

DIMENSIONS AND ESTIMATE OF QUANTITIES ( GRADE CONDITION )

| INLET SIZE ④ |       |        | MAX.<br>PIPE<br>DIA. | LOCATION | Z<br>① | CONCRETE       |        |
|--------------|-------|--------|----------------------|----------|--------|----------------|--------|
| NO. ⑥        | X     | Y      |                      |          |        | CU. YD.<br>① ② | Q<br>③ |
| 1            | 2'-3" | 2'-0"  | 12"                  | X OR Y   | 2'-2"  | 0.9            | 0.3    |
| 2            |       |        | 15"                  |          | 2'-5"  | 1.0            |        |
| 3            |       |        | 18"                  |          | 2'-9"  | 1.1            |        |
| 4            |       |        | 21"                  | X        | 3'-0"  |                |        |
| 5            |       | X OR Y |                      | 1.3      |        |                |        |
| 6            |       | 2'-6"  | Y                    |          |        |                |        |
| 7            | 2'-6" | 2'-0"  | 24"                  |          | X      | 3'-3"          |        |
| 8            |       | 2'-6"  |                      | X OR Y   |        |                |        |
| 9            | 3'-0" | 2'-0"  | 27"                  | X        | 3'-6"  | 1.5            |        |
| 10           |       | 2'-6"  |                      |          | 1.7    |                |        |
| 11           | 3'-6" | 2'-0"  |                      |          | 30"    | 3'-10"         |        |
| 12           |       | 2'-6"  |                      |          |        |                | 2.0    |
| 13           |       | 2'-0"  | 33"                  |          |        | 4'-1"          | 1.9    |
| 14           |       | 2'-6"  |                      |          | 2.0    |                |        |
| 15           | 4'-0" | 2'-0"  | 36"                  |          | 4'-4"  | 2.1            | 0.4    |
| 16           |       | 2'-6"  |                      |          |        | 2.3            |        |
| 17           | 4'-6" | 2'-0"  |                      |          |        | 42"            |        |
| 18           |       | 2'-6"  | 2.7                  |          |        |                |        |
| 19           | 5'-0" | 2'-0"  | 48"                  |          | 5'-5"  | 2.9            |        |
| 20           |       | 2'-6"  |                      |          |        | 3.2            |        |

DIMENSIONS AND ESTIMATE OF QUANTITIES ( SAG CONDITION )

| INLET SIZE ④ |        |       | MAX.<br>PIPE<br>DIA. | LOCATION | Z<br>① | CONCRETE       |        |     |
|--------------|--------|-------|----------------------|----------|--------|----------------|--------|-----|
| NO. ⑥        | X      | Y     |                      |          |        | CU. YD.<br>① ② | Q<br>③ |     |
| 21           | 4'-11" | 2'-0" | 12"                  | X OR Y   | 2'-2"  | 1.4            | 0.4    |     |
| 22           |        |       | 15"                  |          | 2'-5"  | 1.5            |        |     |
| 23           |        |       | 18"                  |          | 2'-9"  | 1.7            |        |     |
| 24           |        |       | 21"                  | X        | 3'-0"  | 1.8            |        |     |
| 25           |        | 2'-6" |                      | X OR Y   |        | 1.9            |        |     |
| 26           |        | 2'-0" | X                    | 3'-3"    | 2.0    |                |        |     |
| 27           |        | 2'-6" | X OR Y               |          |        |                |        |     |
| 28           |        | 2'-0" | 27"                  | X        | 3'-6"  | 2.1            |        |     |
| 29           |        | 2'-6" |                      |          |        |                |        |     |
| 30           |        | 2'-0" |                      |          | 30"    | 3'-10"         |        | 2.3 |
| 31           |        | 2'-6" |                      |          |        |                |        |     |
| 32           |        | 2'-0" | 33"                  |          | 4'-1"  | 2.2            |        |     |
| 33           |        | 2'-6" |                      |          |        | 2.4            |        |     |
| 34           |        | 2'-0" | 36"                  |          | 4'-4"  | 2.3            |        |     |
| 35           |        | 2'-6" |                      |          |        | 2.5            |        |     |
| 36           |        | 2'-0" | 42"                  |          | 4'-11" |                |        | 2.8 |
| 37           |        | 2'-6" |                      |          |        |                |        |     |
| 38           |        | 2'-0" | 48"                  | 5'-5"    | 3.0    |                |        |     |
| 39           |        | 2'-6" |                      |          |        |                |        |     |

