

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

**REFERENCE CHART**

INLET SIZE ④			MAX. PIPE DIA.	PIPE LOCATION	Z ①	CONCRETE		
NO. ⑥	X	Y				CU. YD. ①②	Q ③	
1	2'-3"	1'-3"	12"	X OR Y	2'-2"	0.8	0.2	
2		2'-0"	15"	X	2'-5"	1.0	0.3	
3		1'-3"	18"	X	2'-9"	0.9	0.2	
4		2'-0"		X OR Y		1.1	0.3	
5		1'-3"	21"	X	3'-0"	1.0	0.2	
6		2'-0"		X OR Y		1.2	1.4	
7		2'-6"		Y		1.3		
8		1'-3"	24"	X	3'-3"	1.1	0.3	
9		2'-0"		X OR Y		1.3		
10		2'-6"		X OR Y		1.5		
11	2'-3"	27"	Y	3'-6"	1.6			
12	2'-6"		3'-0"		1.7			
13	1'-3"		X		1.3			
14	2'-0"				1.6			
15	2'-6"	3'-0"	1.7					
16	1'-3"	30"	X OR Y	3'-10"	1.9	0.4		
17	2'-0"		Y		2.0	0.3		
18	3'-0"		Y		2.1	0.4		
19	2'-3"	33"	X	4'-1"	2.3	0.3		
20	2'-6"				1'-3"		1.5	
21	3'-0"				2'-0"		1.8	
22	3'-6"				2'-6"		2.0	
23	1'-3"	36"	X	4'-4"	2.2	0.4		
24	2'-0"				3'-0"		2.4	
25	3'-0"				3'-6"		2.6	
26	2'-3"	42"	Y	5'-2"	2.1	0.4		
27	2'-6"				4'-0"		2.5	
28	3'-0"				4'-7"		2.7	
29	3'-6"				3'-0"		3.0	
30	1'-3"	48"	X	4'-4"	1.8	0.3		
31	2'-0"				2'-0"		2.2	
32	2'-6"				2'-6"		2.4	
33	3'-0"				3'-0"		2.6	
34	3'-6"	42"	X OR Y	4'-7"	3.0	0.5		
35	2'-3"				4'-0"		3.2	
36	2'-6"				4'-6"		2.8	0.4
37	3'-0"	42"	Y	5'-2"	2.9			
38	3'-6"				2.9			

INLET SIZE ④			MAX. PIPE DIA.	PIPE LOCATION	Z ①	CONCRETE		
NO. ⑥	X	Y				CU. YD. ①②	Q ③	
47	3'-0"	4'-6"	42"	Y	5'-2"	3.2	0.4	
48	3'-6"					3.4	0.5	
49	4'-0"					3.7		
50	4'-6"	1'-3"	48"	X	4'-11"	2.2	0.3	
51		2'-0"				2.6		
52		2'-6"				2.8		
53		3'-0"				3.1		
54		3'-6"				3.4		
55		4'-0"				3.7	0.5	
56	4'-6"	4.0						
57	2'-3"	5'-0"	48"	Y	5'-8"	3.2	0.4	
58	2'-6"					3.3		
59	3'-0"					3.6		
60	3'-6"					3.9		
61	4'-0"	4.2	0.5					
62	4'-6"	4.5						
63	1'-3"	5'-0"	48"	X	5'-5"	2.5	0.4	
64	2'-0"					3.0		
65	2'-6"					3.2		
66	3'-0"					3.5		
67	3'-6"	3.9	0.5					
68	4'-0"	4.2						
69	4'-6"	4.5						
70	5'-0"	X OR Y	4.8	0.6				

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		1'-3"	----
12"	2'-3"	2'-0"	0.1
15"-18"		2'-6"	
21"		3'-0"	
24"	3'-0"	3'-0"	0.2
27"	3'-6"	3'-6"	
30"-33"	4'-0"	4'-0"	0.3
36"	4'-6"	4'-6"	0.4
42"	5'-0"	5'-0"	0.5

~ NOTES ~

- ① BASED ON "Z" AS EQUAL TO D+†+1'-0" WHEN "Y" DIMENSION IS LESS THAN 3'-6". BASED ON "Z" AS EQUAL TO D+†+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-017** FOR DIMENSIONS AND ESTIMATE OF QUANTITIES WHEN BOXES ARE LOCATED IN A SAG CONDITION.

USE WITH CUR. STD. DWGS.  
**RDB-013 RDB-014 RDB-015**  
**RDB-017 RDB-018 RDB-019**

KENTUCKY DEPARTMENT OF HIGHWAYS	
DROP BOX INLET TYPE 13 (PIPE CHAMBER-GRADE CONDTN.)	
STANDARD DRAWING NO. <b>RDB-016-03</b>	
SUBMITTED <i>[Signature]</i>	12-01-15
APPROVED <i>[Signature]</i>	12-01-15