

DIMENSIONS AND ESTIMATE OF QUANTITIES

NOTES

INLET SIZE NO.	X	Y	PIPE MAX. DIA.	① H	CONCRETE		REINF. STEEL LBS.
					CUBIC YARDS	② Q	
1			12"	2'-2"	0.99		
2	2'-0"		15"	2'-5"	1.06		28
3		2'-0"	18"	2'-9"	1.13		
4			21"	3'-0"	1.35		32
5	2'-6"	2'-6"	24"	3'-3"	1.51	0.3	37
6		2'-0"			1.44		32
7		2'-6"			1.60		37
8		2'-0"			1.68		42
9	3'-0"	2'-6"	27"	3'-6"	1.86		48
10		3'-0"			2.04	0.4	48
11		2'-0"			1.93	0.3	41
12		2'-6"	30"	3'-10"	2.13		47
13		3'-0"			2.34	0.4	54
14	3'-6"	3'-6"			2.54		60
15		2'-0"			2.02	0.3	41
16		2'-6"	33"	4'-1"	2.24		47
17		3'-0"			2.45		54
18		3'-6"			2.66		60
19		2'-0"			2.30	0.4	45
20		2'-6"			2.53		52
21	4'-0"	3'-0"	36"	4'-4"	2.76		59
22		3'-6"			2.99		66
23		4'-0"			3.22	0.5	73
24		2'-0"			2.70		50
25		2'-6"			2.95	0.4	57
26	4'-6"	3'-0"	42"	4'-11"	3.21		65
27		3'-6"			3.47		73
28		4'-0"			3.73	0.5	80
29		4'-6"			3.98		88
30		2'-0"			3.12	0.4	54
31		2'-6"			3.41		62
32		3'-0"			3.69		71
33	5'-0"	3'-6"	48"	5'-5"	3.97	0.5	79
34		4'-0"			4.26		88
35		4'-6"			4.54		96
36		5'-0"			4.83	0.6	104
37		2'-0"			3.58	0.4	58
38		2'-6"			3.89		67
39		3'-0"			4.20	0.5	76
40	5'-6"	3'-6"	54"	6'-0"	4.51		86
41		4'-0"			4.82		95
42		4'-6"			5.13		104
43		5'-0"			5.44	0.6	113
44		5'-6"			5.75		122
45		2'-0"			4.06		63
46	6'-0"	2'-6"	60"	6'-6"	4.39	0.5	72
47		3'-0"			4.73		82
48		3'-6"			5.07		92

INLET SIZE NO.	X	Y	PIPE MAX. DIA.	① H	CONCRETE		REINF. STEEL LBS.
					CUBIC YARDS	② Q	
49		4'-0"			5.40		102
50		4'-6"			5.74		111
51	6'-0"	5'-0"	60"	6'-6"	6.08	0.6	121
52		5'-6"			6.42		131
53		6'-0"			6.75	0.7	140
54		2'-0"			4.81		71
55		2'-6"			5.19	0.5	83
56		3'-0"			5.57		94
57		3'-6"			5.94	0.6	105
58	7'-0"	4'-0"	66"	7'-1"	6.32		116
59		4'-6"			6.70		127
60		5'-0"			7.07		138
61		5'-6"			7.45	0.7	149
62		6'-0"			7.83		160
63		7'-0"			8.58	0.8	182
64		2'-0"			5.37	0.5	76
65		2'-6"			5.77		88
66		3'-0"			6.17	0.6	99
67		3'-6"			6.57		111
68		4'-0"			6.98		123
69	7'-6"	4'-6"	72"	7'-7"	7.38		134
70		5'-0"			7.78	0.7	146
71		5'-6"			8.19		158
72		6'-0"			8.59		169
73		7'-0"			9.39	0.8	193
74		7'-6"			9.80		204

- ① BASED ON H AS EQUAL TO D++1'-0".
- ② Q = CUBIC YARDS OF CONCRETE PER FOOT INCREASE OR DECREASE WHEN H VARIES FROM D++1'-0".
- 3. NO DEDUCTIONS HAVE BEEN MADE FOR PIPE, SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT.
- 4. THE DIMENSIONS AND QUANTITIES HAVE BEEN CALCULATED FOR ROUND CONCRETE PIPE. WHEN NON-CIRCULAR PIPE IS USED THE BOX SIZE SHALL BE DETERMINED BY CONTROLLING DIMENSIONS OF THE PIPE.

REFERENCE CHART

DIA. OF PIPE	JUNCTION BOX		CONCRETE TO DEDUCT FOR EACH PIPE CUBIC YARDS
	PIPE ON "X" SIDE OF BOX	PIPE ON "Y" SIDE OF BOX	
0			---
12"	2'-0"	2'-0"	
15"-18"			0.1
21"-24"	2'-6"	2'-6"	
27"	3'-0"	3'-0"	
30"-33"	3'-6"	3'-6"	0.2
36"	4'-0"	4'-0"	0.3
42"	4'-6"	4'-6"	0.4
48"	5'-0"	5'-0"	0.5
54"	5'-6"	5'-6"	0.6
60"	6'-0"	6'-0"	0.7
66"	7'-0"	7'-0"	0.8
72"	7'-6"	7'-6"	1.0

USE WITH CUR. STD. DWG. RDX-001

KENTUCKY	
DEPARTMENT OF HIGHWAYS	
JUNCTION BOX (DIMENSIONS & QUANTITIES)	
STANDARD DRAWING NO. RDX-002-03	
SUBMITTED: <i>John B. Sackett</i>	12-1-99
<small>DIRECTOR, DIVISION OF DESIGN</small>	<small>DATE</small>
APPROVED: <i>J. M. Howell</i>	12-1-99
<small>STATE HIGHWAY ENGINEER</small>	<small>DATE</small>