30''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	4	1		
C_1	4	2	1	5		
C_2	4	2	3	5		
E_1	5	2	7	0	4	0
E_2	5	2	7	5	4	5
F	4	4	1	3	0	4
G_1	4	2	4	0		
G_2	4	3	6	4		
H	4	4	4	10	3	2
N	4	6	3	8		
Q	4	2	3	5		
R	4	4	0	8		
V_1	5	4	2	10	1	7
V_2	5	4	3	11	2	8

36''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	4	9		
C_1	4	2	2	7		
C_2	4	2	4	3		
E_1	5	2	7	8	4	8
E_2	5	2	8	1	5	1
F	4	5	1	3	0	4
G_1	4	2	5	3		
G_2	4	3	7	8		
H	4	4	5	4	3	8
N	4	6	4	3		
Q	4	2	4	2		
R	4	5	0	8		
V_1	5	4	3	1	1	10
V_2	5	4	4	1	2	10

42''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	5	5		
C_1	4	2	1	7		
C_2	4	2	3	7		
C_3	4	2	4	10		
E_1	5	2	8	5	5	5
E_2	5	2	8	10	5	10
F	4	6	1	3	0	4
G_1	4	1	4	5		
G_2	4	2	6	7		
G_3	4	3	8	11		
H	4	5	5	10	4	2
N	4	6	4	10		

42'' (CONTINUED)

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
Q	4	2	4	11		
R	4	5	0	9		
V_1	5	4	3	3	2	0
V_2	5	4	4	3	3	0
V_3	5	2	5	3	4	0

48''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	5	11		
C_1	4	2	2	4		
C_2	4	2	4	4		
C_3	4	2	5	4		
E_1	5	2	9	1	6	1
E_2	5	2	9	6	6	6
F	4	7	1	3	0	4
G_1	4	1	5	4		
G_2	4	2	7	8		
G_3	4	3	9	11		
H	4	6	6	3	4	7
N	4	6	5	4		
Q	4	2	5	7		
R	4	6	0	10		
V_1	5	4	3	5	2	2
V_2	5	4	4	5	3	2
V_3	5	2	5	5	4	2

54''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	6	6		
C_1	4	2	1	1		
C_2	4	2	3	2		
C_3	4	2	5	3		
C_4	4	2	5	11		
E_1	5	2	9	10	6	10
E_2	5	2	10	1	7	1
F	4	7	1	3	0	4
G_1	4	2	6	9		
G_2	4	2	9	0		
G_3	4	3	11	4		
H	4	6	6	10	5	2
N	4	6	5	11		
Q	4	2	6	4		
R	4	7	0	10		
V_1	5	4	3	8	2	5
V_2	5	4	4	8	3	5
V_3	5	4	5	7	4	4

60''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	7	2		
C_1	4	2	2	2		
C_2	4	2	4	3		
C_3	4	2	6	4		
C_4	4	2	6	6		
E_1	5	2	10	7	7	7
E_2	5	2	11	0	8	0
F	4	8	1	3	0	4
G_1	4	2	8	1		
G_2	4	2	10	4		
G_3	4	3	12	8		
H	4	7	7	4	5	8
N	4	6	6	6		
Q	4	2	7	1		
R	4	7	0	10		
V_1	5	4	3	10	2	7
V_2	5	4	4	10	3	7
V_3	5	4	5	9	4	6
V_4	5	2	6	9	5	6

66''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	7	9		
C_1	4	2	3	1		
C_2	4	2	5	3		
C_3	4	4	7	1		
E_1	5	2	11	3	8	3
E_2	5	2	11	8	8	8
F	4	9	1	3	0	4
G_1	4	1	7	0		
G_2	4	2	9	4		
G_3	4	2	11	8		
G_4	4	3	13	11		
H	4	7	7	9	6	1
N	4	6	7	1		
Q	4	3	7	9		
R	4	8	0	11		
V_1	5	4	4	1	2	10
V_2	5	4	5	0	3	9
V_3	5	4	6	0	4	9
V_4	5	2	6	11	5	8

72''

MARK	SIZE	NO (1)	LGTH FT	LGTH IN	K FT	K IN
A	5	4	8	6		
C_1	4	2	2	0		
C_2	4	2	4	1		
C_3	4	2	6	3		
C_4	4	4	7	7		
E_1	5	2	12	0	9	0
E_2	5	2	12	5	9	5
F	4	9	1	3	0	4
G_1	4	1	8	4		
G_2	4	2	10	8		
G_3	4	2	13	0		
G_4	4	3	14	10		
H	4	9	8	3	6	7
N	4	6	7	7		
Q	4	3	8	6		
R	4	9	1	0		
V_1	5	4	4	3	3	0
V_2	5	4	5	2	3	11
V_3	5	4	6	2	4	11
V_4	5	4	7	1	5	10

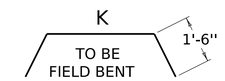
NOTES

(1) NUMBER OF BARS IN ONE HEADWALL.

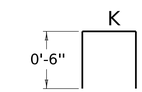
2 DIMENSIONS ARE 0. TO 0. OF BARS.

3 ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.

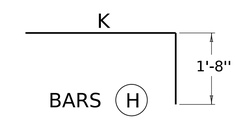
BENT BAR SHAPES



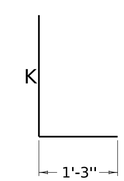
BARS (E)



BARS (F)



BARS (H)



BARS (V)

(USE WITH CURRENT RDH-110)

KENTUCKY
DEPARTMENT OF HIGHWAYS

BILL OF REINFORCEMENT
30'' TO 72'' DIAMETER
NON-CIRCULAR PIPE HEADWALLS
0° SKEW

STANDARD DRAWING NO. RDH-350-03

SUBMITTED _____ DIRECTOR DIVISION OF DESIGN _____ DATE

APPROVED _____ STATE HIGHWAY ENGINEER _____ DATE