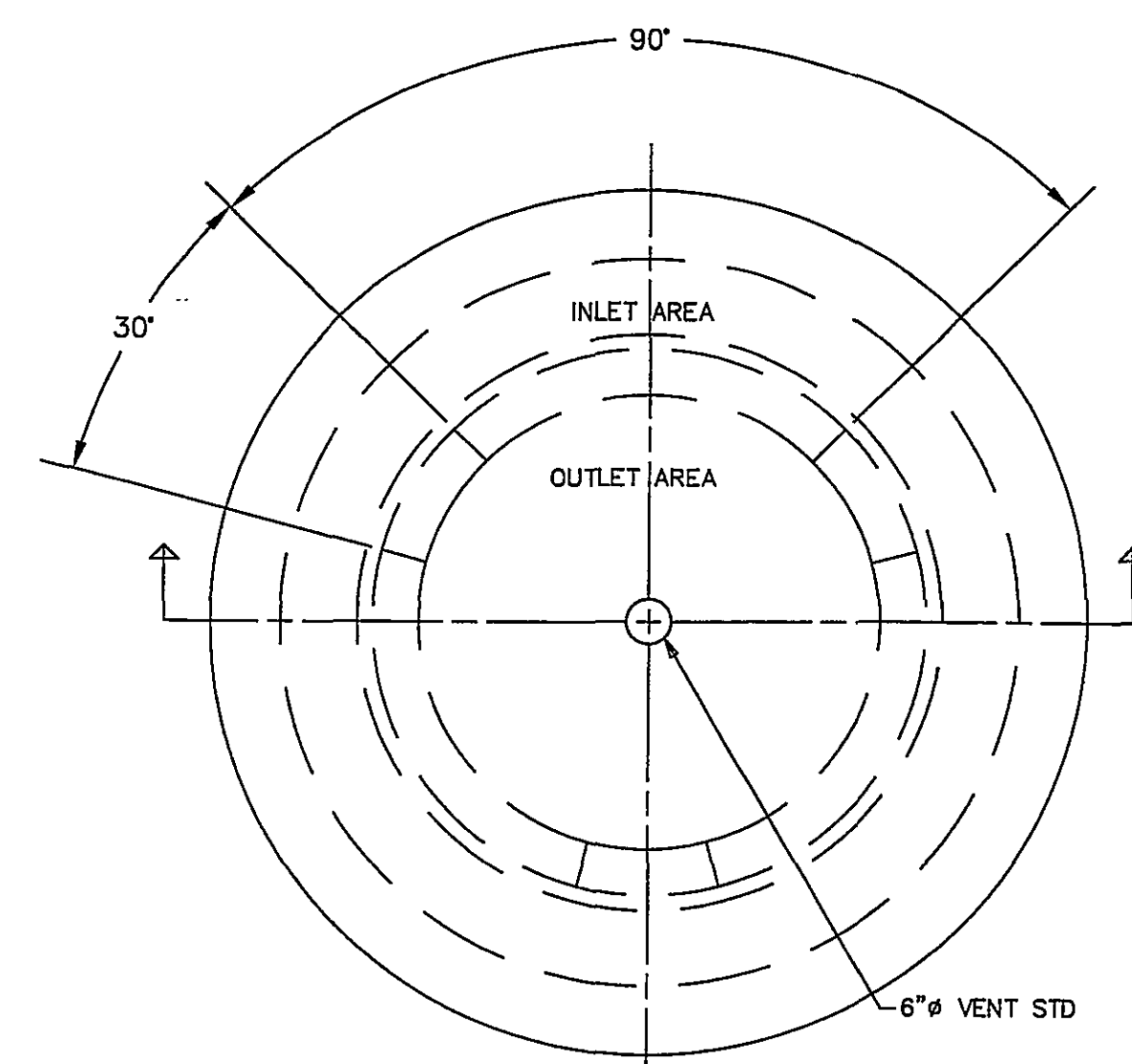


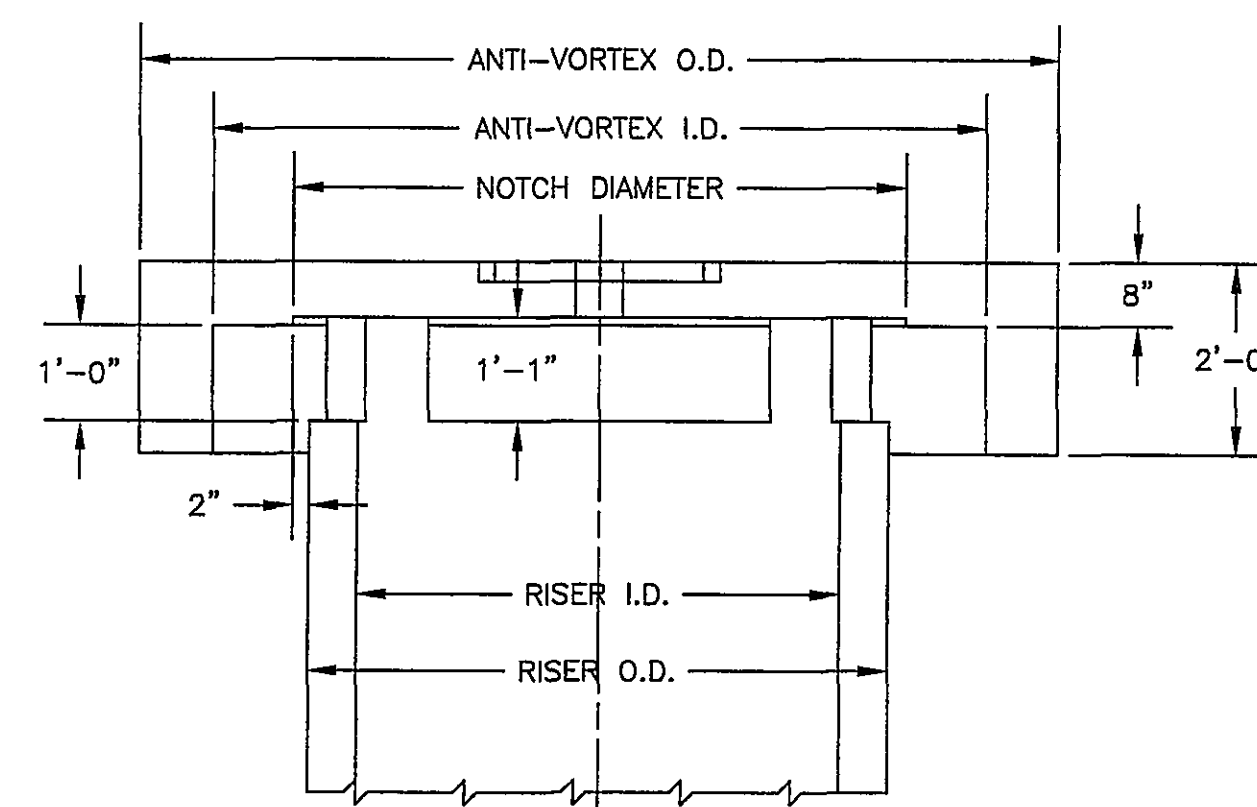
- NOTES:**
1. MIN. CLEARANCE BETWEEN REBAR AND OUTSIDE FACE OF COLLAR SHALL BE 3".
  2. DIMENSIONS AND BAR #5 ARE DESIGN SPECIFIC.
  3. COMPACT OVER-EXCAVATION TO 95% DENSITY PER ASTM D-698.
  4. COLLARS SHOULD BE PLACED A MINIMUM OF 2' FROM PIPE JOINTS UNLESS FLANGED PIPE JOINTS ARE USED.

