DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPAN A GIRDER 1																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.144	0.187	0.224	0.255	0.281	0.299	0.310	0.314	0.310	0.299	0.281	0.255	0.224	0.187	0.144	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.033	0.067	0.098	0.130	0.155	0.180	0.196	0.211	0.217	0.222	0.217	0.211	0.196	0.180	0.155	0.130	0.098	0.067	0.033	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	11/16"	13/16"	15/16"	1"	1 1/16"	1 1/8"	1 1/8"	1 1/8"	1 1/16"	1"	15/16"	13/16"	11/16"	9/16"	3/8"	3/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPAN A GIRDER 2																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.144	0.187	0.224	0.255	0.281	0.299	0.310	0.314	0.310	0.299	0.281	0.255	0.224	0.187	0.144	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.033	0.067	0.099	0.131	0.156	0.181	0.196	0.212	0.218	0.223	0.218	0.212	0.196	0.180	0.155	0.131	0.099	0.067	0.033	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	11/16"	13/16"	7/8"	1"	1 1/16"	1 1/8"	1 1/8"	1 1/8"	1 1/16"	1"	7/8"	13/16"	11/16"	9/16"	3/8"	3/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPAN A GIRDER 3																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.144	0.187	0.224	0.255	0.281	0.299	0.310	0.314	0.310	0.299	0.281	0.255	0.224	0.187	0.144	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.032	0.065	0.096	0.127	0.151	0.175	0.191	0.206	0.211	0.215	0.211	0.206	0.191	0.175	0.151	0.127	0.096	0.065	0.032	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	11/16"	7/8"	15/16"	1 1/16"	1 1/8"	1 3/16"	1 3/16"	1 3/16"	1 1/8"	1 1/16"	15/16"	7/8"	11/16"	9/16"	3/8"	3/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPAN A GIRDER 4																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.144	0.187	0.224	0.255	0.281	0.299	0.310	0.314	0.310	0.299	0.281	0.255	0.224	0.187	0.144	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.032	0.065	0.096	0.126	0.151	0.175	0.190	0.205	0.211	0.216	0.211	0.205	0.190	0.175	0.151	0.126	0.096	0.065	0.032	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	3/4"	7/8"	15/16"	1 1/16"	1 1/8"	1 3/16"	1 3/16"	1 3/16"	1 1/8"	1 1/16"	15/16"	7/8"	3/4"	9/16"	3/8"	3/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

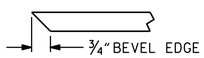
0.6" Ø LOW RELAXATION STRANDS	SPANS B - H GIRDERS 1 & 4																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.145	0.187	0.224	0.256	0.281	0.300	0.311	0.315	0.311	0.300	0.281	0.256	0.224	0.187	0.145	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.035	0.068	0.100	0.129	0.154	0.176	0.194	0.206	0.214	0.217	0.214	.206	0.194	0.176	0.154	0.129	0.100	0.068	0.035	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	11/16"	13/16"	15/16"	1 1/16"	1 1/8"	1 3/16"	1 3/16"	1 3/16"	1 1/8"	1 1/16"	15/16"	13/16"	11/16"	9/16"	3/8"	3/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPANS B - H GIRDERS 2 & 3																						
		℄ BRG.	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.050	0.099	0.145	0.187	0.224	0.256	0.281	0.300	0.311	0.315	0.311	0.300	0.281	0.256	0.224	0.187	0.145	0.099	0.050	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.034	0.066	0.097	0.125	0.150	0.172	0.189	0.201	0.209	0.211	0.209	0.201	0.189	0.172	0.150	0.125	0.097	0.066	0.034	0.000
FINAL CAMBER	↑	0	3/16"	3/8"	9/16"	3/4"	7/8"	1"	1 1/8"	1 3/16"	1 1/4"	1 1/4"	1 1/4"	1 3/16"	1 1/8"	1"	7/8"	3/4"	9/16"	3/8"	3/16"	0

0.6" Ø LOW RELAXATION STRANDS	SPAN I GIRDERS 1 & 4											
		℄ BRG.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.016	0.030	0.041	0.048	0.050	0.048	0.041	0.030	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.005	0.010	0.013	0.016	0.017	0.016	0.013	0.010	0.005	0.000
FINAL CAMBER	↑	0	1/8"	1/4"	5/16"	3/8"	3/8"	3/8"	5/16"	1/4"	1/8"	0

0.6" Ø LOW RELAXATION STRANDS	SPAN I GIRDERS 2 & 3											
		℄ BRG.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ BRG.
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.016	0.030	0.041	0.048	0.050	0.048	0.041	0.030	0.016	0.000
✳ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.005	0.009	0.013	0.015	0.016	0.015	0.013	0.009	0.005	0.000
FINAL CAMBER	↑	0	1/8"	1/4"	5/16"	3/8"	3/8"	3/8"	5/16"	1/4"	1/8"	0



SECTION "F"

(SEE NOTES)

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

DRAWN BY : TBE DATE : 1/20
CHECKED BY : MGC DATE : 1/20
DESIGN ENGINEER OF RECORD : TBE DATE : 2/20

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.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

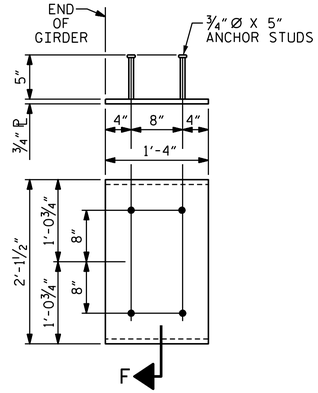
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 8,000 PSI FOR SPANS A-H AND NOT LESS THAN 5,000 PSI FOR SPAN I.

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", SHALL BE RAKED TO A DEPTH OF 1/4", EXCEPT AS NOTED IN THE LINK SLAB AREAS.

A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" AND 72" MODIFIED BULB TEES ONLY.

THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.



EMBEDDED PLATE "B-1" DETAIL

(2 REQ'D PER GIRDER)

PROJECT NO. B-5825

YADKIN/FORSYTH COUNTY

STATION: 34+65.50-L-

SHEET 6 OF 7

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK, JR.

DocuSigned by: Marshall G. Cheek Jr. 5FBCC2F3A4DC413...

4/14/2020

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
706 HILLSBOROUGH STREET
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DEAD LOAD DEFLECTIONS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-25
1			3			TOTAL SHEETS
2			4			60