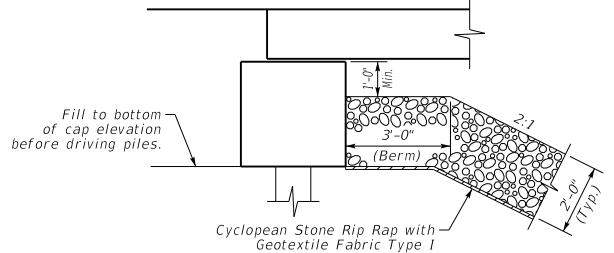
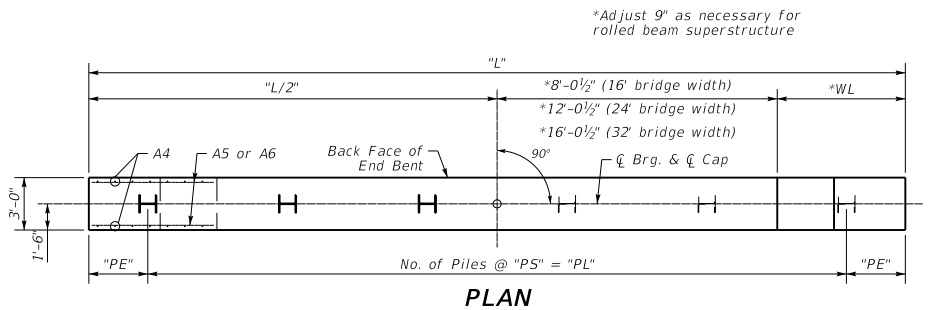


SUPERSTRUCTURE HEIGHT SDH = Beam+Pad Height (+haunch+slab) (if applicable)		CAP BILL OF REINFORCEMENT															WING BILL OF REINFORCEMENT																													
		16'-0" BRIDGE WIDTH					24'-0" BRIDGE WIDTH					32'-0" BRIDGE WIDTH					MARK TYPE NO. SIZE LENGTH																													
		MARK	TYPE	NO.	SIZE	LENGTH	MARK	TYPE	NO.	SIZE	LENGTH	MARK	TYPE	NO.	SIZE	LENGTH																														
H1	12" \leq SDH \leq 27"	A1e	14s	22	5	11-0	A1e	14s	29	5	11-0	A1e	14s	36	5	11-0	A4e	Str.	12	5	4-0	A2e	Str.	9	8	22-9	A2e	Str.	9	8	30-9	A2e	Str.	9	8	38-9	A5e	Str.	8	5	3-2					
H2	27" $<$ SDH \leq 35"	A3e	Str.	4	5	22-9	A3e	Str.	4	5	30-9	A3e	Str.	4	5	38-9	A4e	Str.	20	5	4-8	A2e	Str.	9	8	25-5	A2e	Str.	9	8	33-5	A2e	Str.	9	8	41-5	A5e	Str.	12	5	4-6	A6e	Str.	4	6	4-6
H3	35" $<$ SDH \leq 50"	A1e	14s	29	5	11-0	A1e	14s	36	5	11-0	A1e	14s	43	5	11-0	A4e	Str.	28	5	5-11	A2e	Str.	9	8	30-5	A2e	Str.	9	8	38-5	A2e	Str.	9	8	46-5	A5e	Str.	16	5	7-0	A6e	Str.	4	6	7-5
BRIDGE WIDTH		PILES					DIMENSIONS										QUANTITIES																													
		SIZE	TONS	NO.	PE	PS	PL	A	B	C	D	E	F	G	H	J	L	WL	WU	WV	WX	CONCRETE (C.Y.)	STEEL (LBS.)																							
16		H1	92	3	3'-6 1/2"	8'-0"	16'-0"	3 1/2"	4	9"	2'-3"	7	6'-0"	3	2'-0"	2	23'-1"	3'-6"	3'-6"	0	0	9.8	991																							
24		H2	87	4	2'-4 1/2"	7'-0"	21'-0"	2 1/2"	3	7"	1'-2"	6	5'-0"	5	4'-0"	3	25'-9"	4'-10"	4'-10"	0	0	12.2	1175																							
32		H3	107	4	3'-4 1/2"	8'-0"	24'-0"	4 1/2"	4	8"	2'-0"	7	6'-0"	7	6'-0"	4	30'-9"	7'-4"	3'-3"	4'-1"	2'-1"	16.8	1527																							
16		H1	97	4	3'-6 1/2"	8'-0"	24'-0"	3 1/2"	4	9"	2'-3"	7	6'-0"	3	2'-0"	2	31'-1"	3'-6"	3'-6"	0	0	12.4	1297																							
24		H2	99	5	2'-10 1/2"	7'-0"	28'-0"	2 1/2"	3	10"	1'-8"	6	5'-0"	5	4'-0"	3	33'-9"	4'-10"	4'-10"	0	0	14.8	1469																							
32		H3	122	5	3'-4 1/2"	8'-0"	32'-0"	4 1/2"	4	8"	2'-0"	7	6'-0"	7	6'-0"	4	38'-9"	7'-4"	3'-3"	4'-1"	2'-1"	19.4	1833																							
16		H1	103	5	3'-6 1/2"	8'-0"	32'-0"	3 1/2"	4	9"	2'-3"	7	6'-0"	3	2'-0"	2	39'-1"	3'-6"	3'-6"	0	0	15.1	1604																							
24		H2	109	6	3'-4 1/2"	7'-0"	35'-0"	4 1/2"	4	8"	2'-0"	6	5'-0"	5	4'-0"	3	41'-9"	4'-10"	4'-10"	0	0	17.5	1787																							
32		H3	133	6	3'-4 1/2"	8'-0"	40'-0"	4 1/2"	4	8"	2'-0"	7	6'-0"	7	6'-0"	4	46'-9"	7'-4"	3'-3"	4'-1"	2'-1"	22.1	2139																							

