

Dimension "A" = (Camber @ 50 days) - Dead Load Deflection (Deck + Diaphragm + Rail + Fillet)
 Total thickness @ Brg. = (Dimension "A") + (Total Deck Thickness) + (1/2" Min. Fillet)

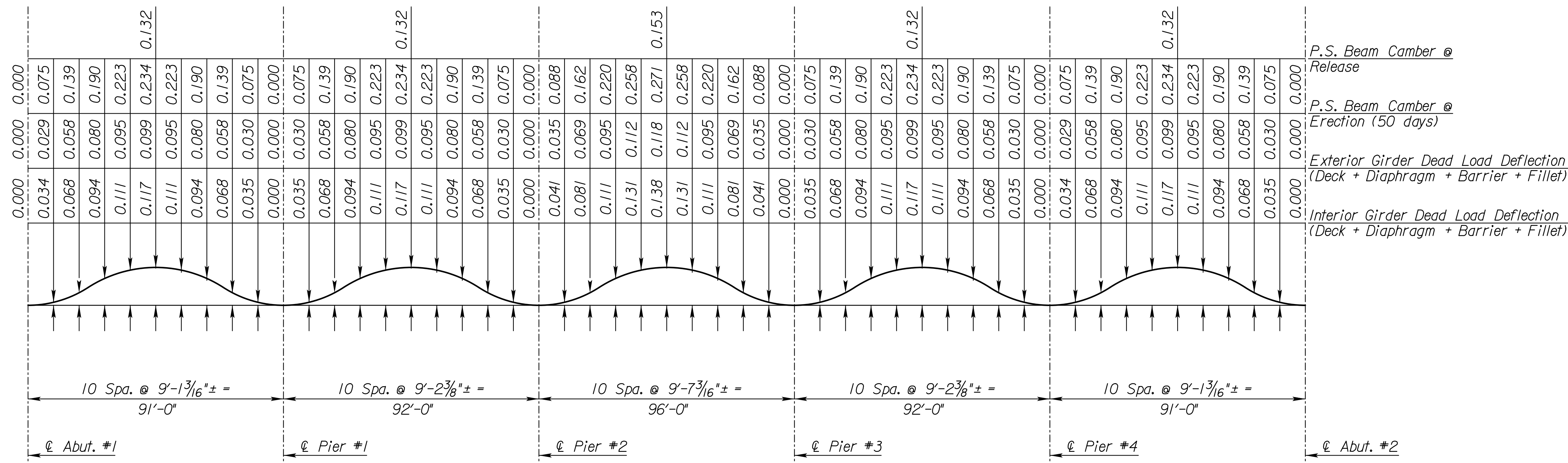
CAMBER: Construct the finished deck to plan grade by varying the depth of the fillet over the beam to provide for prestress camber, concrete dead load deflection and vertical curvature. After the prestressed beams are erected measure the camber in the field by taking a profile of each beam. Correct any variation between actual camber and concrete dead load deflection shown in the plans by varying the depth of the concrete fillets over the beam so that the finished floor is constructed to the theoretical grade. The minimum depth of the deck over the beam shall be 8 1/2" @ Brg. (not including fillets). Prior to shipping, the camber shall be not greater than the design camber + 1/2". The design camber is equal to the 50 day camber shown in the plans.

The theoretical amount of concrete required for the fillets is 31.22 C.Y. This amount of concrete is included in the Summary of Quantities. Any additional concrete required to construct the fillets will be subsidiary.

CAMBER DIAGRAM SHOWING VARIABLE FILLET THICKNESS

*Dimensions shown are along B of the Beam.
 Theoretical fillet depth at mid-span is:

	Ext. Girder	Int. Girder
Span #1	7/8"	1 1/16"
Span #2	7/8"	1 1/8"
Span #3	3/4"	1"
Span #4	7/8"	1 1/8"
Span #5	mid-span fillet depths vary by girder.	



K4+3 BEAM CAMBER AND DEAD LOAD DEFLECTION

Measure beam camber at midspan by the Contractor at the project site at time of delivery. Submit a copy of the field notes of measured beam camber to the Engineer not more than 5 working days after the delivery of the beams to the site. Beam camber shall meet the tolerance specified on the "Standard Prestressed Concrete Beam Details" sheet.

Note:
 Camber is Upward
 Deflection is Downward

Ordinates are in feet

Beam Concrete: $E_i = 4,287$ ksi ($f'_{ci} = 5.0$ ksi) (Spans 1, 2, 4 & 5)
 $E_f = 4,696$ ksi ($f'_{ci} = 6.0$ ksi) (Spans 1, 2, 4 & 5)
 $E_i = 4,496$ ksi ($f'_{ci} = 5.5$ ksi) (Span 3)
 $E_f = 4,888$ ksi ($f'_{ci} = 6.5$ ksi) (Span 3)

CONSULTANTS:

AMIDON AVE. BRIDGE
 AT ARKANSAS RIVER
 WICHITA, KANSAS

REVISIONS:	MARK	DATE	DESCRIPTION

PROJ NO: E1010-4025062
 SCALE:
 DATE: 07/08/2022
 DESIGNED BY: JBM
 DRAWN BY: JBM
 CHECKED BY: WBS

SHEET TITLE:
**BEAM
 AUXILIARY
 DETAILS**

SHEET NO.
51
 SHEET 51 OF 128