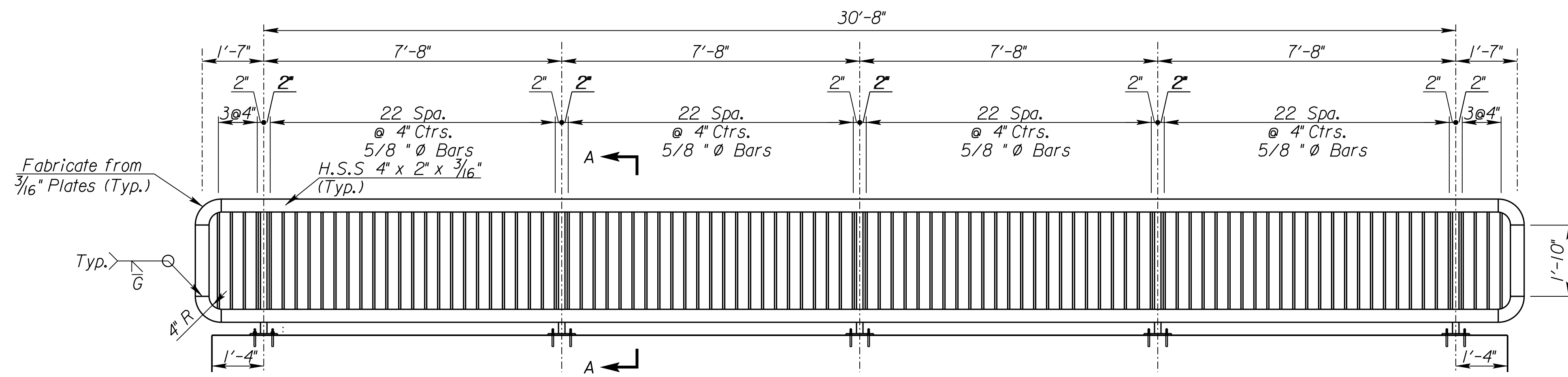
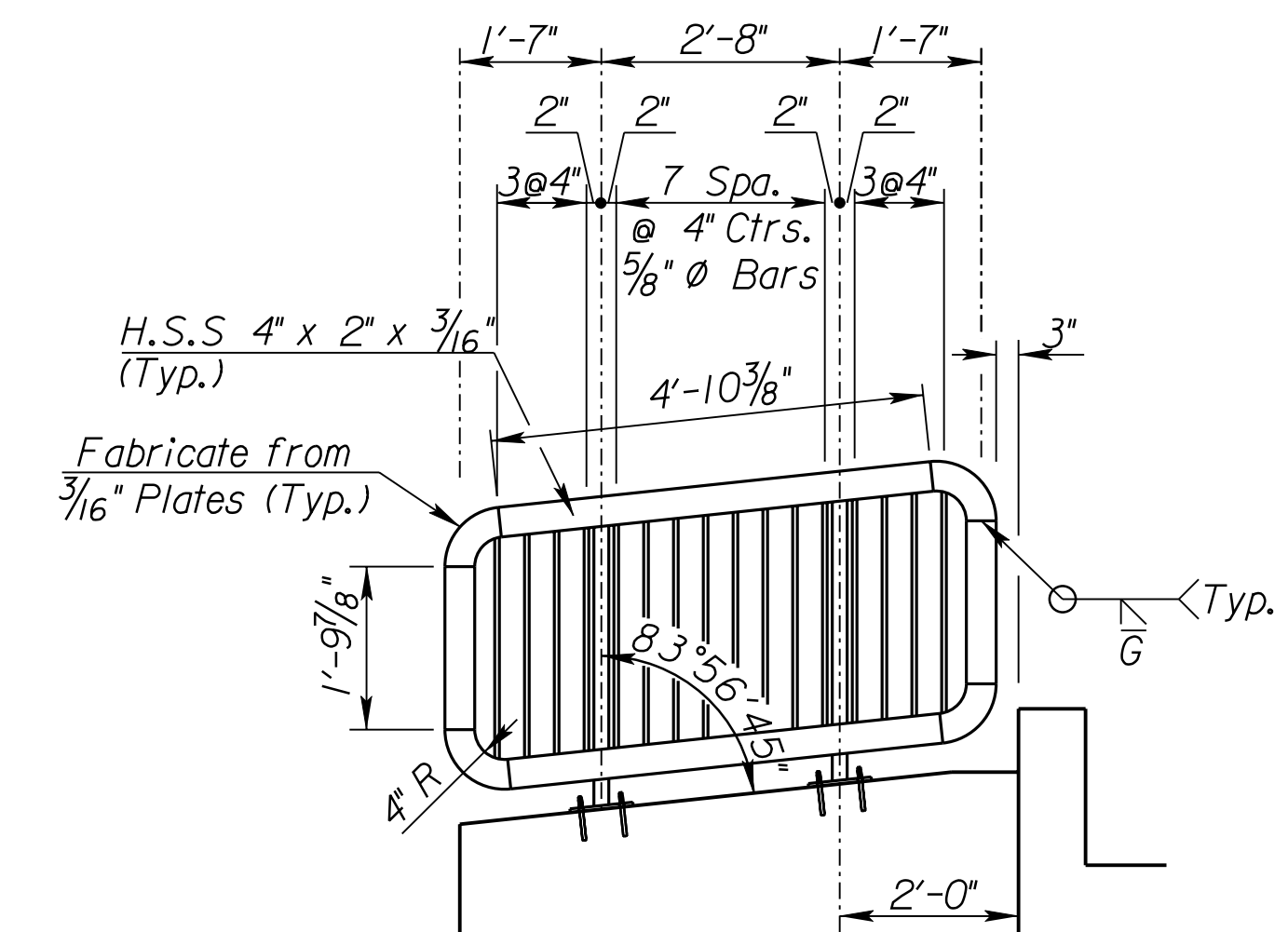


