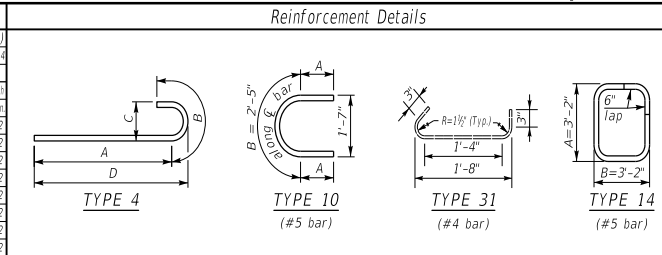
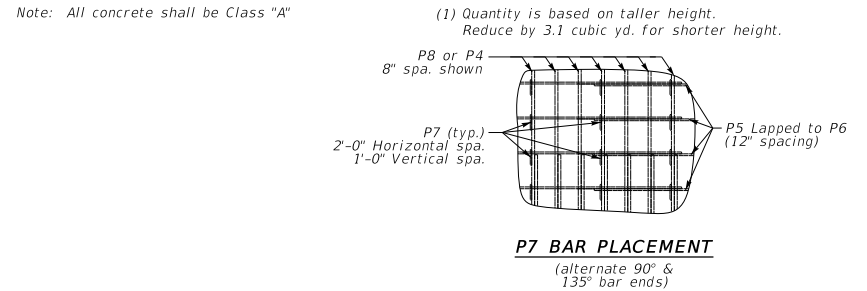
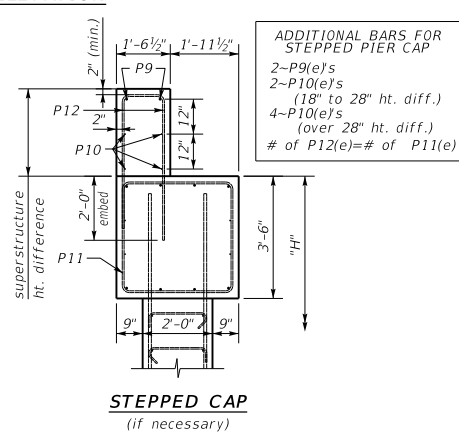
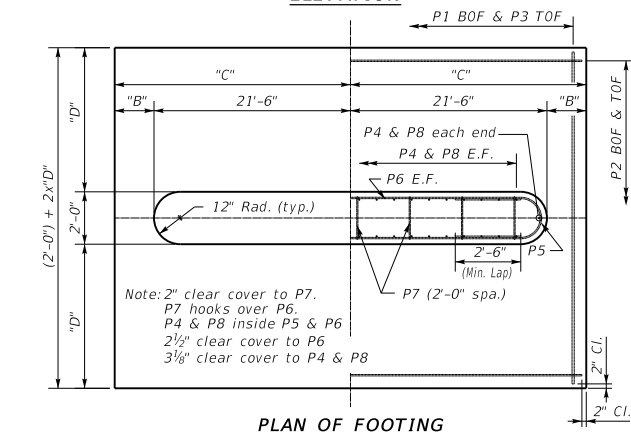
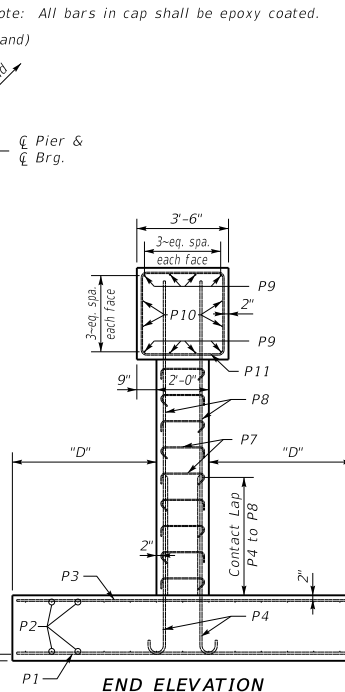
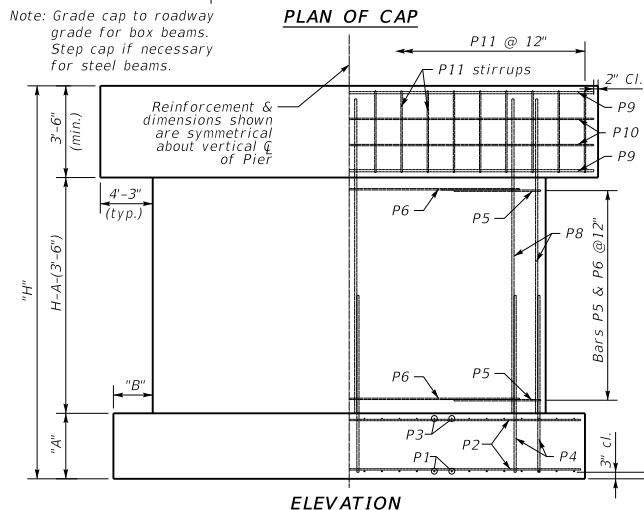
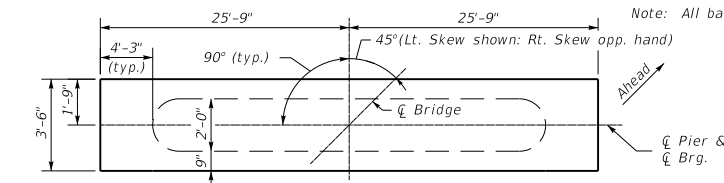


