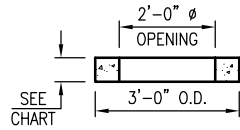


## GENERAL DESIGN NOTES:

- 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 84" (68" RCP).
- PRECAST INVERT PROVIDED UPON REQUEST: MIN  $\frac{1}{2}$ " PER FT BENCH SLOPE FROM SPRINGLINE

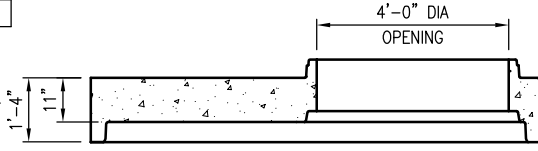
### GRADE RING

HEIGHT	WEIGHT (lbs)
4"	200
6"	300



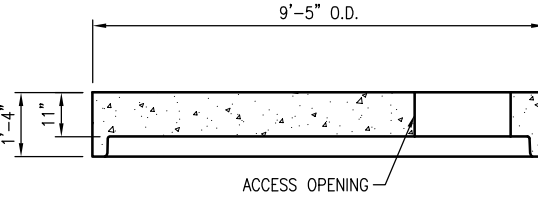
### TRANSITION SLAB

WT = 8,500 LBS.



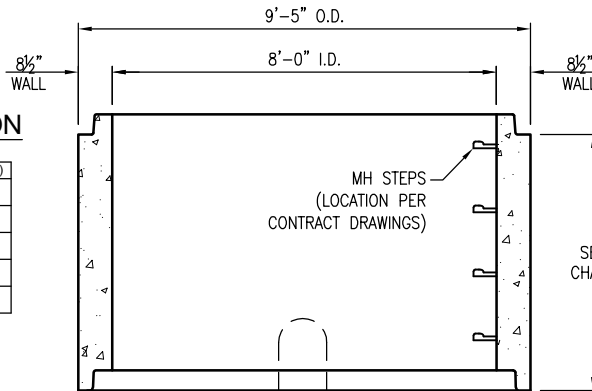
### FLAT TOP

WT = 9,700 LBS.



### RISER SECTION

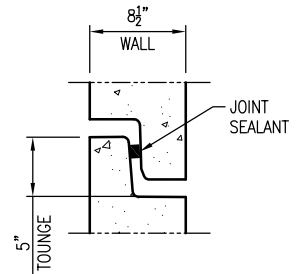
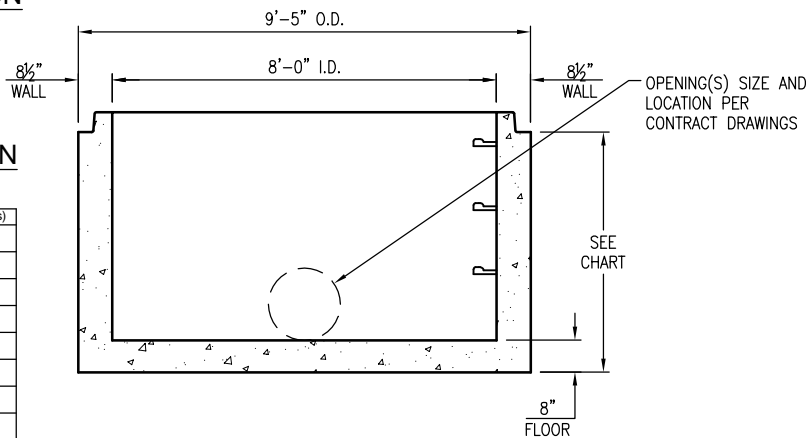
HEIGHT	WEIGHT (lbs)
2.00' RISER	5,900
2.67' RISER	7,850
3.00' RISER	8,850
4.00' RISER	11,800
5.00' RISER	14,750



### DOGHOUSE RISER SECTION

### STANDARD BASE SECTION

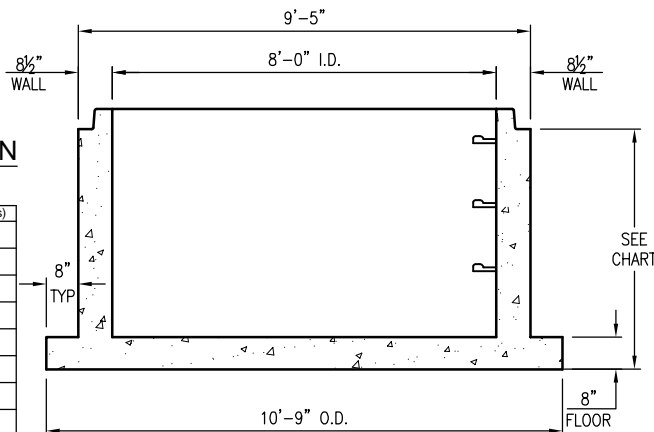
HEIGHT	WEIGHT (lbs)
2.00' BASE	10,550
2.50' BASE	12,500
2.67' BASE	14,450
3.34' BASE	16,400
3.50' BASE	16,400
4.00' BASE	18,350
4.67' BASE	20,300
5.00' BASE	22,250



JOINT DETAIL  
SCALE: 1/4" = 1'-0"

### EXTENDED BASE SECTION

HEIGHT	WEIGHT (lbs)
2.00' EXP BASE	12,150
2.50' EXP BASE	14,100
2.67' EXP BASE	16,050
3.34' EXP BASE	18,000
3.50' EXP BASE	18,000
4.00' EXP BASE	19,950
4.67' EXP BASE	21,900
5.00' EXP BASE	23,850



SCALE (TYP): 1/4" = 1'-0"



**Oldcastle Precast**<sup>®</sup>

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### 8' DIAMETER MANHOLE SUBMITTAL LAYOUT

CUSTOMER

DATE	SALES	DRAWN	ENGINEER	CHECKED	SALES ORDER
12/11/17		PPS			
DRAWING NUMBER				REVISION	SHEET
8-MH-2017					1 OF 1
				REV DATE	