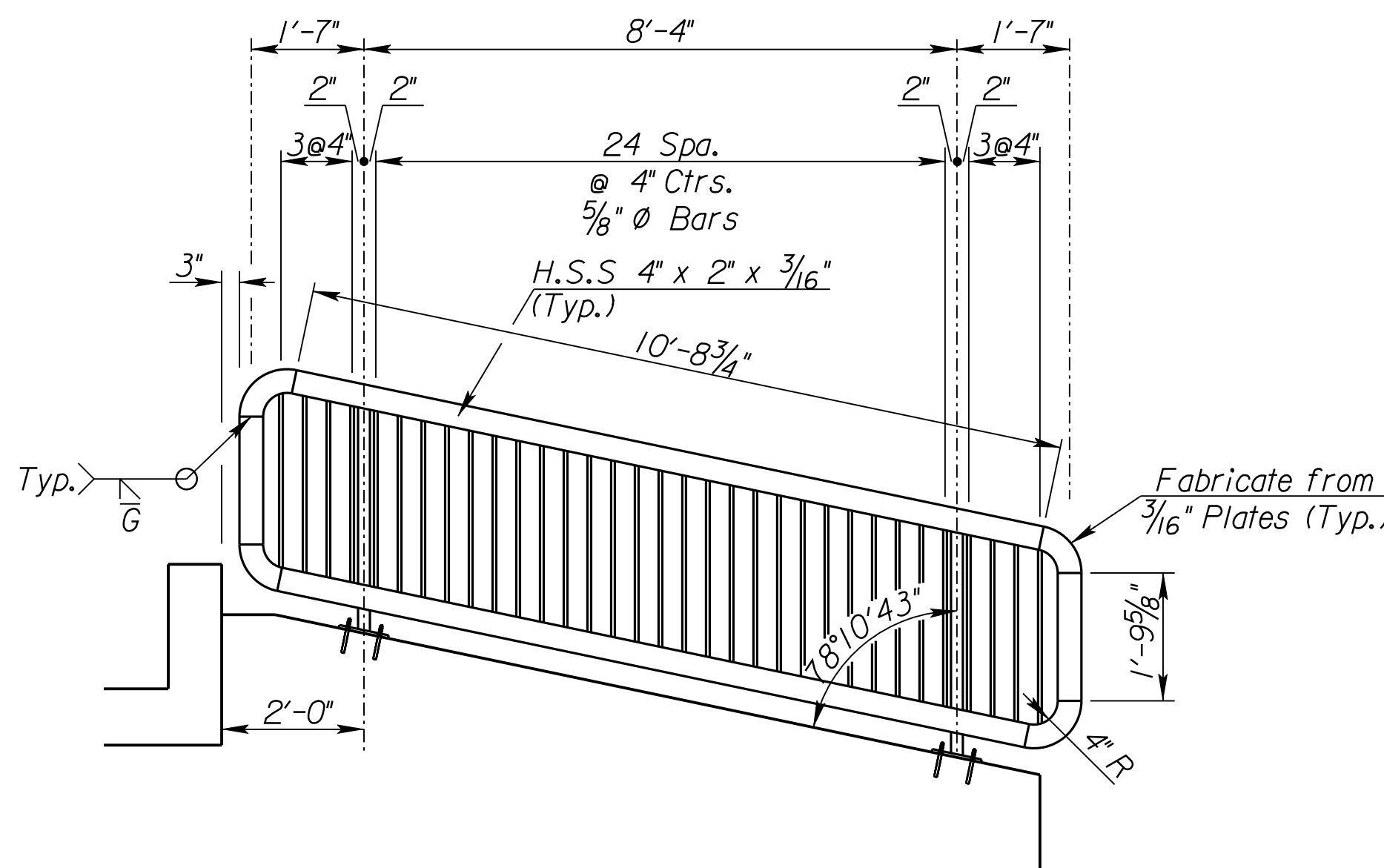
COUNTY	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
SEDGWICK	KANSAS	472-84702	2010	17	36



