45° SKEW 32'-0" - 33'-6" BRIDGE WIDTH 2:1 FILL SLOPES

Bill of Reinforcement

MARK	A1					A2					A3			A4		A5*			A6								A7				A8				A9			A10		A11		A12		A13		A14*		A15		A16		A17		A18	
TYPE	Str.					Str.					Str.			Str.		Str.			4								Str.				Str.				Str.			8		8		8		8		7		7		Str.		Str.		Str.	
SIZE											#5			#5		#5																				#5			#5		#5		#5		#5		#5		#5		#5		#5	
H	No.	Size	Length ft.	Length in.	Spacing	No.	Size	Length ft.	Length in.	Spacing	No.	Length ft.	Length in.	No.	Length ft.	No.	Length ft.	Length in.	No.	Size	Length ft.	Length in.	Spacing	A ft.	A in.	B ft.	B in.	C ft.	C in.	D ft.	D in.	No.	Size	Length ft.	Length in.	Spacing	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.	Length in.	No.	Length ft.
15-16	112	10	11	8	12	112	7	11	8	12	24	24	20	6	24	38	11	24	62	1	109	9	9	11	12	8	⅛	1	10	0	11⅜	8	6	113	5	4	11	12	109	6	12	10	12	113	12	10	12	14	41	8	14	38	2	14	18	6	14	18	1	14	63	7	14	59	5	2	45	0	2	21	11	140	5	9
13-14	107	9	10	8	12	107	7	10	8	12	22	18	2	22	34	10	22	61	8	103	8	8	3	12	6	11	1	3	0	8	7	3	107	5	4	11	12	103	6	10	10	12	107	10	10	12	12	37	9	12	34	2	12	16	6	12	16	1	12	63	7	12	59	5	2	41	0	2	19	11	128	5	9
11-12	101	8	9	8	12	101	6	9	8	12	20	15	10	20	29	9	20	61	3	96	7	7	1	12	5	10½	1	2	0	7	6	2	100	5	4	11	12	96	5	8	10	12	100	8	10	12	10	32	9	10	29	2	10	14	6	10	14	1	10	63	8	10	59	5	2	36	0	2	17	11	114	5	9
9-10	94	7	8	8	12	94	5	8	8	12	18	13	6	18	24	8	18	60	9	89	6	6	1	12	5	1	1	1	0	0	6	5	4	93	5	4	11	12	89	5	6	10	12	93	6	10	12	8	27	9	8	24	2	8	12	6	8	12	1	8	63	8	8	59	5	2	31	0	2	15	11	100	5	9
7-8	89	6	7	2	12	89	5	7	2	12	16	10	11	16	18	11	16	59	11	82	5	5	7	12	4	8½	0	10	0	5	4	11	86	5	4	11	12	82	5	4	10	12	86	4	10	12	6	22	10	6	19	2	6	10	6	6	10	1	6	63	8	6	59	5	2	26	0	2	13	11	86	5	9
5-6	83	5	6	2	12	83	5	6	2	12	14	8	7	14	13	9	14	59	6	75	5	5	7	12	4	8½	0	10	0	5	4	11	79	5	4	11	12	75	5	2	10	12	79	2	10	12	4	17	10	4	14	2	4	8	6	4	8	1	4	63	8	4	59	5	2	21	0	2	11	11	72	5	9

Reinforcement Details

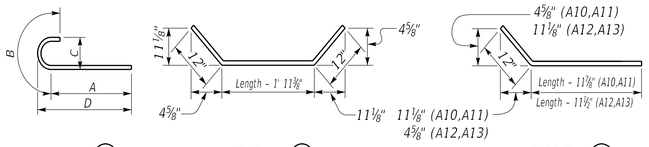
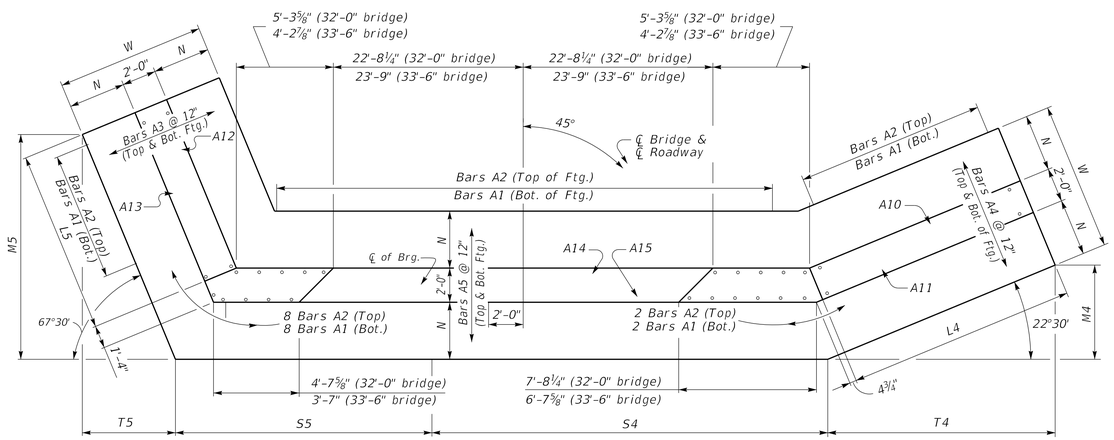


Table of Dimensions

H	W	N	M4	M5	S4	S5	T4	T5	L4	L5
	Length ft.	Length in.	Length ft.	Length in.	Length ft.	Length in.	Length ft.	Length in.	Length ft.	Length ft.
15-16	12	0	5	0	14	8¼	19	1¼	36	4⅝	25	8	35	5⅝	7	11	37	16
13-14	11	0	4	6	13	1½	16	1⅜	35	9⅜	25	10	31	8⅛	7	⅛	33	14
11-12	10	0	4	0	11	2	14	9½	35	2¼	26	0	26	11⅞	6	1½	28	12
9-10	9	0	3	6	9	2⅝	12	7⅝	34	7	26	2	22	3½	5	2¾	23	10
7-8	7	6	2	9	7	3	10	3⅞	33	8¼	26	5	17	6	4	3⅜	18	8
5-6	6	6	2	3	5	3⅝	8	2	33	1	26	7	12	9½	3	4⅜	13	6

NOTE: Bars with * next to mark may have lengths over 60 ft and may require a lap splice of 2'-2". The contractor shall determine the lap location and include the extra length necessary for the lap when ordering the steel reinforcement. This extra length is not included in the quantities and shall be incidental to the rebar.

