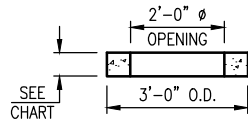


GENERAL DESIGN NOTES:

- STRENGTH DESIGN METHOD IN ACCORDANCE WITH (I.A.W.) ACI 318.
- APPLICABLE DESIGN DOCUMENTS (CURRENT EDITIONS):
 - ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (MAIN DESIGN SPECIFICATION).
 - ASTM C890 STANDARD PRACTICE FOR MINIMUM STRUCTURAL LOADING FOR MONOLITHIC OR SECTIONAL PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES (LOADING SPECIFICATION).
 - ASTM C478 STANDARD SPECIFICATION FOR PRECAST MANHOLES (PRODUCT SPECIFICATION).
- PRECAST RATED FOR HS20-44 TRUCK LIVE LOAD W/ IMPACT I.A.W. ASTM C890.
- MAX DEPTH TO INVERT OF MANHOLE (I.E. FLOOR) = 30'.
- LATERAL DESIGN PRESSURES (AS APPLICABLE TO DESIGN):
 - EQUIV DRY SOIL FLUID PRESSURE = 47 PCF.
 - EQUIV SATURATED SOIL FLUID PRESSURE = 85 PCF.
 - HYDROSTATIC WATER PRESSURE = 62.4 PCF.
 - LIVE LOAD SURCHARGE = 80 PSF
- DESIGN CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS = 4,000 PSI (MIN).
- REINFORCEMENT:
 - CARBON-STEEL DEFORMED BARS: ASTM A615, $f_y = 60$ KSI (MIN).
 - WELDED WIRE REINFORCEMENT (PLAIN): ASTM A1064 $f_y = 65$ KSI (MIN).
 - WELDED WIRE REINFORCEMENT (DEFORMED): ASTM A1064 $f_y = 70$ KSI (MIN).
- JOINT SEALANT (PER CONTRACT SPECIFICATIONS):
 - CS-102 CONSEAL BUTYL RUBBER SEALANT (OR EQUIV.) I.A.W. ASTM C990 FED. SPEC. SS-S-210.
 - CS-212 CONSEAL EXTERIOR JOINT WRAP (OR EQUIV.) I.A.W. ASTM C877 AND ASTM C990.
 - CS-50 CONSEAL LIQUID BUTYL PRIMER (OR EQUIV.) AS NEEDED.
- COPOLYMER POLY PROPYLENE STEEL REINFORCED STEPS I.A.W. ASTM C478 SPACED 16" O.C.
- OPENINGS CAST OR CORED IN MANHOLE TO DEFLECTIONS AND ELEVATIONS SPECIFIED ON CONTRACT DRAWINGS MAX HOLE SIZE IS 56" (42" RCP).
- PRECAST INVERT PROVIDED UPON REQUEST: MIN $\frac{1}{2}$ " PER FT BENCH SLOPE FROM SPRINGLINE

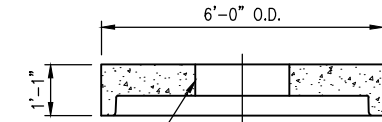
GRADE RING

HEIGHT	WEIGHT (lbs)
4"	200
6"	300



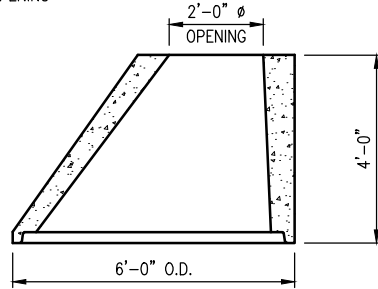
FLAT TOP

WT = 2,900 LBS.