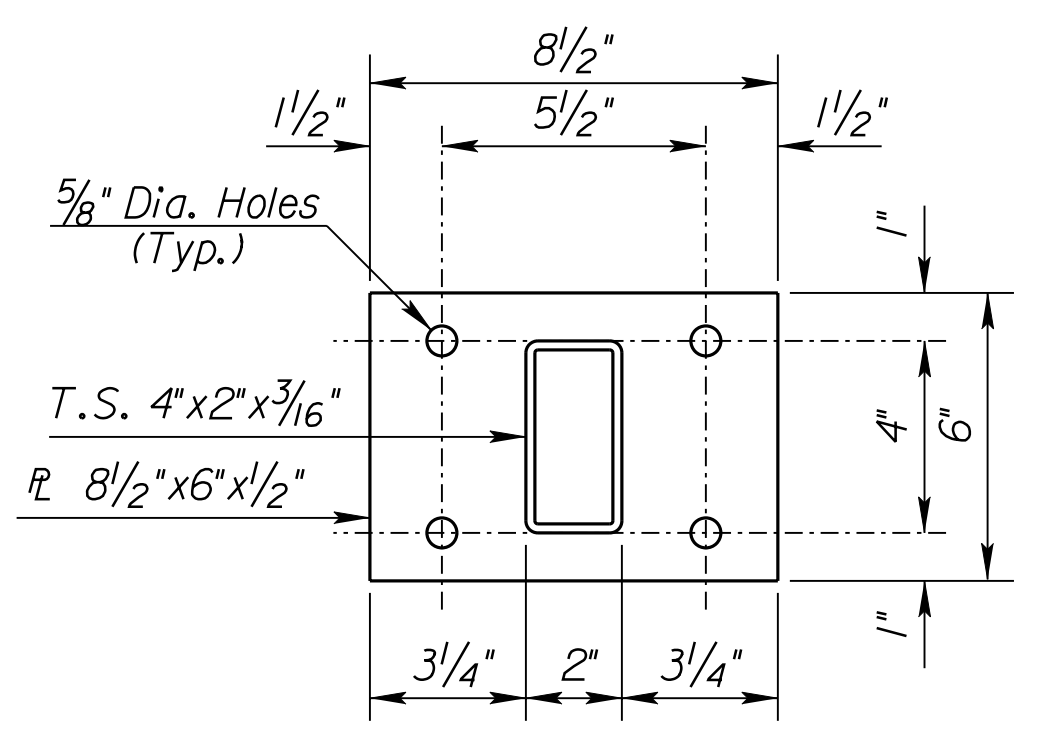
HANDRAIL ON HUBGUARD
Scale: 1/2" = 1'
(2 Required)



