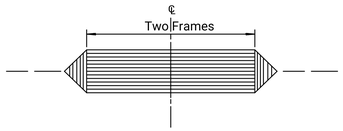
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		0	0	



Sketch Showing Two Cattleguard Frames
(one unit)

GENERAL NOTE

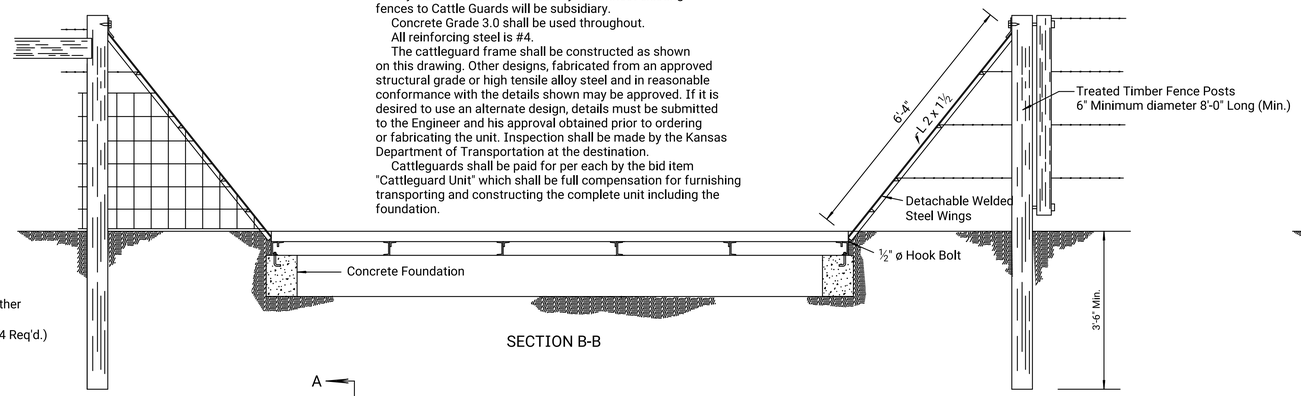
Any work or materials necessary to connect existing fences to Cattle Guards will be subsidiary.

Concrete Grade 3.0 shall be used throughout.

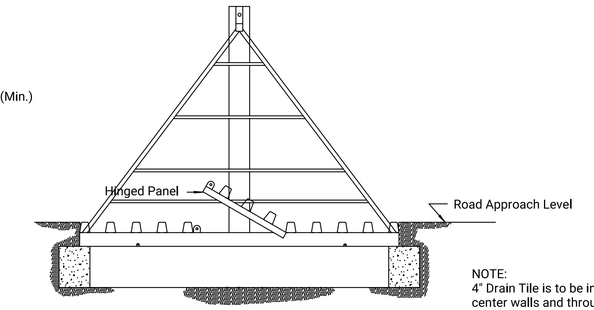
All reinforcing steel is #4.

The cattleguard frame shall be constructed as shown on this drawing. Other designs, fabricated from an approved structural grade or high tensile alloy steel and in reasonable conformance with the details shown may be approved. If it is desired to use an alternate design, details must be submitted to the Engineer and his approval obtained prior to ordering or fabricating the unit. Inspection shall be made by the Kansas Department of Transportation at the destination.

Cattleguards shall be paid for per each by the bid item "Cattleguard Unit" which shall be full compensation for furnishing transporting and constructing the complete unit including the foundation.