### CONCRETE ANTI-SEEP COLLAR DETAIL

NO SCALE



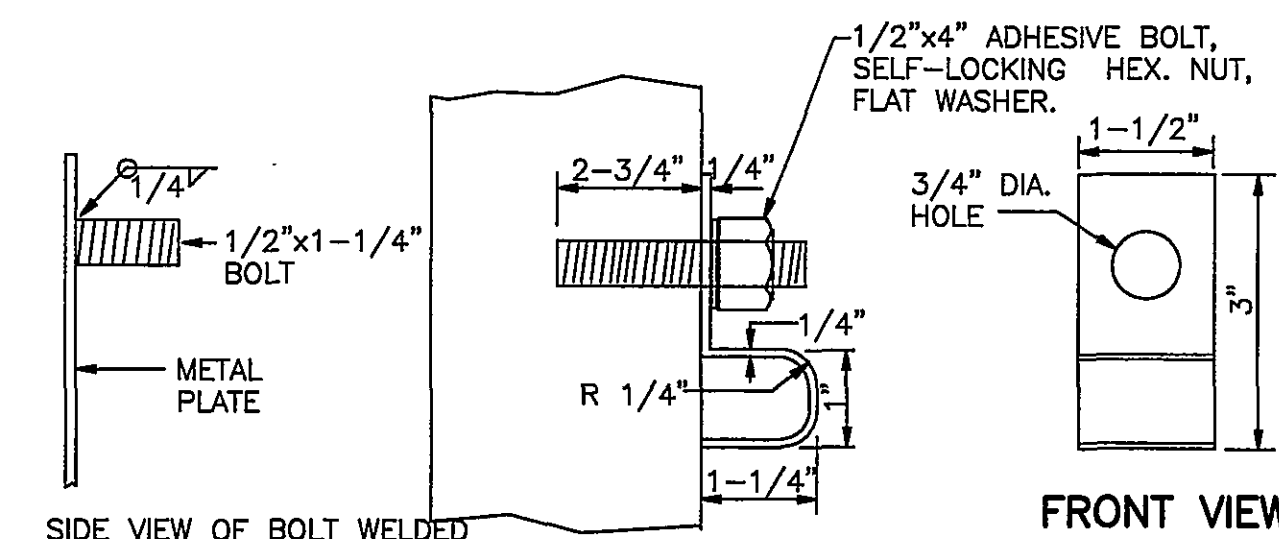
### PLAN



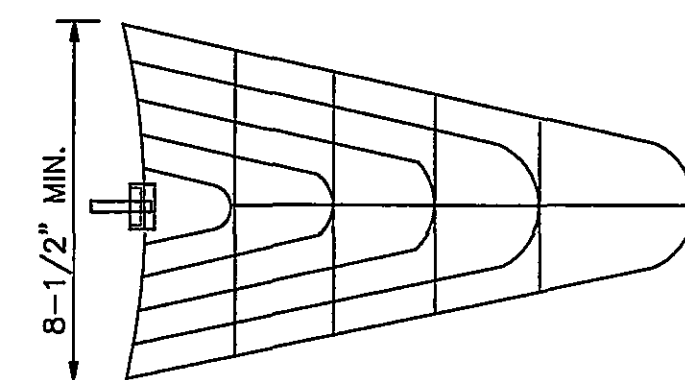
**SECTION**

## PRECAST ANTI-VORTEX DEVICE

SCALE: 1"=1'-0"