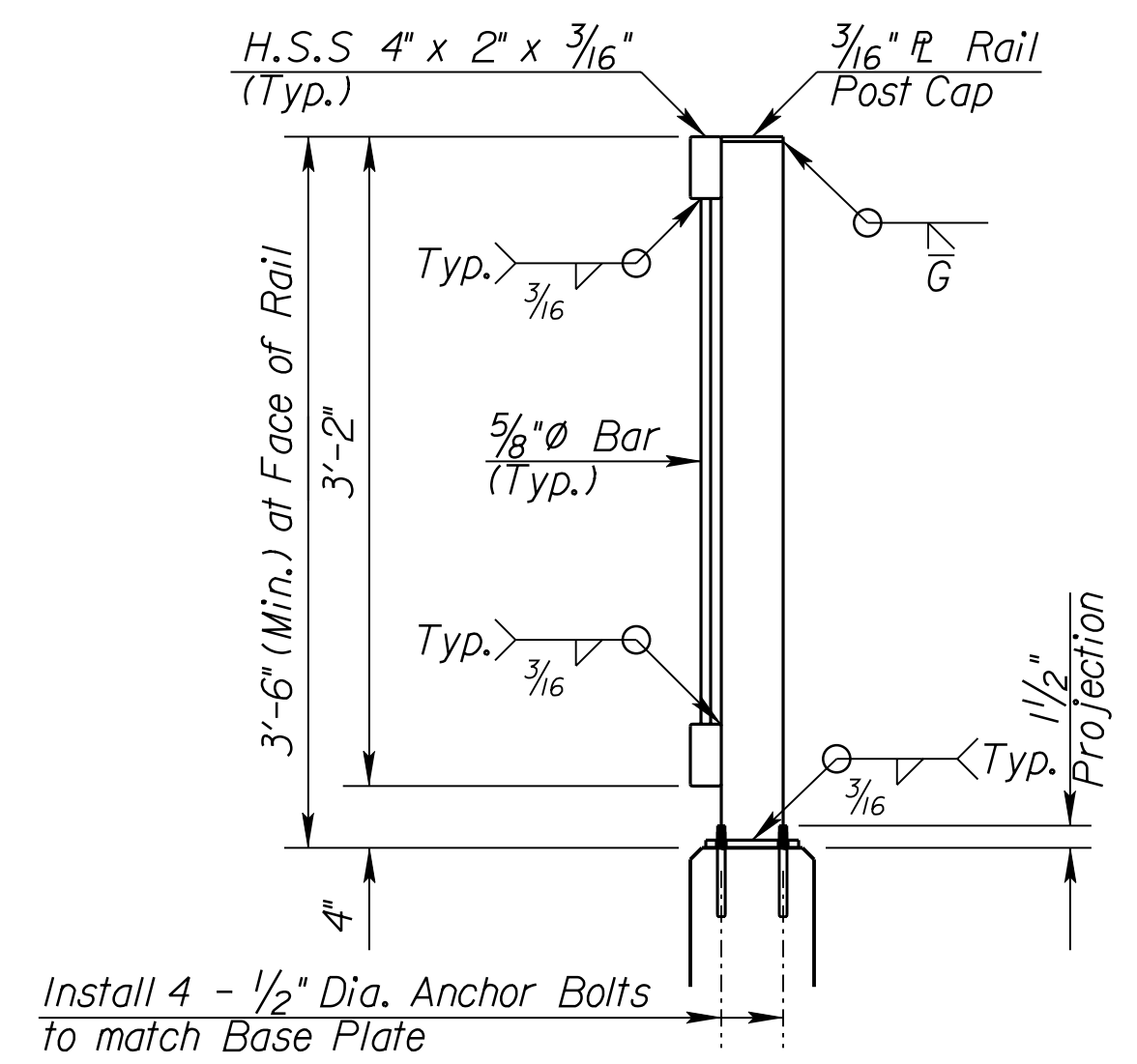
HANDRAIL ON LEFT WINGS
Scale: 1/2" = 1'
(2 Required)



HANDRAIL ON RIGHT WINGS
Scale: 1/2" = 1'
(2 Required)



BASE PLATE DETAILS
Scale: 3" = 1'



SECTION A-A
Scale: 1" = 1'

GENERAL NOTES

The horizontal members of the rail and posts shall be hollow structural steel and tubing shall comply to ASTM Designation A36 or A500 Grade B respectively. Material and construction shall conform to the Structural Welding Code A.W.S. D1.1:2006.

Anchor bolts shall be glass capsule epoxy type threaded bolts. Embed bolts 5" minimum in concrete. Drill and grout hole locations after concrete is poured. The anchors bolts shall be galvanized and have a minimum pullout strength of 13.5 k based on 4 ksi concrete. Length of embedment into the concrete shall conform to manufacturer's recommendations. This work shall not result in an increase in cost and shall be paid for as Bridge Handrail (Metal)(3'-6").

Rail shall be fabricated in lengths as shown. Posts and bars shall be set vertical and shimmed if required.

The handrail shall be painted in shop and field with an inorganic zinc-vinyl paint system complying with Standard Specification for State Road and Bridge Construction, 1990 Edition Kansas Department of Transportation.

All Handrail Components shall be painted BLACK (c900-Carboline).

Shop details must be submitted for approval by the Engineer.

CITY OF WICHITA
JAMES ARMOUR, P.E., CITY ENGINEER
31ST STREET BRIDGE AT GLENN

HANDRAIL DETAILS I

PB PARSONS BRINCKERHOFF
122. Wichita, Kansas

SCALE	DATE	DWG. NO.
	4/28/2010	35768A

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SURV. PLOT CADD DES. TR. CKD. APP.