

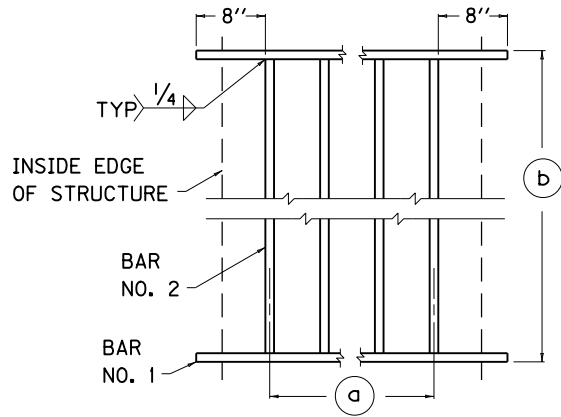
~ NOTES ~

ALL COMPONENTS ARE 1" X 2" STRUCTURAL STEEL BARS.

Ⓐ EQUALLY SPACE BARS NO. 2.

Ⓑ LENGTH OF GRATE SHALL BE EITHER 2'-0" OR 3'-0".

① ADDITIONAL Ⓐ BARS: 1 REQUIRED FOR 15° SKEW,
2 REQUIRED FOR 30° SKEW.



TYPICAL GRATE

1" X 2" STRUCTURAL STEEL BARS

BOX SIZE	GRATE		BAR NO. 1		BAR NO. 2		LBS STRUCTURAL STEEL	
	NO.	LG.	LENGTH	NO. BARS	LENGTH	EACH GRATE	TOTAL	
15" - 18"	1	2'-0"	2'-5"	3	1'-10"	70	161	
	2	3'-0"			2'-10"	91		
24"	1	2'-0"	3'-0"	4	1'-10"	91	300	
	2							
	3	3'-0"			2'-10"	118		

NO. 4 REINFORCEMENT BARS

PIPE SIZE	① BAR a		BAR b		BAR c1		BAR c2		BAR c3		BAR d		TOTAL STEEL	CLASS A CONC. CU. YD.
	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	LBS.	
15"	12	2'-5"	4	8'-6"	0	0	6	1'-0"	4	1'-6"	4	4'-3"	62	1.2
18"														
24"	14	3'-0"	4	10'-6"	2	1'-0"	6	1'-3"	6	2'-0"	4	6'-3"	87	

FOR BOX DETAIL SEE
CUR. STD. DWG. RDB-100

KENTUCKY
DEPARTMENT OF HIGHWAYS

GRATES FOR
SLOPED BOX
OUTLET TYPE 1

STANDARD DRAWING NO. RDB-101-04

SUBMITTED: *John B. Sackett* DIRECTOR, DIVISION OF DESIGN 12-1-99 DATE
APPROVED: *J. M. Howell* STATE HIGHWAY ENGINEER 12-1-99 DATE