7′ X 5′

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	8	7		
A2	5	2	11	5		
C1	4	1	7	9		
C2	4	1	10	4		
C3	4	1	12	11		
C4	4	1	15	6		
C5	4	2	17	2		
E1	5	2	14	8	11	8
E2	5	2	15	0	12	0
F	4	12	1	3	0	6
G1	4	2	12	3		
G2	4	2	14	2		
G3	4	2	16	2		
G4	4	3	18	0		
H	4	10	9	8	8	0
K1	4	1	2	8		
K2	4	1	4	7		
K3	4	1	6	5		
K4	4	2	7	6		
N1	4	3	7	6		
N2	4	3	17	2		
Q	4	2	8	0		
R	4	9	1	3		
S1	5	2	1	7		
S2	5	2	2	3		
S3	5	2	3	0		
S4	5	2	3	8		
S5	5	2	4	5		
S6	5	2	5	1		
S7	5	2	5	10		
S8	5	2	6	4		
T1	5	2	2	2		
T2	5	2	3	7		
T3	5	2	5	1		
T4	5	2	6	6		
T5	5	2	7	10		
T6	5	2	8	10		
V1	5	2	4	3	3	0
V2	5	2	5	0	3	9
V3	5	2	5	9	4	6
V4	5	2	6	7	5	4
V5	5	2	7	4	6	1
V6	5	7	7	11	6	8
W1	5	2	4	4	3	1
W2	5	2	5	5	4	2
W3	5	2	6	6	5	3
W4	5	2	7	7	6	4

7′ X 6′

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	9	6		
A2	5	2	12	8		
B1	5	4	3	0		
B2	5	4	3	9		
B3	5	4	4	7		
B4	5	4	5	4		
B5	5	4	6	1		
B6	5	4	6	11		
B7	5	14	7	2		
C1	4	2	7	10		
C2	4	2	10	5		
C3	4	2	13	1		
C4	4	2	15	7		
C5	4	2	18	2		
C6	4	4	18	6		
E1	5	2	16	8	11	8
E2	5	2	17	3	12	3
F	4	12	1	5	0	6
G1	4	1	10	9		
G2	4	2	12	6		
G3	4	2	14	4		
G4	4	2	16	2		
G5	4	3	18	0		
H	4	10	11	2	9	0
J1	5	4	3	1		
J2	5	4	4	2		
J3	5	4	5	3		
J4	5	4	6	4		
J5	5	2	7	5		
K1	4	2	2	7		
K2	4	2	4	6		
K3	4	2	6	3		
K4	4	2	8	1		
K5	4	4	8	4		
M1	4	1	2	4		
M2	4	27	3	9		
N1	4	7	8	4		
N2	4	5	16	7		
N3	4	2	18	8		
P	5	28	5	3	3	6
Q	5	5	8	0		
R	5	9	3	6		
S1	5	2	1	2		
S2	5	2	1	11		
S3	5	2	2	7		
S4	5	2	3	4		
S5	5	2	4	0		
S6	5	2	5	8		
S7	5	2	5	5		
S8	5	2	6	2		

7′ X 6′ (CONTINUED)

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
S9	5	2	6	6		
T1	5	2	1	3		
T2	5	2	2	7		
T3	5	2	4	0		
T4	5	2	5	5		
T5	5	2	6	10		
T6	5	2	8	4		
T7	5	2	9	0		

7′ X 7′

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	10	8		
A2	5	2	14	2		
B1	5	4	3	6		
B2	5	4	4	3		
B3	5	4	5	0		
B4	5	4	5	10		
B5	5	4	6	7		
B6	5	4	7	4		
B7	5	16	8	2		
C1	4	2	7	10		
C2	4	2	10	6		
C3	4	2	13	1		
C4	4	2	15	8		
C5	4	2	18	4		
C6	4	6	19	11		
E1	5	2	16	8	11	8
E2	5	2	17	3	12	3
F	4	12	1	5	0	6
G1	4	2	12	3		
G2	4	2	14	2		
G3	4	2	16	1		
G4	4	2	18	1		
G5	4	3	20	0		
H	4	11	12	2	10	0
J1	5	4	3	7		
J2	5	4	4	8		
J3	5	4	5	9		
J4	5	4	6	10		
J5	5	4	7	11		
K1	4	2	2	8		
K2	4	2	4	6		
K3	4	2	6	4		
K4	4	2	8	2		
K5	4	6	9	4		
M1	4	1	2	5		
M2	4	29	3	9		
N1	4	7	9	4		
N2	4	5	18	0		

7′ X 7′ (CONTINUED)

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
N3	4	2	20	1		
P	5	30	5	9	4	0
Q	5	5	8	0		
R	5	9	3	6		
S1	5	2	1	2		
S2	5	2	1	11		
S3	5	2	2	7		
S4	5	2	3	4		
S5	5	2	4	0		
S6	5	2	4	8		
S7	5	2	5	5		
S8	5	2	6	2		
S9	5	2	6	6		
T1	5	2	1	3		
T2	5	2	2	7		
T3	5	2	4	0		
T4	5	2	5	5		
T5	5	2	6	10		
T6	5	2	8	4		
T7	5	2	9	0		

