DocuSign Envelope ID: 8D9DD5CE-C82A-448C-BE92-69EF089A271B

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPANS A AND F																				
	GIRDERS 1 AND 5																				
TWENTIETH POINTS	0	1/20	2/20	3/20	4/20	5/20	6/20	7/20	8/20	9/20	10/20	11/20	12/20	13/20	14/20	15/20	16/20	17/20	18/20	19/20	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.016	0.031	0.045	0.058	0.107	0.080	0.088	0.093	0.097	0.098	0.097	0.093	0.088	0.080	0.070	0.058	0.045	0.031	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.012	0.024	0.035	0.046	0.054	0.063	0.068	0.074	0.076	0.078	0.076	0.074	0.068	0.063	0.054	0.046	0.035	0.024	0.012	0.000
FINAL CAMBER ↑	0"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	0"

✳ INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPANS B, C, D, AND E																				
	GIRDERS 1 AND 5																				
TWENTIETH POINTS	0	1/20	2/20	3/20	4/20	5/20	6/20	7/20	8/20	9/20	10/20	11/20	12/20	13/20	14/20	15/20	16/20	17/20	18/20	19/20	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.016	0.031	0.045	0.058	0.070	0.080	0.088	0.094	0.097	0.098	0.097	0.094	0.088	0.080	0.070	0.058	0.045	0.031	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.012	0.024	0.036	0.047	0.057	0.066	0.072	0.078	0.080	0.082	0.080	0.078	0.072	0.066	0.057	0.047	0.036	0.024	0.012	0.000
FINAL CAMBER ↑	0"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	0"

✳ INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPANS A AND F																				
	GIRDERS 2 THRU 4																				
TWENTIETH POINTS	0	1/20	2/20	3/20	4/20	5/20	6/20	7/20	8/20	9/20	10/20	11/20	12/20	13/20	14/20	15/20	16/20	17/20	18/20	19/20	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.016	0.031	0.045	0.058	0.070	0.080	0.088	0.093	0.097	0.098	0.97	0.093	0.088	0.080	0.070	0.058	0.045	0.031	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.012	0.024	0.035	0.046	0.055	0.064	0.070	0.075	0.077	0.079	0.077	0.075	0.070	0.064	0.055	0.046	0.035	0.024	0.012	0.000
FINAL CAMBER ↑	0"	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	0"

✳ INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPANS B, C, D, AND E																				
	GIRDERS 2 THRU 4																				
TWENTIETH POINTS	0	1/20	2/20	3/20	4/20	5/20	6/20	7/20	8/20	9/20	10/20	11/20	12/20	13/20	14/20	15/20	16/20	17/20	18/20	19/20	0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.016	0.031	0.045	0.058	0.070	0.080	0.088	0.094	0.097	0.098	0.097	0.094	0.088	0.080	0.070	0.058	0.045	0.031	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.012	0.024	0.036	0.048	0.058	0.067	0.073	0.080	0.081	0.083	0.081	0.080	0.073	0.067	0.058	0.048	0.036	0.024	0.012	0.000
FINAL CAMBER ↑	0"	1/16"	1/16"	1/8"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	1/8"	1/8"	1/8"	1/16"	1/16"	0"

✳ INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

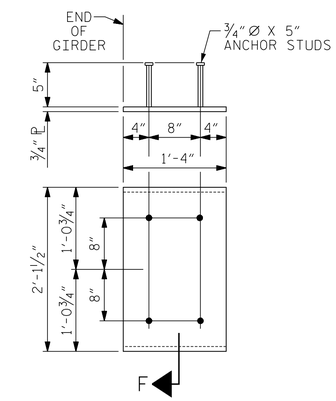
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 6500 PSI.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", AND THE LINK SLAB AREA, SHALL BE RAKED TO A DEPTH OF 1/4".

SECTION "F"

(SEE NOTES)



EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE IV GIRDER

(2 REQ'D PER GIRDER)

PROJECT NO. B-4926

LENOIR COUNTY

STATION: 25+45.00 -L-

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Johnson, Mirmiran, & Thompson Inc.
4700 Falls of Neuse Rd, Suite 100,
Raleigh, NC, 27609
License No: C-3097

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

PRESTRESSED CONCRETE GIRDER DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-20
1			3			TOTAL SHEETS
2			4			49

DWN. BY: WDC DATE: 03/2023
CHKD. BY: PRG DATE: 03/2023
DES. EGR. OF RECORD: PRG DATE: 03/2023

wdcrutcher
DGN: V:\NCStructures\03T47-01_B-4926 Lenoir 20 & 24\Structures\Lenoir 20\Plans\01_L039_B4926_SMU_G30_D20.dgn
TIME: 01:13 PM on Wednesday, September 06, 2023