

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION STRANDS	SPAN A																				
	GIRDERS 1 & 6																				
	40TH POINTS	0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475
CAMBER (GIRDER IN PLACE) ↑	0.000	0.041	0.083	0.124	0.165	0.193	0.220	0.247	0.274	0.291	0.308	0.325	0.342	0.352	0.361	0.370	0.379	0.382	0.385	0.388	0.391
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.023	0.047	0.069	0.087	0.114	0.135	0.155	0.171	0.192	0.209	0.224	0.236	0.251	0.262	0.271	0.278	0.285	0.289	0.292	0.293
FINAL CAMBER ↑	0"	3/16"	7/16"	1 1/16"	1 5/16"	1 5/8"	1"	1 1/8"	1 1/4"	1 3/16"	1 3/16"	1 3/16"	1 1/4"	1 3/16"	1 3/16"	1 3/16"	1 3/16"	1 1/8"	1 1/8"	1 3/16"	1 3/16"
40TH POINTS	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000	
CAMBER (GIRDER IN PLACE) ↑	0.388	0.385	0.382	0.379	0.370	0.361	0.352	0.342	0.325	0.308	0.291	0.274	0.247	0.220	0.193	0.165	0.124	0.083	0.041	0.000	
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.292	0.289	0.284	0.279	0.271	0.262	0.251	0.237	0.224	0.209	0.192	0.172	0.155	0.135	0.114	0.088	0.069	0.047	0.023	0.000	
FINAL CAMBER ↑	1 1/8"	1 1/8"	1 3/16"	1 3/16"	1 3/16"	1 3/16"	1 3/16"	1 1/4"	1 3/16"	1 3/16"	1 3/16"	1 1/4"	1 1/8"	1"	1 5/16"	1 5/16"	1 3/16"	7/16"	3/16"	0"	

0.6" Ø LOW RELAXATION STRANDS	SPAN A																				
	GIRDERS 2-5																				
	40TH POINTS	0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475
CAMBER (GIRDER IN PLACE) ↑	0.000	0.041	0.083	0.124	0.165	0.193	0.220	0.247	0.274	0.291	0.308	0.325	0.342	0.352	0.361	0.370	0.379	0.382	0.385	0.388	0.391
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.024	0.047	0.070	0.088	0.115	0.137	0.157	0.173	0.194	0.212	0.227	0.240	0.254	0.265	0.275	0.282	0.285	0.293	0.296	0.297
FINAL CAMBER ↑	0"	3/16"	7/16"	5/8"	1 5/16"	1 5/8"	1"	1 1/16"	1 3/16"	1 3/16"	1 3/16"	1 3/16"	1 1/4"	1 3/16"	1 1/8"	1 1/8"	1 3/16"	1 1/8"	1 1/8"	1 1/8"	1 1/8"
40TH POINTS	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000	
CAMBER (GIRDER IN PLACE) ↑	0.388	0.385	0.382	0.379	0.370	0.361	0.352	0.342	0.325	0.308	0.291	0.274	0.247	0.220	0.193	0.165	0.124	0.083	0.041	0.000	
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.296	0.293	0.288	0.283	0.275	0.265	0.254	0.241	0.227	0.312	0.194	0.174	0.157	0.137	0.115	0.090	0.070	0.047	0.024	0.000	
FINAL CAMBER ↑	1 1/8"	1 1/8"	1 1/8"	1 3/16"	1 1/8"	1 1/8"	1 3/16"	1 1/4"	1 3/16"	1 3/16"	1 3/16"	1 1/4"	1 3/16"	1"	1 5/16"	1 5/16"	5/8"	7/16"	3/16"	0"	