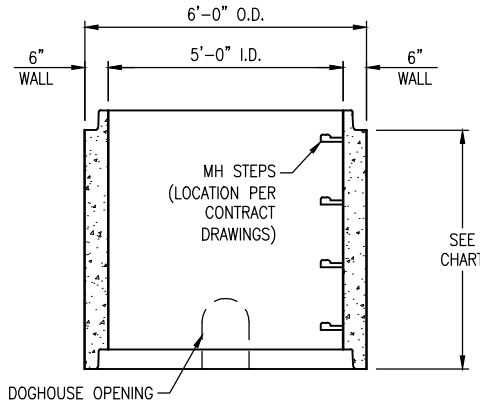
CONE

WT = 5,400 LBS.



RISER SECTION

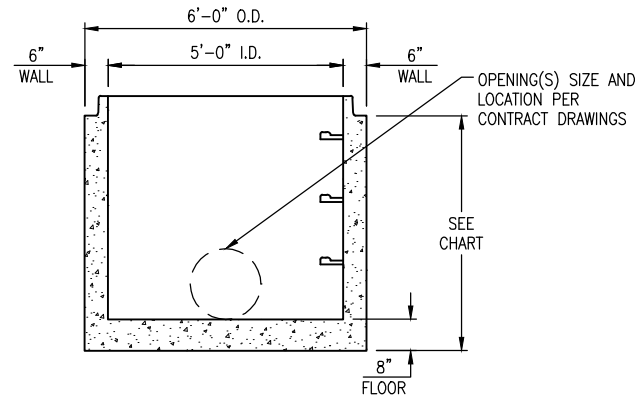
HEIGHT	WEIGHT (lbs)
1.00' RISER	1,300
1.33' RISER	1,750
2.00' RISER	2,600
2.67' RISER	3,450
3.00' RISER	3,900
4.00' RISER	5,200
5.00' RISER	6,500
6.00' RISER	7,800



DOGHOUSE RISER SECTION

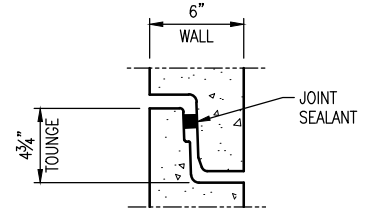
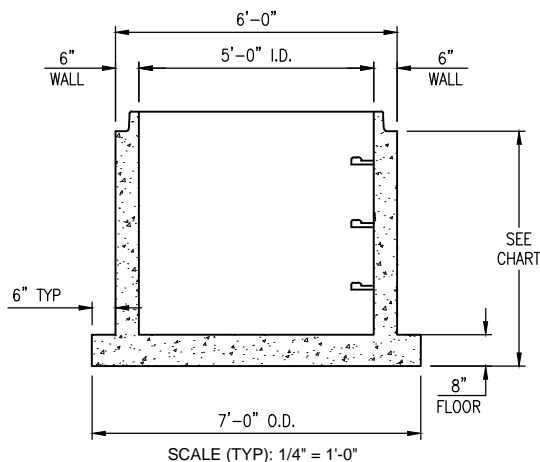
STANDARD BASE SECTION

HEIGHT	WEIGHT (lbs)
2.00' BASE	5,450
2.50' BASE	6,100
2.67' BASE	6,300
3.00' BASE	6,750
3.50' BASE	7,350
4.00' BASE	8,050
5.00' BASE	9,300
6.00' BASE	10,600
6.67' BASE	11,450



EXTENDED BASE SECTION

HEIGHT	WEIGHT (lbs)
2.00' BASE	6,450
2.50' BASE	7,050
2.67' BASE	7,300
3.00' BASE	7,750
3.50' BASE	8,450
4.00' BASE	9,050
5.00' BASE	10,300
6.00' BASE	11,600
6.67' BASE	12,500



JOINT DETAIL
SCALE: 1" = 1'-0"



Oldcastle Precast[®]

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OFFICE 919-852-2252, FAX 844-966-7476

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5' DIAMETER MANHOLE

SUBMITTAL LAYOUT

CUSTOMER

DATE	SALES	DRAWN	ENGINEER	CHECKED	SALES ORDER
6/15/17		PPS			

DRAWING NUMBER		REVISION	SHEET
5-MH-2017		REV DATE	1 OF 1