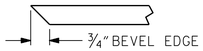
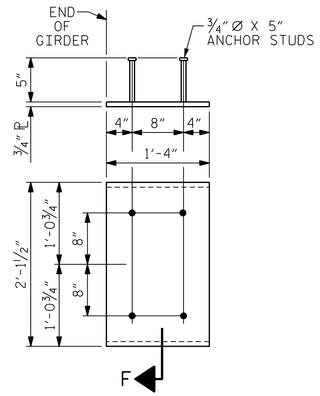


SECTION "F"

(SEE NOTES)



EMBEDDED PLATE "B-1" DETAILS

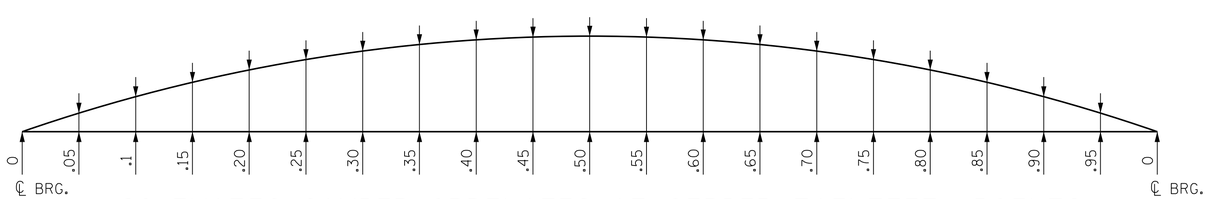
(2 REQUIRED PER GIRDER)

DEAD LOAD DEFLECTION AND CAMBER TABLE FOR GIRDERS

GIRDER		SPAN A																				
	TWENTIETH POINTS	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1.0
1 & 4	CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.046	0.092	0.134	0.173	0.208	0.237	0.261	0.278	0.288	0.292	0.288	0.278	0.261	0.237	0.208	0.173	0.134	0.092	0.046	0
	** DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.028	0.057	0.084	0.111	0.132	0.153	0.167	0.180	0.185	0.190	0.185	0.180	0.167	0.153	0.132	0.111	0.084	0.057	0.028	0
	FINAL CAMBER ↑	0	3/16"	7/16"	5/8"	3/4"	15/16"	1"	1 1/8"	1 3/16"	1 1/4"	1 1/4"	1 1/4"	1 3/16"	1 1/8"	1"	15/16"	3/4"	5/8"	7/16"	3/16"	0
2 & 3	CAMBER (GIRDER ALONE IN PLACE) ↑	0	0.046	0.092	0.134	0.173	0.208	0.237	0.261	0.278	0.288	0.292	0.288	0.278	0.261	0.237	0.208	0.173	0.134	0.092	0.046	0
	** DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0	0.032	0.064	0.094	0.124	0.148	0.171	0.187	0.202	0.207	0.212	0.207	0.202	0.187	0.171	0.148	0.124	0.094	0.064	0.032	0
	FINAL CAMBER ↑	0	3/16"	5/16"	1/2"	9/16"	3/4"	13/16"	7/8"	15/16"	1"	15/16"	1"	15/16"	7/8"	13/16"	3/4"	9/16"	1/2"	5/16"	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).



SCHEMATIC CAMBER ORDINATES AT GIRDER TWENTIETH POINTS

(SLOPE FOR THE ZERO CAMBER BASE LINE VARIES)

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 7000 PSI.

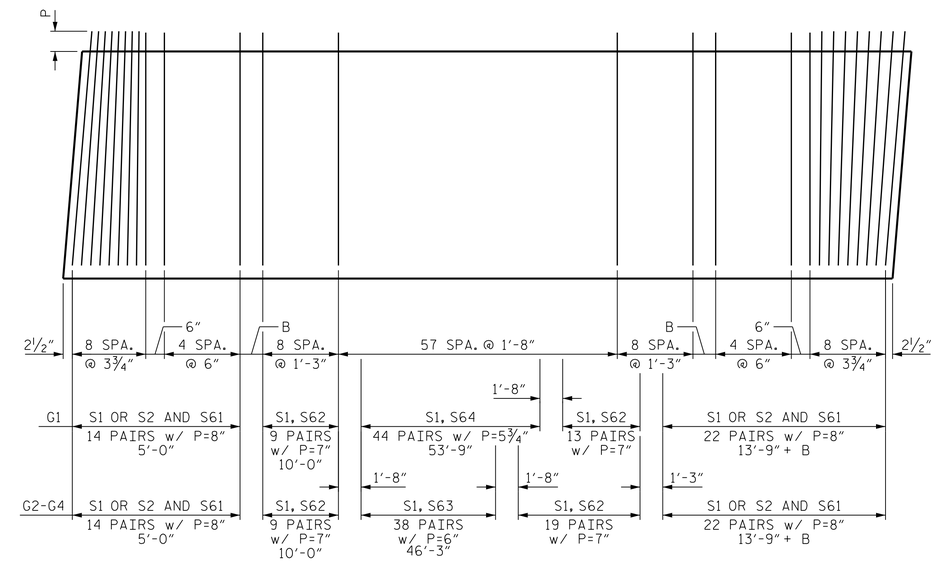
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

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

A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 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.

FOR EMBEDDED CLIPS FOR PRECAST CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.



STIRRUP PROJECTION

P = PROJECTION ABOVE TOP OF TOP FLANGE.

STIRRUP SPACING MEASURED ALONG BOTTOM FLANGE.

FOR DIMENSION B, SEE SHEET 1 OF 3.

PROJECT NO. R-5771

HENDERSON COUNTY

STATION: 20+77.50 -L-

SHEET 2 OF 3

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027799 ALLYSON K. ORR

3/27/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			S-10
1			3					TOTAL SHEETS
2			4					29

STD. NO. PCG9 (Sht. 4)

ASSEMBLED BY: B.E. LANNING		DATE: 01/17	
CHECKED BY : A.K. ORR		DATE: 01/17	
DESIGN ENGINEER OF RECORD: A.K. ORR		DATE: 03/17	
DRAWN BY : ELR 11/91	REV. 10/1/11	MAA/GM	
CHECKED BY : GRP 11/91	REV. 1/15	MAA/TMG	
	REV. 2/15	MAA/TMG	

3/27/2017
2:14:05 PM
User: blanning
Filename: P:\NC Bridges\MI6002_MA_R-5771 Br. Repl. (Div. 14)\R-5771\Structures\401_019_R5771_SMU_PCG2.dgn