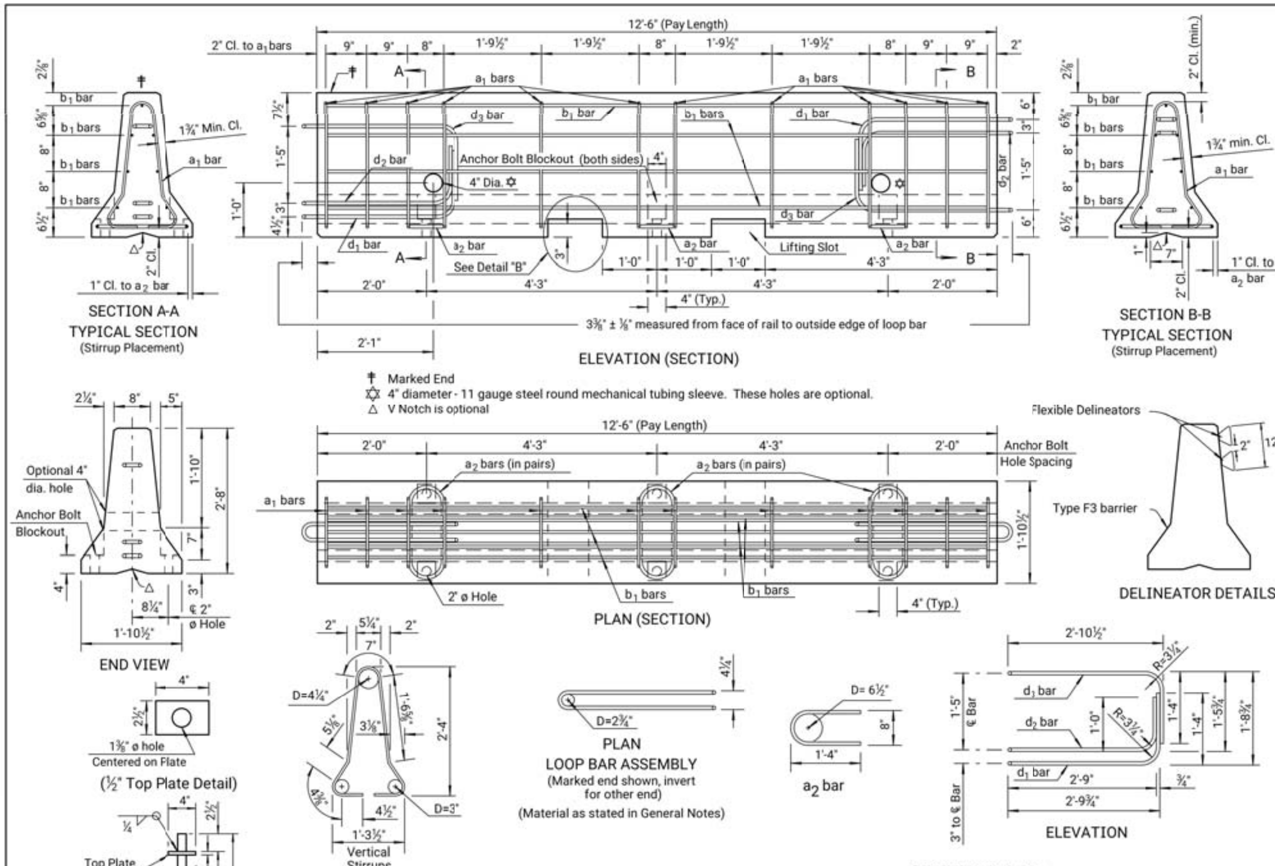
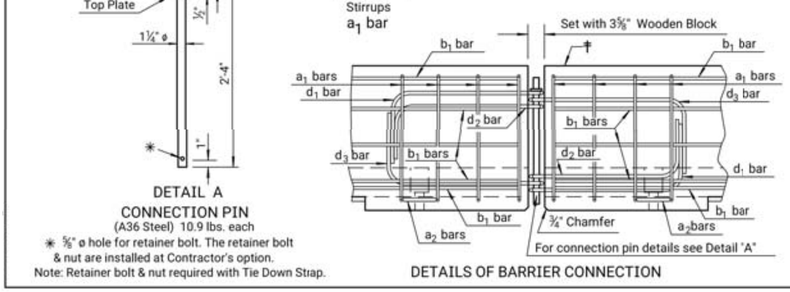
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	468–2019–085422	2019	CU504	19



12'-6" (Pay Length)
2" Cl. to a_1 bars
a_1 bars
b_1 bar
b_1 bars
d_3 bar
d_2 bar
d_1 bar
a_2 bar
1¾" Min. Cl.
Anchor Bolt Blockout (both sides)
4" Dia.
See Detail "B"
Lifting Slot
1" Cl. to a_2 bar
3⅜" ± ⅛" measured from face of rail to outside edge of loop bar
SECTION A-A
TYPICAL SECTION
(Stirrup Placement)
ELEVATION (SECTION)
SECTION B-B
TYPICAL SECTION
(Stirrup Placement)
† Marked End
✡ 4" diameter - 11 gauge steel round mechanical tubing sleeve. These holes are optional.
△ V Notch is optional
a_2 bars (in pairs)
Anchor Bolt Hole Spacing
2" ø Hole
4" (Typ.)
PLAN (SECTION)
Flexible Delineators
Type F3 barrier
DELINEATOR DETAILS
Optional 4" dia. hole
Anchor Bolt Blockout
ø Hole
END VIEW
1⅜" ø hole
Centered on Flate
(½" Top Plate Detail)
Vertical Stirrups
a_1 bar
PLAN
LOOP BAR ASSEMBLY
(Marked end shown, invert for other end)
(Material as stated in General Notes)
a_2 bar
ELEVATION