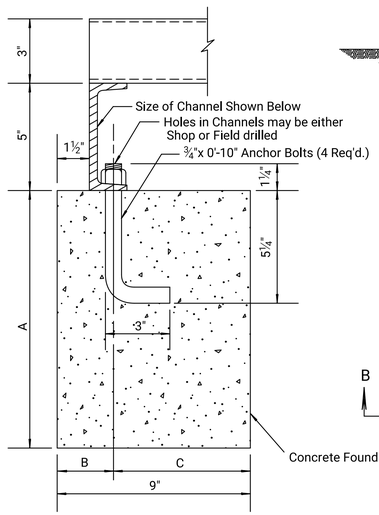


SECTION B-B



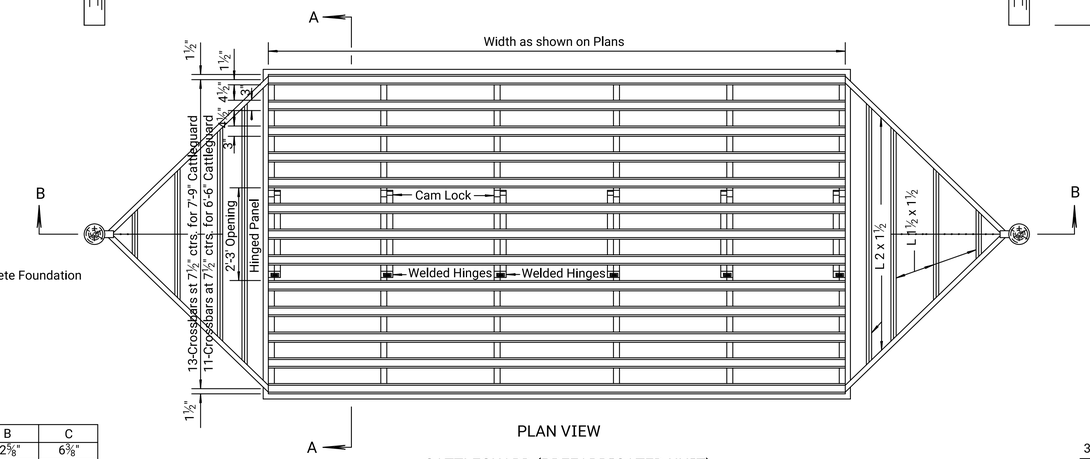
SECTION A-A

NOTE:
4" Drain Tile is to be installed through center walls and through outside wall to drain water from foundation pit. Drain Tile to be subsidiary to bid item "Cattleguard Unit".



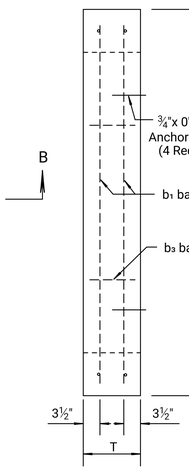
ANCHOR BOLT DETAIL

Size of Cattleguard Frame	Channel Size	A	B	C
Standard-All Sizes	C5x 6.7	1'-0"	2⅝"	6⅜"
Heavy Duty 6'-6" Span	C6x 8.2	1'-6"	2⅝"	6⅜"
Heavy Duty 7'-9" Span	C7x 9.8	1'-6"	2¾"	6¼"

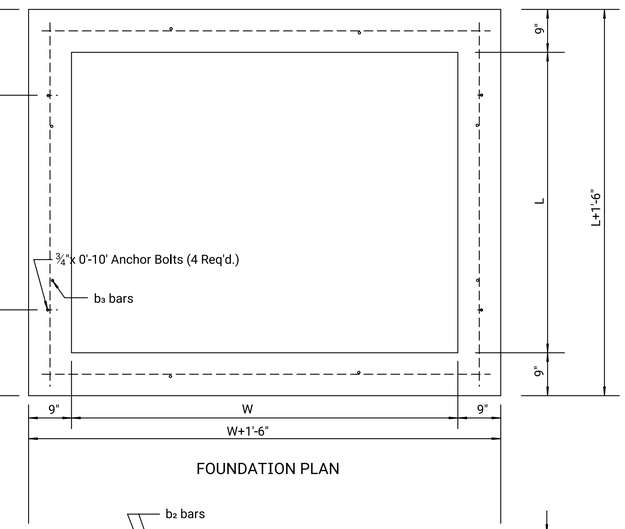


PLAN VIEW

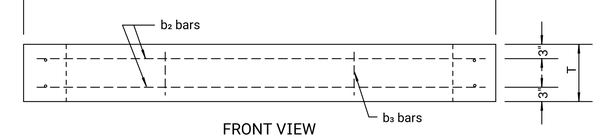
CATTLEGUARD (PREFABRICATED UNIT)