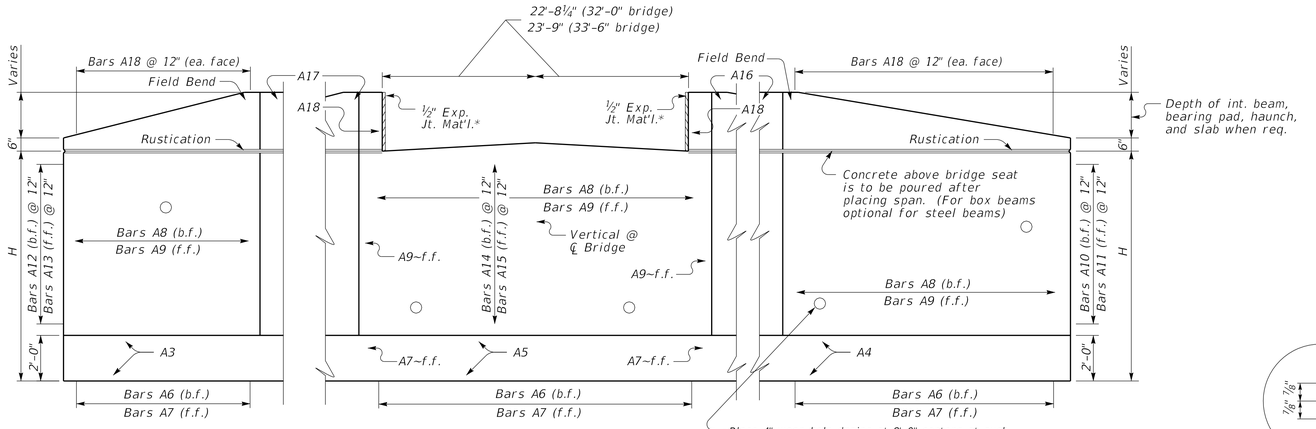
4 foot min. shoulder



(Left Skew as shown; right skew opp. hand)

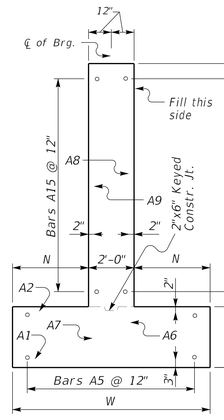
PLAN

NOTE: Trim A16 & A17 bars if necessary

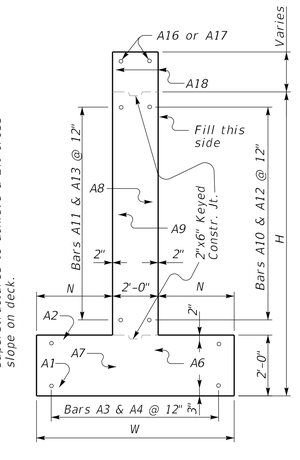


ELEVATION

*Expansion Joint Material:
AASHTO M153
Type-I Sponge Rubber



WALL SECTION



WING SECTION

Quantities

H	Concrete*	Reinforcement
	C.Y.	LBS.
5	58.5	4790
6	64.2	4790
7	82.8	6667
8	89	6667
9	113.5	9350
10	120.2	9350
11	144.2	13073
12	151.4	13073
13	178	18320
14	185.8	18320
15	213	23554
16	221.2	23554

*Concrete quantities computed using 21" beam depth on ½" pad & 32'-0" Bridge Width

GENERAL NOTES

SPECIFICATIONS: Construct abutments according to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. Abutments are designed for side by side box beams as detailed in Standard Drawings BDP-001 through BDP-012, current edition. Dimensions may be adjusted to allow for 33'-6" rolled steel beam bridge width.

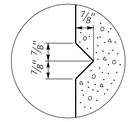
FOUNDATION PRESSURE: Construct abutment footings on solid rock bearing material that can support a pressure of 8000 psf service or 10,800 psf strength factored as recommended by a geotechnical engineer.

WING LENGTHS: Calculated assuming 21" superstructure depth and stream bank elevation at top of footing.

FOOTING ELEVATION: Construct bottom of footing below the anticipated scour elevation. (This typically entails embedding the footings 1'-0" to 2'-0" into rock and pouring concrete directly against cut rock faces as recommended by geotechnical engineer.)

NOTE: Distances to bars shown are clear dimensions unless otherwise noted.

MATERIAL SPECIFICATIONS:
Concrete, Class "A" = 3500 psi
Steel Reinforcement = Grade 60



RUSTICATION GROOVE

REVISION DATE: 08/11/2025
REVISION NUMBER: 0

SUBMITTED Mabel Cayton 08-11-2025
DIVISION DIRECTOR DATE

APPROVED Jason Bellamy 08-11-2025
STATE HIGHWAY ENGINEER DATE

BRIDGE STANDARDS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

45° SKEW 32'-0" - 33'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER

STANDARD DRAWING NUMBER
BSA-112-01