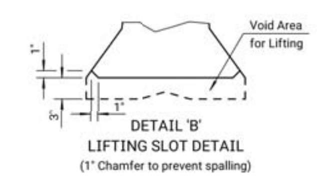
Top Plate
DETAIL A
CONNECTION PIN
(A36 Steel) 10.9 lbs. each
✳ ⅝" ø hole for retainer bolt. The retainer bolt & nut are installed at Contractor's option.
Note: Retainer bolt & nut required with Tie Down Strap.
Set with 3⅜" Wooden Block
¾" Chamfer
For connection pin details see Detail "A"
DETAILS OF BARRIER CONNECTION

Per 12'-6" Barrier Section

Bar	Bar Size	Shape	No. of Bars	Length Ft.	Weight Lbs.
REINFORCING A615 Gr. 60					
a_1	#4		12	6'-0"	48.1
a_2	#6		6	2'-11"	26.3
b_1	#5		7	12'-2"	88.8
LOOP ASSEMBLY					
d_1	#6		2	8'-5"	25.3
d_2	#6		2	7'-7"	22.8
d_3	#6		2	8'-6"	25.5

Concrete Quantity = 1.3 C.Y.

(Dimensions are out to out of bars unless otherwise noted.)



NOTE: At no time shall the barriers be lifted, moved, etc. by use of the loop bars: d_1, d_2 or d_3.

GENERAL NOTES:

MATERIAL: Use ASTM A615, Grade 60 reinforcing bars, except for the loop bars (d_1, d_2 and d_3).
The loop bars (d_1, d_2 and d_3) shall be ¾" smooth steel bars with a minimum yield of 60 ksi, a tensile strength of not less than 1.25 times the yield strength but *a minimum of 80 ksi, a* minimum 14% elongation in 8 inches, and passing a 180 degree bend test using a 3.5 D pin bend diameter. The loops shall be installed within ⅛" of the plan dimensions.
Use air-entrained concrete with f'c = 5,000 p.s.i.

SECTION: The section furnished must generally comply with dimensions shown. Requests for minor variations in section geometry and attachments may be submitted to the Engineer for approval.

LIFTING SLOTS: Lifting slots shall be constructed where specified on the plans to facilitate the drainage of water after installation on the roadway.

TEMPORARY CONCRETE SAFETY BARRIER: Furnishing and placing of all materials when required and all labor and equipment required to position the temporary barrier shall be included in the Contract unit price bid for "Concrete Safety Barrier (Type F3)(Temporary)". Any relocation of the barrier required for the project shall be paid in accordance with the Special Provisions under the bid item "Concrete Safety Barrier (Type F3) (Temporary-Relocate)". Unless otherwise noted on the Plans, the Temporary Concrete Safety Barrier shall become the property of the Contractor and shall be removed from the site upon acceptance of the completed project.
Approximate weight of one unit equals 2.7 tons.

PLACEMENT: Barrier shall be placed on a paved surface. All loose dirt and sand shall be removed from the roadway surface just prior to placement of the barrier.
After the barrier is placed and the connection pin is inserted, tension or pull the barrier such that the installation is taut and the connection pin cannot freely move vertically. If the connection pin or loop bar assembly are damaged during the tensioning process, it is the responsibility of the Contractor to repair the damaged area or replace the temporary barrier section.

MARKING: The left end (†) of each barrier shall be permanently marked by stamping or forming into the barrier the following information:
- Type F3
- Manufacturer code (as specified by KDOT Bureau of Const. & Maint.)
- Date manufactured (month and year)

DELINEATION: Delineators shall be spaced on 50' centers, except through curves where they shall be spaced on 25' centers. See Standard Drawing RD610 for additional details.
The delineation shall be mounted on the side of the Temporary Concrete Safety Barrier with two delineators at each location. Each delineator shall have a minimum height-to-width ratio of 1.75, and a minimum reflective surface area of 7 sq. in.. The delineators shall be affixed to the Temporary Concrete Safety Barrier as recommended by the manufacturer.
Delineators shall be attached to bridge rail or other structures in construction zones when roadway is narrowed and traffic is adjacent to the structure. The method and location of placement shall be similar to permanent barrier delineation.
When traffic flow is in one direction, the delineators shall be yellow when used on the left, white when used on the right. When traffic flow is in both directions delineators shall be placed back-to-back, and shall correspond to the color of the edge line.
The work and materials required for the installation of delineators as mentioned shall be subsidiary to the bid item "Concrete Safety Barrier (Type F3) (Temporary).
If necessary, include Standard Drawing RD622A for Taper Section, Standard drawing RD622B for anchor and tie down details, Standard Drawing RD622C for Bridges with thermal expansion of 1½" or greater and Standard Drawing RD622D for Barrier Layouts.
The Contractor shall be responsible for maintaining a clear area, shown as dimension "A" on Standard Drawing RD622B. The clear area is located behind the Temporary Concrete Safety Barrier and shall be kept free of any equipment, material stockpiles or other obstacles. For non-anchored roadway applications, dimension "A" shall be a minimum of 2'-0".

SCOTT ALLAN CAMPFIELD LICENSED 14369 05/01/2019 KANSAS PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY	APP'D
7	9-11-17	Revised Markers	A.L.R.	S.W.K.
6	7-17-17	Revised General Note	A.L.R.	S.W.K.
5	8-27-15	Added Note, Pay Length	K.E.K.	S.W.K.
4	5-17-13	Revised General Note, Clear Area	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE SAFETY BARRIER TYPE F3

RD622

FHWA APPROVAL	3-5-18	APP'D. Scott W. King	
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN CK.	TRACE CK.

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