

**DIMENSIONS AND ESTIMATE OF QUANTITIES  
(PIPE CHAMBER-SAG CONDITION)**

**REFERENCE CHART**



INLET SIZE ④			MAX. PIPE DIA.	PIPE LOCATION	Z ①	CONCRETE		
NO. ⑥	X	Y				CU. YD. ①②	Q ③	
			71	4'-11"	1'-3"			12"
72	1'-3"	15"	X		2'-5"	1.3		
73	2'-0"	15"	X OR Y		2'-5"	1.6		
74	1'-3"	18"	X		2'-9"	1.4		
75	2'-0"		X OR Y		2'-9"	1.8		
76	1'-3"	21"	X		3'-0"	1.5		
77	2'-0"		X		3'-0"	1.9		
78	2'-6"	24"	X OR Y		3'-3"	2.1		
79	1'-3"		X		3'-3"	1.6		
80	2'-0"	27"	X OR Y		3'-6"	2.0		
81	2'-6"		X OR Y		3'-6"	2.2		
82	1'-3"	30"	X		3'-10"	1.7		
83	2'-0"		X		3'-10"	2.1		
84	2'-6"	33"	X OR Y		4'-1"	2.3		
85	3'-0"		X OR Y		4'-1"	2.5		
86	1'-3"	36"	X		4'-4"	1.8		
87	2'-0"		X		4'-4"	2.2		
88	2'-6"	42"	X		4'-7"	2.4		
89	3'-0"		X		4'-7"	2.7		
90	3'-6"	48"	X OR Y		5'-2"	2.7		
91	1'-3"		X		5'-2"	3.0		
92	2'-0"	5'-5"	X		5'-5"	1.9		
93	2'-6"		X		5'-5"	2.3		
94	3'-0"	5'-8"	X		5'-8"	2.5		
95	3'-6"		X		5'-8"	2.8		
96	4'-0"	0.5	X OR Y		5'-8"	3.2		
97	4'-6"		X OR Y		5'-8"	3.6		
98	1'-3"	0.4	X		5'-8"	2.0		
99	2'-0"		X		5'-8"	2.4		
100	2'-6"	0.5	X		5'-8"	2.7		
101	3'-0"		X		5'-8"	2.9		
102	3'-6"	0.4	X		5'-8"	3.3		
103	4'-0"		X		5'-8"	3.5		
104	4'-6"	0.5	X OR Y		5'-8"	3.8		
105	1'-3"		X		5'-8"	4.1		
106	2'-0"	0.4	X		5'-8"	2.2		
107	2'-6"		X		5'-8"	2.6		
108	3'-0"	0.5	X		5'-8"	2.9		
109	3'-6"		X		5'-8"	3.2		
110	4'-0"	0.4	X		5'-8"	3.6		
111	4'-6"		X		5'-8"	3.8		
112	1'-3"	0.5	X		5'-8"	2.4		
113	2'-0"		X		5'-8"	2.8		
114	2'-6"	0.6	X		5'-8"	3.1		
115	3'-0"		X		5'-8"	3.4		
116	3'-6"	X	5'-8"		3.8			

DIA. OF PIPE	D.B.I. TYPE 13		CONCRETE TO DEDUCT FOR EACH PIPE CUBIC YARDS
	PIPE ON "X" SIDE OF INLET	PIPE ON "Y" SIDE OF INLET	
0	4'-11"	1'-3"	----
12"		0.1	
15"-18"			2'-0"
21"			0.2
24"			
27"		3'-0"	
30"-33"		3'-6"	
36"		4'-0"	
42"		4'-6"	
48"		5'-0"	

~ NOTES ~

- ① BASED ON "Z" AS EQUAL TO D+1+1'-0" WHEN "Y" DIMENSION IS LESS THAN 3'-6".  
BASED ON "Z" AS EQUAL TO D+1+1'-3" WHEN "Y" DIMENSION IS 3'-6" OR GREATER.
- ② SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT FOR PIPE.
- ③ Q = CU. YD. PER FT. INCREASE OR DECREASE WHEN Z VARIES.
- ④ SEE CUR. STD. DWGS. [RDB-013](#) AND [RDB-014](#) FOR DIMENSIONS.
5. SEE CUR. STD. DWGS. [RDB-018](#) AND [RDB-019](#) FOR STEEL REINFORCEMENT IN PIPE CHAMBER AND RISER WHEN H = 8'-0" OR GREATER.
- ⑥ INLET IS SHOWN ON PLANS AS "DROP BOX INLET TYPE 13". FOLLOWING THIS IS A NUMBER AND A BOX HEIGHT. USE THIS NUMBER WITH THIS CHART.
7. SEE CUR. STD. DWG. [RDB-016](#) FOR DIMENSIONS AND ESTIMATE OF QUANTITIES WHEN BOXES ARE LOCATED IN A GRADE CONDITION.

USE WITH CUR. STD. DWGS.  
[RDB-013](#) [RDB-014](#) [RDB-015](#)  
[RDB-016](#) [RDB-018](#) [RDB-019](#)

KENTUCKY DEPARTMENT OF HIGHWAYS	
DROP BOX INLET TYPE 13 (PIPE CHAMBER-SAG CONDITION)	
STANDARD DRAWING NO. <a href="#">RDB-017-03</a>	
SUBMITTED 	12-01-15
APPROVED 	12-01-15