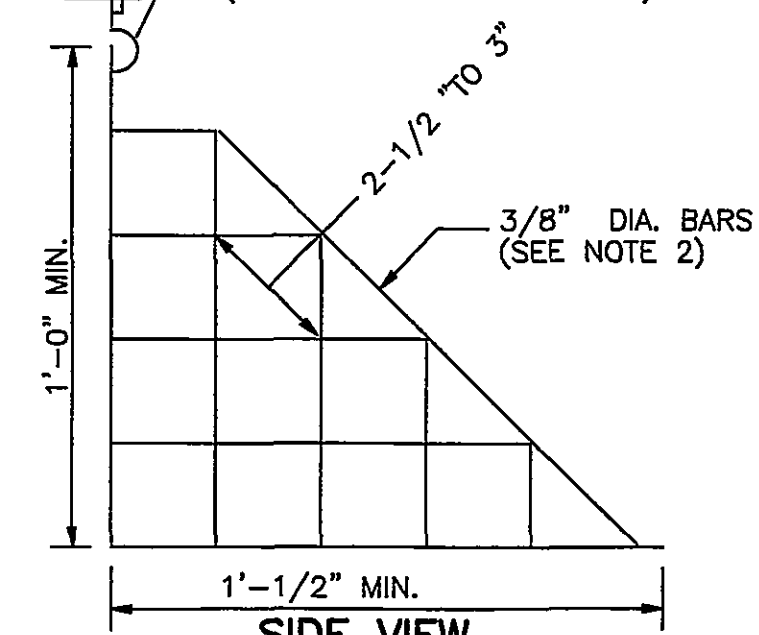


TO METAL PLATE  
SIDE VIEW  
DETAIL FOR DEBRIS RACK HOLDER

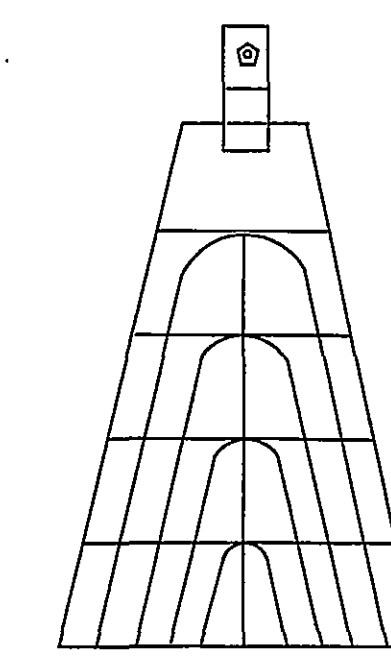