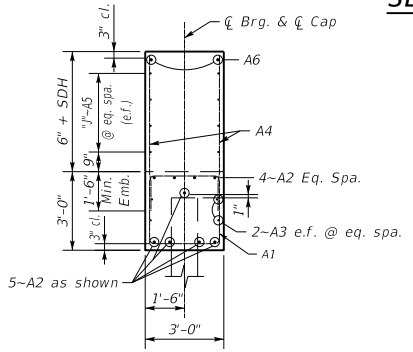
- NOTES:**
- 1) Conform to KYTC, Standard Specifications, Current Edition.
 - 2) Concrete to be Class "A", 3500 psi.
 - 3) Rebar to be epoxy coated A615, Grade 60.
 - 4) Maintain 2" clear cover to reinforcement unless otherwise noted.
 - 5) End Bents are designed for the maximum span of the following steel and concrete beams as shown in the current standards:
 H1 - B12, CB12, B17, CB17, B21 or rolled steel beams up to 16" nominal depth.
 H2 - CB21, B27, CB27, B33 or rolled steel beams up to 24" nominal depth.
 H3 - CB33, B42, CB42 or rolled steel beams up to 36" nominal depth.
 - 6) Piles may be HP12x53 or 16" Steel Pipes with 1/2" wall thickness.
 - 7) Piles driven to rock must be driven to Refusal. Friction Piles must be driven to (Pile Load/0.4) using the Gates Method.
 - 8) Pile load given is Factored Strength Load.
 - 9) Piles must be driven 10' into existing ground or to refusal on bedrock. Piles at wet crossings must be driven to 10' below stream bed or to refusal on bedrock. A minimum pile length of 10' is required in all circumstances.
 - 10) Contractor shall provide a hammer capable of driving the piling to refusal or capacity without encountering excessive blow counts or damaging the pile. Contractor shall be responsible for all damaged piling.



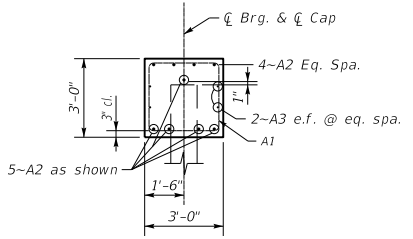
SECTION THRU END BENT
(Showing berm and fill slope)



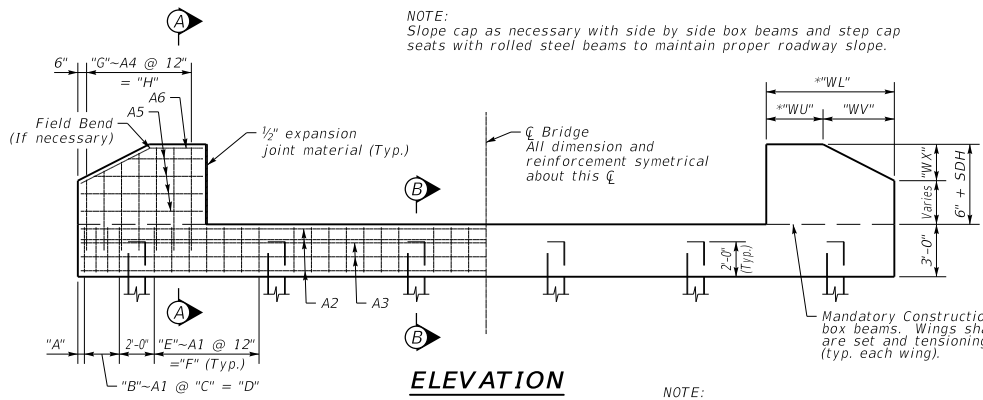
PLAN



SECTION A-A

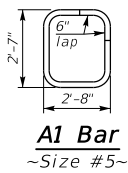


SECTION B-B



ELEVATION

NOTE:
Trim A4-A6 bars as necessary.



A1 Bar
~Size #5~

**KENTUCKY
DEPARTMENT OF HIGHWAYS**

**PILE END BENT
0° SKEW**

STANDARD DRAWING NO. BSE-001

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

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