~ NOTES ~

- ① BASED ON "Z" AS EQUAL TO D+†+12" .
- ② SEE REFERENCE CHART FOR QUANTITIES TO DEDUCT FOR PIPE.
- ③ Q = CU. YDS. PER FT. INCREASE OR DECREASE WHEN "Z" VARIES.
- ④ SEE CUR. STD. DWG. RDB-030 FOR DIMENSIONS.
5. SEE CUR. STD. DWGS. RDB-034 AND RDB-035 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 16". FOLLOWING THIS IS A NUMBER AND A BOX HEIGHT. USE THIS NUMBER WITH THIS CHART.

USE WITH CUR. STD. DWGS.

RDI-200RDB-014RDB-030

RDB-031RDB-032RDB-034

RDB-035

REFERENCE CHART ( GRADE CONDITION )

| DIA.<br>OF<br>PIPE | D.B.I. TYPE 16                  |                                 | CONCRETE<br>TO DEDUCT<br>FOR EACH PIPE |
|--------------------|---------------------------------|---------------------------------|----------------------------------------|
|                    | PIPE ON<br>"X" SIDE<br>OF INLET | PIPE ON<br>"Y" SIDE<br>OF INLET |                                        |
|                    |                                 |                                 | CU. YDS.                               |
| 0                  | 2'-3"                           | 2'-0"                           | ---                                    |
| 12"                |                                 |                                 | 0.1                                    |
| 15"-18"            |                                 |                                 |                                        |
| 21"                |                                 | 2'-6"                           |                                        |
| 24"                | 2'-6"                           |                                 |                                        |
| 27"                | 3'-0"                           | ---                             | 0.2                                    |
| 30"-33"            | 3'-6"                           |                                 |                                        |
| 36"                | 4'-0"                           |                                 | 0.3                                    |
| 42"                | 4'-6"                           |                                 | 0.4                                    |
| 48"                | 5'-0"                           |                                 | 0.5                                    |

REFERENCE CHART ( SAG CONDITION )

| DIA.<br>OF<br>PIPE | D.B.I. TYPE 16                  |                                 | CONCRETE<br>TO DEDUCT<br>FOR EACH PIPE |
|--------------------|---------------------------------|---------------------------------|----------------------------------------|
|                    | PIPE ON<br>"X" SIDE<br>OF INLET | PIPE ON<br>"Y" SIDE<br>OF INLET |                                        |
|                    |                                 |                                 | CU. YDS.                               |
| 0                  | 4'-11"                          | 2'-0"                           | ---                                    |
| 12"                |                                 |                                 | 0.1                                    |
| 15"-18"            |                                 |                                 |                                        |
| 21"                |                                 | 2'-6"                           |                                        |
| 24"                |                                 |                                 |                                        |
| 27"                |                                 | ----                            | 0.2                                    |
| 30"-33"            |                                 |                                 | 0.3                                    |
| 36"                |                                 |                                 | 0.4                                    |
| 42"                |                                 |                                 | 0.5                                    |
| 48"                |                                 |                                 |                                        |



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



INLETS

DROP BOX INLET TYPE 16 (DIMENSIONS & ESTIMATE OF QUANTITIES)

STANDARD DRAWING NUMBER  
RDB-033-03

DRAINAGE

REVISION DATE: 12/01/2015  
REVISION NUMBER: 0

SUBMITTED 12-01-2015  
DIVISION DIRECTOR

APPROVED 12-01-2015  
STATE HIGHWAY ENGINEER