TOP VIEW

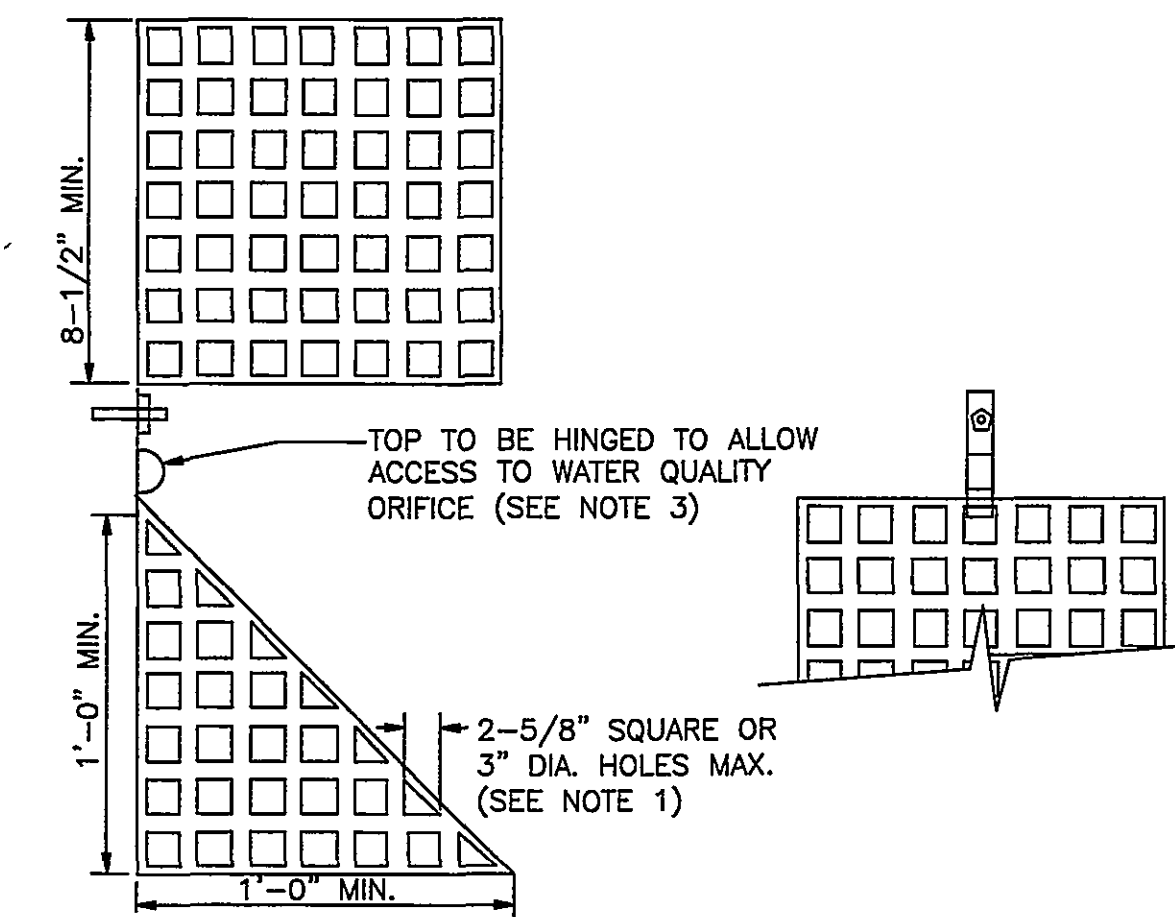
TOP TO BE HINGED TO ALLOW  
ACCESS TO WATER QUALITY ORIFICE  
(SEE HOLDER DETAIL ABOVE)