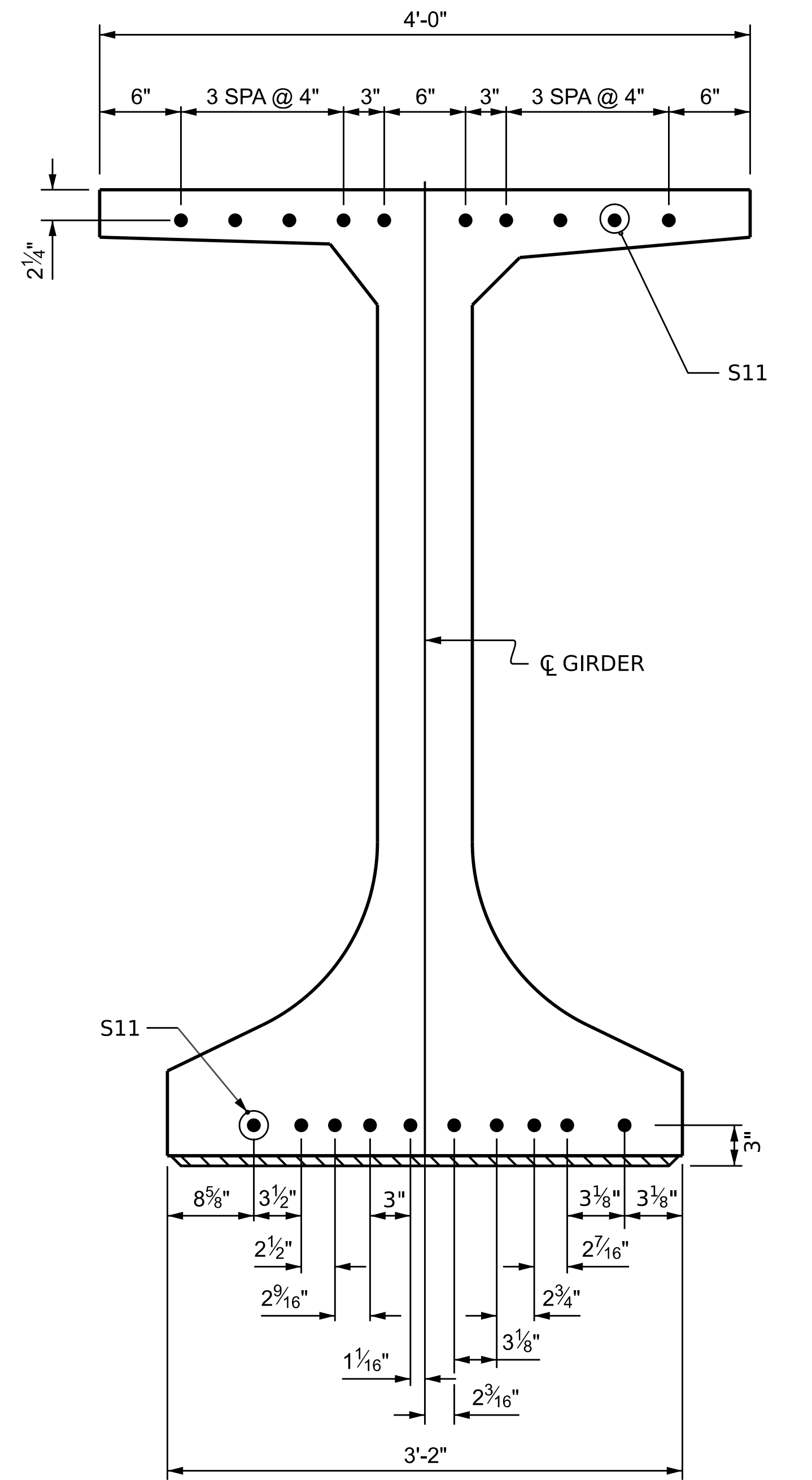
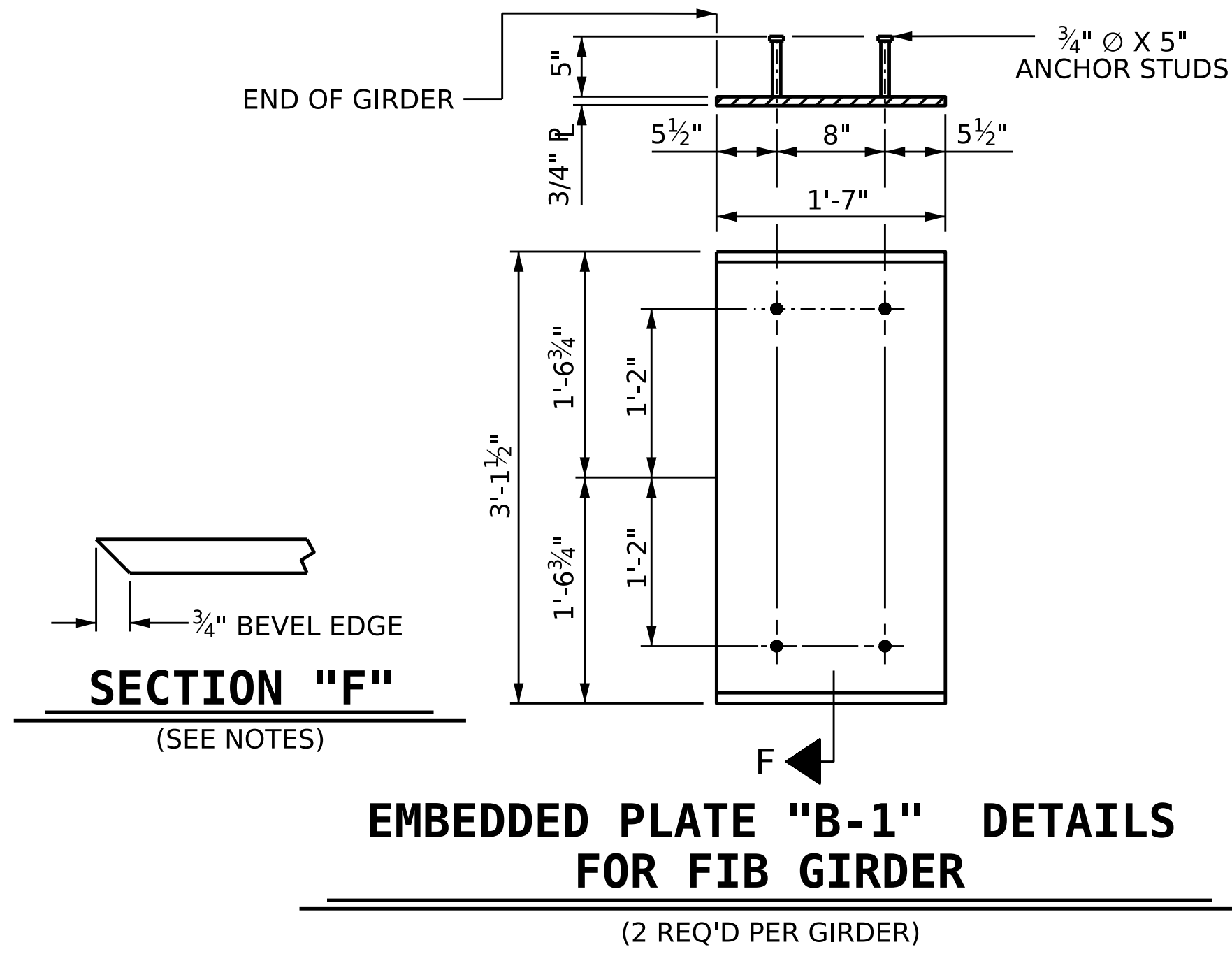
0.6" Ø LOW RELAXATION STRANDS	SPAN B																				
	GIRDERS 1 & 6																				
	20TH POINTS	0.000	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95
CAMBER (GIRDER IN PLACE) ↑	0.000	0.019	0.039	0.053	0.067	0.077	0.086	0.092	0.097	0.099	0.101	0.099	0.097	0.092	0.086	0.077	0.067	0.053	0.039	0.019	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.005	0.009	0.014	0.018	0.021	0.024	0.027	0.029	0.030	0.030	0.029	0.027	0.024	0.021	0.017	0.014	0.009	0.005	0.000	
FINAL CAMBER ↑	0"	3/16"	3/8"	1/2"	5/8"	1 1/16"	3/4"	3/4"	1 3/16"	1 3/16"	7/8"	1 3/16"	1 3/16"	3/4"	3/4"	1 1/16"	5/8"	7/16"	3/8"	3/16"	0"

