

45° SKEW 16'-0" - 17'-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	7	7	Str.	Str.	Str.				
SIZE	#5	#5	#5	#5	#5	#5				#5	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5			
H	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.	Length	no.			
15-16	90	11.1	2.90	7.11	8.12	24.20	6.24	38.12	24.39	5.87	9.11	12.8	1.10	0.71	8.6	9.0	5.4	11.12	8.7	6.12	10.12			
13-14	84	9.10	8.14	7.10	8.12	22.18	2.23	34.10	22.39	0.81	8.8	3.12	6.11	3.0	8.7	3.84	5.4	11.12	8.1	6.10	10.12			
11-12	78	8.9	8.12	7.8	6.9	8.12	15.16	23.29	9.23	38.7	7.4	7.1	12.5	10.1	2.0	7.6	2.77	5.4	11.12	7.4	5.8	10.12		
9-10	72	7.8	8.12	7.2	5.8	8.12	18.13	6.18	24.8	18.38	2.67	6.6	1.12	5.1	1.0	0.0	6.5	4.70	5.4	11.12	6.7	5.6	10.12	
7-8	66	6.7	2.12	6.6	5.7	2.12	16.10	1.18	18.1	16.37	4.60	5.5	1.12	4.8	0.10	0.0	5.4	11.63	5.4	11.12	6.0	5.4	10.12	
5-6	60	5.6	5.6	2.12	6.0	5.6	2.12	14.8	7.14	13.9	14.36	10.0	5.7	1.12	4.8	0.10	0.0	5.4	11.56	5.4	11.12	5.3	5.2	10.12
4																								

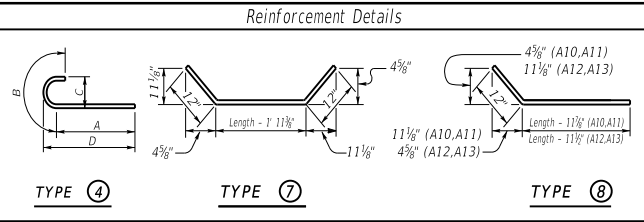
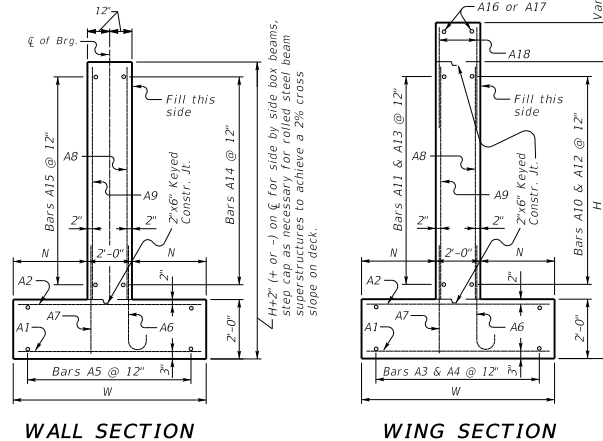
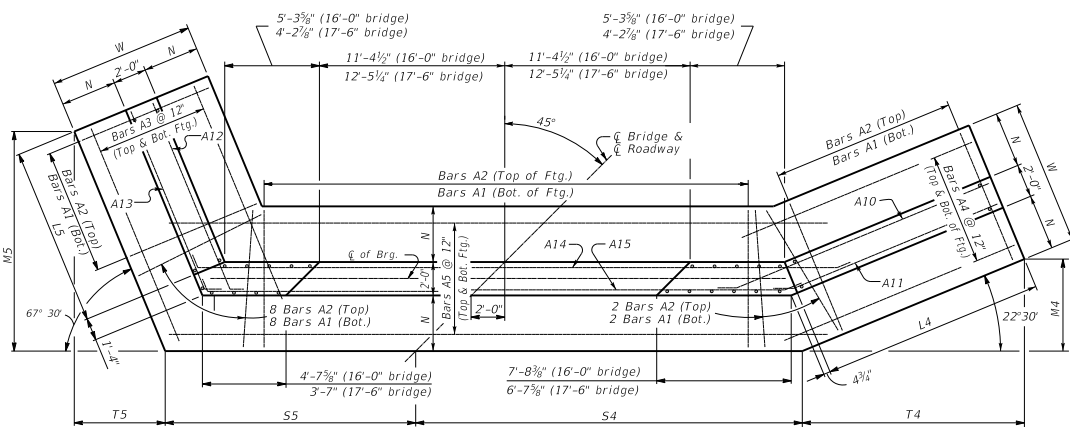