## METAL



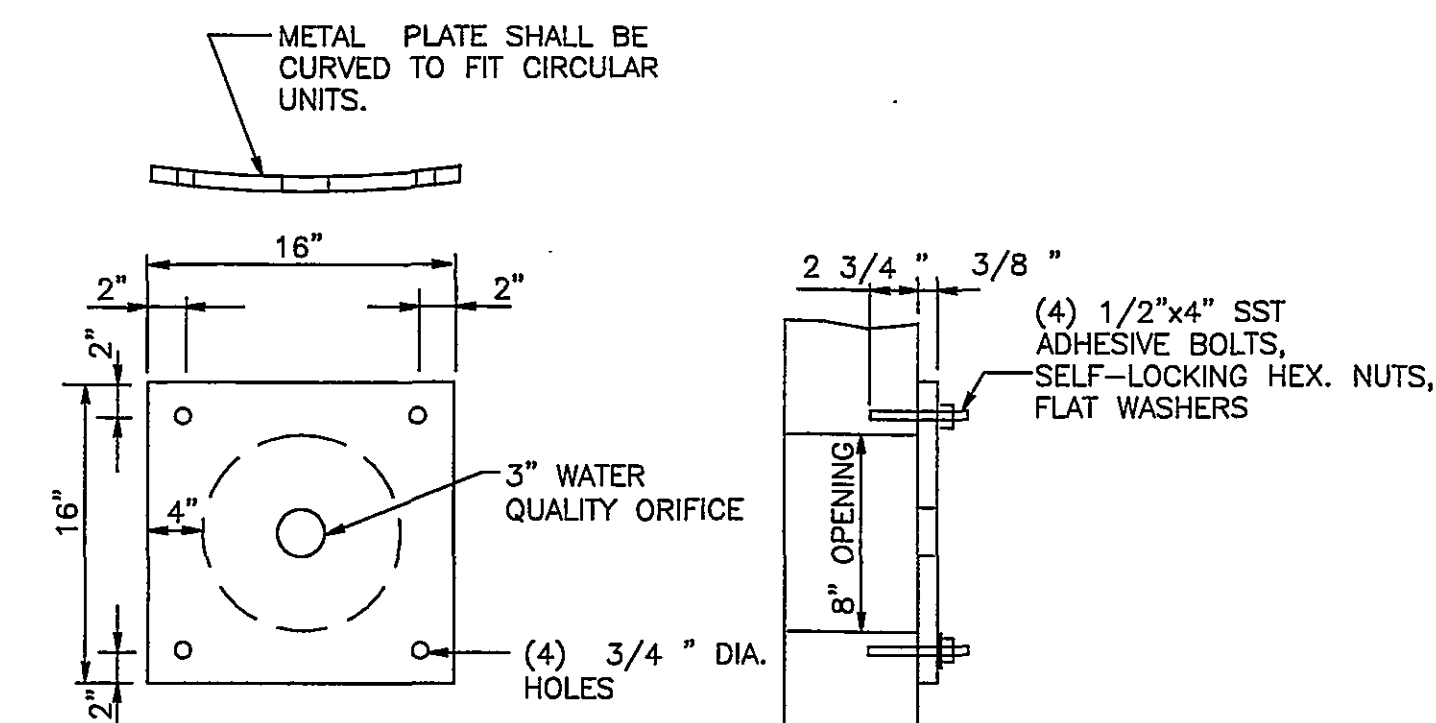
FRONT VIEW



## HIGH DENSITY POLYETHYLENE

**DEBRIS RACK DETAIL (FOR WATER QUALITY ORIFICE)**

NO SCALE



METAL ORIFICE PLATE DETAIL

NO SCALE

- NOTES:**
1. SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C478.
  2. INLET AREA (BETWEEN DEVICE I.D. AND RISER O.D.) SHALL BE GREATER THAN OUTLET AREA (AREA OF RISER I.D.).
  3. SLAB REINFORCEMENT SHALL BE ASTM A615 #4 BARS @ 8" E.W. CIRCUMFERENTIAL REINFORCEMENT SHALL BE Ase = 1 @ 0.150 2x6 W2.5 x W2.5 WWF MINIMUM.  
MINIMUM PROPERTIES: fy = 60 ksi, fc = 4 ksi,  
CONCRETE COVER OVER REINFORCEMENT (CCR) = 1 INCH, UNLESS NOTED OTHERWISE.

RISER		ANTI-VORTEX CAP		NOTCH DIAMETER	APPROX. C/L WEIGHT
I.D.	O.D.	I.D.	O.D.		
24"	30"	48"	58"	34"	1.49 T
27"	33 <sup>1</sup> / <sub>2</sub> "	60"	70" OR 72"	37 <sup>1</sup> / <sub>2</sub> "	2.28 T
30"	37"	60"	70" OR 72"	41"	2.26 T
36"	44"	60"	70" OR 72"	48"	2.22 T
42"	51"	72"	86"	55"	3.16 T
48"	58"	84"	100"	62"	4.27 T
54"	66 <sup>1</sup> / <sub>2</sub> "	84"	100"	70 <sup>1</sup> / <sub>2</sub> "	4.20 T
60"	72"	96"	114"	76"	5.48 T
66"	80 <sup>1</sup> / <sub>2</sub> "	96"	114"	84 <sup>1</sup> / <sub>2</sub> "	5.39 T
72"	86"	108"	128"	90"	6.83 T
78"	94 <sup>1</sup> / <sub>2</sub> "	126"	147"	98 <sup>1</sup> / <sub>2</sub> "	8.97 T
84"	100"	126"	147"	104"	8.90 T

	DATE	CITY COMMENTS	TSP
REV.	DATE	DESCRIPTION	APP.

REV	DATE	DESCRIPTION	APP
COMM NO: 60973			
ISSUE DATE: AUGUST 15, 2007			
DESIGNED BY: NTG		DRAWN BY: NTG	
CHECKED BY: DMH		SUBMITTED BY: TSP	
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