END VIEW



FOUNDATION PLAN

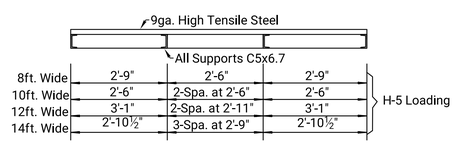


FRONT VIEW

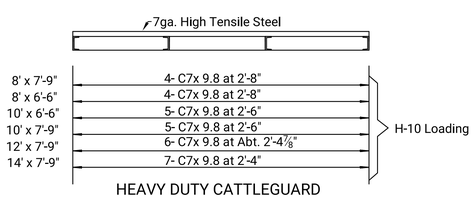
T=1'-0" for Standard Cattleguard Foundations
T=1'-6" for Heavy Duty Cattleguard Foundations

GENERAL NOTE

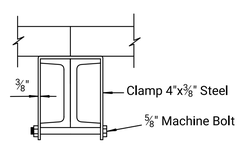
PAINT: The cattleguard frame shall be painted a minimum of one shop coat. All parts which are accessible after erection shall receive one coat of tinted aluminum paint followed by one coat of aluminum paint.



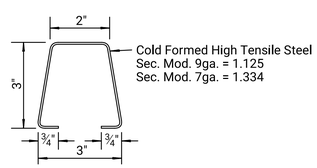
STANDARD CATTLEGUARD



HEAVY DUTY CATTLEGUARD



MULTIPLE INSTALLATION
JOINT



DETAIL OF CROSSBAR FOR
ALL TYPE PREFABRICATED CATTLEGUARDS

TOTAL ESTIMATED QUANTITIES

STANDARD CATTLEGUARDS

CATTLEGUARD FRAME SIZE			Grade 3.0 Concrete	Reinforcing Steel	Anchor Bolts	Excavation Class III
Length		Width	C.Y.	Lb.	Each	C.Y.
6'-6"	x	8'-0"	0.7	42	4	4
7'-9"	x	8'-0"	0.8	45	4	5
6'-6"	x	10'-0"	1.0	47	4	4
7'-9"	x	10'-0"	0.9	51	4	5
7'-9"	x	12'-0"	1.0	56	4	6
7'-9"	x	14'-0"	1.3	61	4	6

HEAVY DUTY CATTLEGUARDS

6'-6"	x	8'-0"	1.1	45	4	5
7'-9"	x	8'-0"	1.2	48	4	6
6'-6"	x	10'-0"	1.3	50	4	6
7'-9"	x	10'-0"	1.4	53	4	7
7'-9"	x	12'-0"	1.6	59	4	8
7'-9"	x	14'-0"	1.9	64	4	8

Wider widths may be obtained by clamping two Cattleguard Frames side by side.
Two clamps required for each pair of Cattleguard Frames.

TABLE OF DIMENSIONS

CATTLEGUARD FRAME SIZE		FOUNDATION		REINFORCING STEEL			
				b₁ Bars	b₂ Bars	b₃ Bars	(8 Req'd)
		INSIDE DIMENSIONS		4 Req'd	4 Req'd	Heavy Duty	Standard
Length	Width	L	W	Length	Length	Length	Length
6'-6"	8'-0"	5'-3"	6'-9"	6'-5"	7'-11"	1'-2"	0'-8"
7'-9"	8'-0"	6'-6"	6'-9"	7'-8"	7'-11"	1'-2"	0'-8"
6'-6"	10'-0"	5'-3"	8'-9"	6'-5"	9'-11"	1'-2"	0'-8"
7'-9"	10'-0"	6'-6"	8'-9"	7'-8"	9'-11"	1'-2"	0'-8"
7'-9"	12'-0"	6'-6"	10'-9"	7'-8"	11'-11"	1'-2"	0'-8"
7'-9"	14'-0"	6'-6"	12'-9"	7'-8"	13'-11"	1'-2"	0'-8"

NO.	DATE	REVISIONS	BY	APP'D
05	01-24-05	Changed Class to Grade Concrete	S.W.K.	J.O.B.
04	03-20-96	Added pay note	R.J.S.	J.O.B.
03	06-01-95	Delete Manufacturer Reference	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

CATTLEGUARD (PREFABRICATED UNITS)

RD504

FHWA APPROVAL	06-10-05	APP'D.	James O. Brewer
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.

KDOT Graphics Certified 05-10-2022 Sh. No. 0

KDOT Graphics Certified

Plotted by : Kylee.Sims@ks.gov 22-JUL-2022 14:11
File : rd504.dgn