8′ X 4′

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	7	5		
A2	5	2	9	11		
C1	4	1	8	5		
C2	4	1	11	0		
C3	4	1	13	6		
C4	4	1	16	1		
C5	4	1	16	5		
E1	5	2	16	0	13	0
E2	5	2	16	5	13	5
F	4	14	1	3	0	6
G1	4	1	12	4		
G2	4	2	14	3		
G3	4	2	16	1		
G4	4	3	18	0		
H	4	10	8	8	7	0
K1	4	1	2	8		
K2	4	1	4	6		
K3	4	1	6	3		
K4	4	1	6	6		
N1	4	3	6	6		
N2	4	3	16	5		
Q	4	2	9	0		
R	4	10	1	3		
S1	5	2	1	7		
S2	5	2	2	3		
S3	5	2	3	0		

8′ X 4′ (CONTINUED)

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
S4	5	2	3	8		
S5	5	2	4	5		
S6	5	2	5	1		
S7	5	2	5	10		
S8	5	2	6	6		
S9	5	2	7	0		
T1	5	2	1	9		
T2	5	2	3	2		
T3	5	2	4	7		
T4	5	2	6	0		
T5	5	2	7	5		
T6	5	2	8	10		
T7	5	2	9	9		
V1	5	2	3	9	2	6
V2	5	2	4	6	3	3
V3	5	2	5	3	4	0
V4	5	2	6	1	4	10
V5	5	9	6	11	5	8
W1	5	2	3	10	2	7
W2	5	2	4	11	3	8
W3	5	2	6	0	4	9
W4	5	1	7	1	5	10

8′ X 5′

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
A1	5	2	8	6		
A2	5	2	11	5		
C1	4	1	8	5		
C2	4	1	11	0		
C3	4	1	13	7		
C4	4	1	16	3		
C5	4	2	17	10		
E1	5	2	16	0	13	0
E2	5	2	16	5	13	5
F	4	14	1	3	0	6
G1	4	2	14	0		
G2	4	2	16	0		
G3	4	2	18	0		
G4	4	3	20	0		
H	4	11	9	8	8	0
K1	4	1	2	9		
K2	4	1	4	7		
K3	4	1	6	5		
K4	4	2	7	6		
N1	4	3	7	6		
N2	4	3	17	10		
Q	4	2	9	0		
R	4	10	1	3		
S1	5	2	1	7		

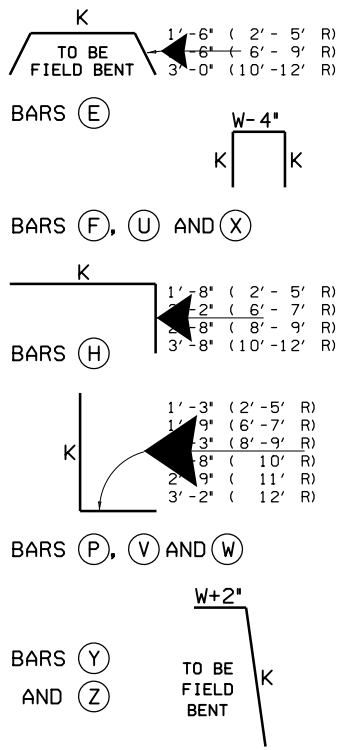
8′ X 5′ (CONTINUED)

MARK	SIZE	NO ①	LGTH FT	LGTH IN	K FT	K IN
S2	5	2	2	3		
S3	5	2	3	0		
S4	5	2	3	8		
S5	5	2	4	5		
S6	5	2	5	1		
S7	5	2	5	10		
S8	5	2	6	6		
S9	5	2	7	0		
T1	5	2	1	9		
T2	5	2	3	2		
T3	5	2	4	7		
T4	5	2	6	0		
T5	5	2	7	5		
T6	5	2	8	10		
T7	5	2	9	9		
V1	5	2	4	3	3	0
V2	5	2	5	0	3	9
V3	5	2	5	9	4	6
V4	5	2	6	6	5	3
V5	5	2	7	4	6	1
V6	5	8	7	10	6	7
W1	5	2	4	4	3	1
W2	5	2	5	5	4	2
W3	5	2	6	6	5	3
W4	5	2	7	7	6	4

NOTES

1. ① NUMBER OF BARS IN ONE HEADWALL.
2. DIMENSIONS ARE O. TO O. OF BARS.
3. ALL BARS ARE STRAIGHT EXCEPT THOSE SHOWN BELOW.
4. R = BOX OR PIPE RISE
5. W = WING WALL WIDTH

BENT BAR SHAPES



KENTUCKY
DEPARTMENT OF HIGHWAYS

BILL OF REINFORCEMENT
7′ X 5′ - 8′ X 5′ HEADWALLS
PRECAST BOX CULVERTS
30° SKEW

STANDARD DRAWING NO. RDH-1332-03

SUBMITTED John B Sachatich — DIRECTOR DIVISION OF DESIGN — 12-1-99 DATE

APPROVED J M Yowell — STATE HIGHWAY ENGINEER — 12-1-99 DATE