Table of Dimensions																
H	W	N	M4	M5	S4	T4	T5	L4	L5							
Length	Length	Length	Length	Length	Length	Length	Length	Length	Length							
15-16	12.0	5.0	14.8	19.14	24.8	14.4	38.5	7.11	37.16							
13-14	11.0	4.4	13.3	16.11	24.5	14.6	38.8	7.11	35.14							
11-12	10.0	4.0	12.1	14.99	23.0	14.8	38.1	6.78	34.12							
9-10	9.0	3.6	11.2	12.78	22.3	14.0	37.5	6.45	33.10							
7-8	7.6	2.9	7.3	10.3	22.4	15.1	37.6	4.3	31.8							
5-6	6.6	2.3	5.3	8.2	21.9	15.3	37.3	4.3	31.6							

4 foot min. shoulder



Quantities		
H	Concrete*	Reinforcement
	cu yd	LBS.
5	42.2	3993
6	46.2	3993
7	61.4	5111
8	65.9	5111
9	86.2	7315
10	91.3	7315
11	111.9	10341
12	117.5	10341
13	140.7	14673
14	146.8	14673
15	170.7	19131
16	177.2	19131

PLAN NOTE: Trim A16 & A17 bars if necessary

WALL SECTION **WING SECTION**

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 17'-6" rolled steel beam bridge width.

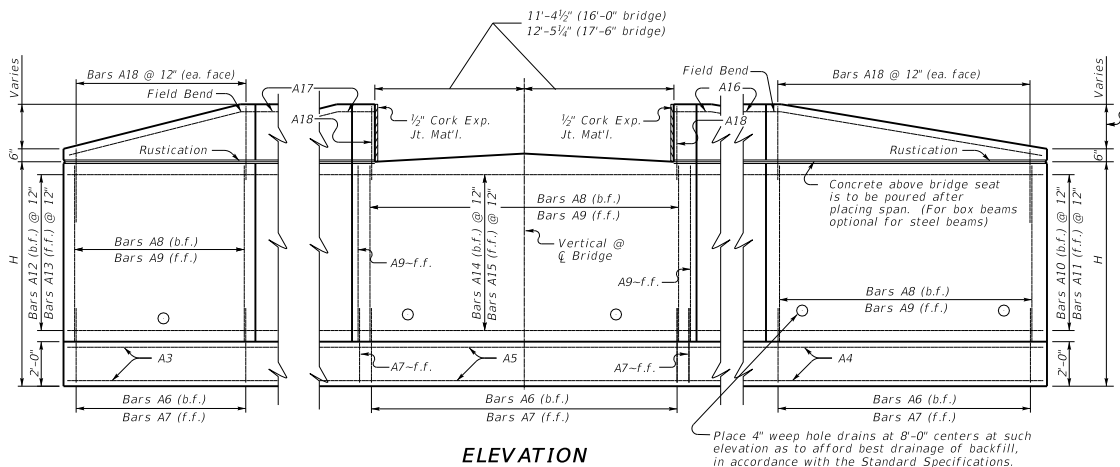
FOUNDATION PRESSURE: Construct abutment footings on solid rock bearing material that can support a pressure of 8000 psf service or 10,800 psf strength factored as recommended by a geotechnical engineer.

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

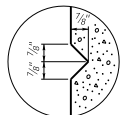
FOOTING ELEVATION: Construct bottom of footing below the anticipated scour elevation. (This typically entails embedding the footings 1'-0" to 2'-0" into rock and pouring concrete directly against cut rock faces as recommended by geotechnical engineer.)

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

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



ELEVATION



RUSTICATION GROOVE

KENTUCKY DEPARTMENT OF HIGHWAYS

45° SKEW
16'-0"-17'-6" BRIDGE WIDTH
2:1 FILL SLP, 4' MIN. SHLDR.

STANDARD DRAWING NO. BSA-110

SUBMITTED *[Signature]* 02-26-20
DIRECTOR DIVISION OF STRUCTURAL DESIGN DATE

APPROVED *[Signature]* 02-26-20
STATE ENGINEER DATE