

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			X OR Y	2'-9"	0.9	0.2	
4		2'-0"	18"	X	2'-9"	1.1	0.3
5			X OR Y	3'-0"	1.0	0.2	
6		2'-0"	21"	X	3'-0"	1.2	
7			X OR Y	3'-3"	1.3		
8		2'-6"	24"	Y	3'-3"	1.4	
9			X	3'-6"	1.1		
10	2'-6"	24"	X	3'-6"	1.3	0.3	
11		X OR Y	3'-0"	1.6			
12	2'-3"	27"	Y	3'-0"	1.7		
13		3'-0"	27"	X	3'-6"	1.3	
14	2'-6"	27"	X	3'-6"	1.6		
15		X OR Y	3'-0"	1.7			
16	2'-3"	30"	Y	4'-1"	2.1	0.4	
17		3'-0"	30"	X	3'-10"	2.3	
18	2'-3"	30"	X	3'-10"	1.5	0.3	
19		2'-0"	30"	X	3'-10"	1.8	
20	2'-6"	33"	X	4'-1"	2.0	0.4	
21		3'-0"	33"	X OR Y	4'-4"	2.2	
22	2'-3"	33"	Y	4'-4"	2.5	0.4	
23		2'-6"	33"	X	4'-1"	1.6	0.3
24	3'-0"	33"	X	4'-1"	1.9		
25		3'-6"	33"	X	4'-1"	2.1	
26	2'-3"	36"	X OR Y	4'-4"	2.3		
27		2'-6"	36"	X OR Y	4'-4"	2.6	
28	3'-0"	36"	Y	4'-7"	2.4	0.4	
29		3'-6"	36"	Y	4'-7"	2.5	
30	2'-3"	36"	Y	4'-7"	2.7		
31		2'-6"	36"	Y	4'-7"	3.0	
32	3'-0"	36"	X	4'-4"	1.8	0.3	
33		3'-6"	36"	X	4'-4"	2.2	
34	2'-3"	42"	X	4'-4"	2.4	0.4	
35		2'-6"	42"	X	4'-4"	2.6	
36	3'-0"	42"	X OR Y	4'-7"	3.0		
37		3'-6"	42"	X OR Y	4'-7"	3.2	0.5
38	2'-3"	42"	Y	5'-2"	2.8	0.4	
39		2'-6"	42"	Y	5'-2"	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	0.4
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"	X	5'-5"	3.2	0.4
58	2'-6"					3.3	
59	3'-0"					3.6	
60	3'-6"					3.9	0.5
61	4'-0"					4.2	
62	4'-6"					4.5	
63	5'-0"	1'-3"	48"	X	5'-8"	2.5	
64		2'-0"				3.0	0.4
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"	4.8					

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		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"	
36"	4'-6"	4'-6"	0.3
42"	5'-0"	5'-0"	0.4
48"			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 FOOT INCREASE OR DECREASE WHEN Z VARIES.
- ④ SEE CURRENT STD. DWGS. **RDB-013** AND **RDB-014** FOR DIMENSIONS.
5. SEE CUR. STD. DWG. **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 CURRENT 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, 014, 015, 017, 018,
AND **RDB-019**

KENTUCKY	
DEPARTMENT OF HIGHWAYS	
DROP BOX INLET	
TYPE 13	
(PIPE CHAMBER-GRADE COND'TN.)	
STANDARD DRAWING NO. RDB-016-02	
SUBMITTED <i>John B. Sackett</i>	12-1-99
DIRECTOR, DIVISION OF DESIGN	DATE
APPROVED <i>J. M. Powell</i>	12-1-99
STATE HIGHWAY ENGINEER	DATE