45° SKEW 32'-0" - 33'-6" BRIDGE WIDTH (No Seismic Load)

Bill of Reinforcement																																					
MARK	P1			P2			P3			P4				P5				P6			P7			P8		P9(e)		P10(e)		P11(e)							
TYPE	Str.			Str.			Str.			Type 4				Type 10				Str.			Type 31			Str.		Str.		Type 14		Type 14							
SIZE																					#4					#8		#5		#5							
H	No.	Length	ft.	No.	Length	ft.	No.	Length	ft.	No.	Length	ft.	A	B	C	D	No.	Length	ft.	A	No.	Length	ft.	No.	Length	ft.	No.	Length	ft.	No.	Length	ft.					
10-11	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	10	5	126	8	10	8	7	9	10	5	7
12-13	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	14	5	126	8	10	8	7	9	10	5	7
14-15	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	18	5	126	8	10	8	7	9	10	5	7
16-17	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	22	5	126	8	10	8	7	9	10	5	7
18-19	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	26	5	126	8	10	8	7	9	10	5	7
20-21	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	30	5	126	8	10	8	7	9	10	5	7
22-23	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	34	5	126	8	10	8	7	9	10	5	7
24-25	72	7	12	8	8	26	5	47	8	12	72	5	12	8	8	126	8	10	8	7	9	10	5	7	12	6	38	5	126	8	10	8	7	9	10	5	7



QUANTITIES											
DIMENSIONS TABLE											
H	A	B	C	D	H	CONCRETE CLASS "A"	STEEL REINFORCEMENT EPOXY COATED	STEEL REINFORCEMENT			
ft.	ft.	ft.	ft.	ft.	ft.	CU. YDS. (1)	LBS.	LBS.			
10-11	2	6	2	6	24	0	5	6	10-11	98.1	2013
12-13	2	6	2	6	24	0	5	6	12-13	104.4	2013
14-15	2	6	2	6	24	0	5	6	14-15	110.7	2013
16-17	2	6	2	6	24	0	5	6	16-17	117	2013
18-19	2	6	2	6	24	0	5	6	18-19	123.4	2013
20-21	2	6	2	6	24	0	5	6	20-21	129.7	2013
22-23	2	6	2	6	24	0	5	6	22-23	136	2013
24-25	2	6	2	6	24	0	5	6	24-25	142.3	2013



GENERAL NOTES

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

FOUNDATION PRESSURE: Construct pier 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.

DESIGN LOADS: Pier is designed for the CB42 beam superstructure with 3-97 foot spans. Pier is designed to handle a half a 97 foot span for thermal load with expansion bearings under the beams. Pier is designed for 100 mph wind. Wind on superstructure is for 1-97' span longitudinal and transverse. Pier is designed for stream flow of 10 ft./sec. up to the top of the pier. It is not designed for flow acting on the superstructure. Pier is not designed for earthquake loading.

DESIGN APPLICABILITY: Consult with a structural engineer to determine if these details are applicable for any particular project.

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

KENTUCKY DEPARTMENT OF HIGHWAYS	
Standard Pier 45° Skew 32'-0"-33'-6" Bridge Width	
STANDARD DRAWING NO. BSP-012	
SUBMITTED	02-26-20
DIRECTOR DIVISION OF STRUCTURAL DESIGN	DATE
APPROVED	02-26-20
STATE ENGINEER	DATE