0.6" Ø LOW RELAXATION STRANDS	SPAN B																				
	GIRDERS 2-5																				
	20TH POINTS	0.000	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95
CAMBER (GIRDER IN PLACE) ↑	0.000	0.019	0.039	0.053	0.067	0.077	0.086	0.092	0.097	0.099	0.101	0.099	0.097	0.092	0.086	0.077	0.067	0.053	0.039	0.019	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.005	0.009	0.014	0.018	0.021	0.024	0.027	0.029	0.030	0.030	0.029	0.027	0.024	0.021	0.017	0.014	0.009	0.005	0.000	
FINAL CAMBER ↑	0"	3/16"	3/8"	7/16"	5/8"	1 1/16"	3/4"	3/4"	1 3/16"	1 3/16"	7/8"	1 3/16"	1 3/16"	3/4"	3/4"	1 1/16"	5/8"	7/16"	3/8"	3/16"	0"

* INCLUDES FUTURE WEARING SURFACE IN SUPERIMPOSED DEAD LOAD
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS SHOWN 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 PLACE "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 6400 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 SHADED AREA NEAR BENT, SHALL BE RAKED TO A DEPTH OF 1/4".



DETAIL "C"
(FLORIDA I BEAM)

PROJECT NO. B-3186 / B-5898
HAYWOOD COUNTY
STATION: 24+42.26 -L_RT-
SHEET 3 OF 4

AECOM

AECOM TECHNICAL SERVICES OF NC, INC.
5438 WADE PARK BOULEVARD, SUITE 200
RALEIGH, NC 27607
(919) 854-6200 www.aecom.com
AECOM License No. FC6242

NORTH CAROLINA
PROFESSIONAL
SEAL
054212
ENGINEER
APRIL K. VASUDEVAN

10/18/2023

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-13 TOTAL SHEETS 31
1			3			
2			4			

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

DRAWN BY: A.R. VAN VUREN DATE: 04/2023
CHECKED BY: A.K. VASUDEVAN DATE: 04/2023
DESIGN ENGINEER OF RECORD: A.K. VASUDEVAN DATE: 06/2023