

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 6000 PSI (SPAN A) & 6200 PSI (SPAN B)

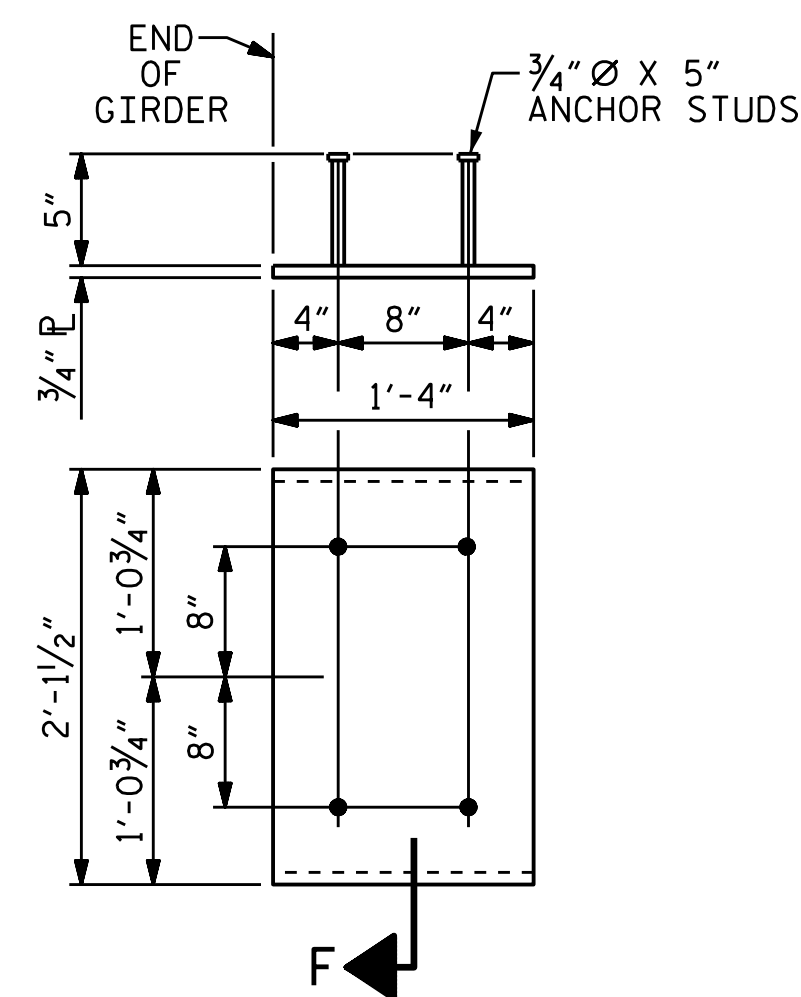
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

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

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 6" OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 1/2" OF THE THEORETICAL LOCATION SHOWN.

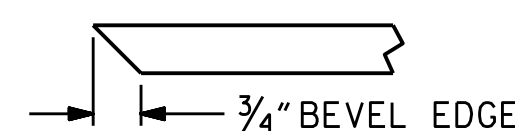
A 2" x 2" CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" AND 72" MODIFIED BULB TEES ONLY.

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.



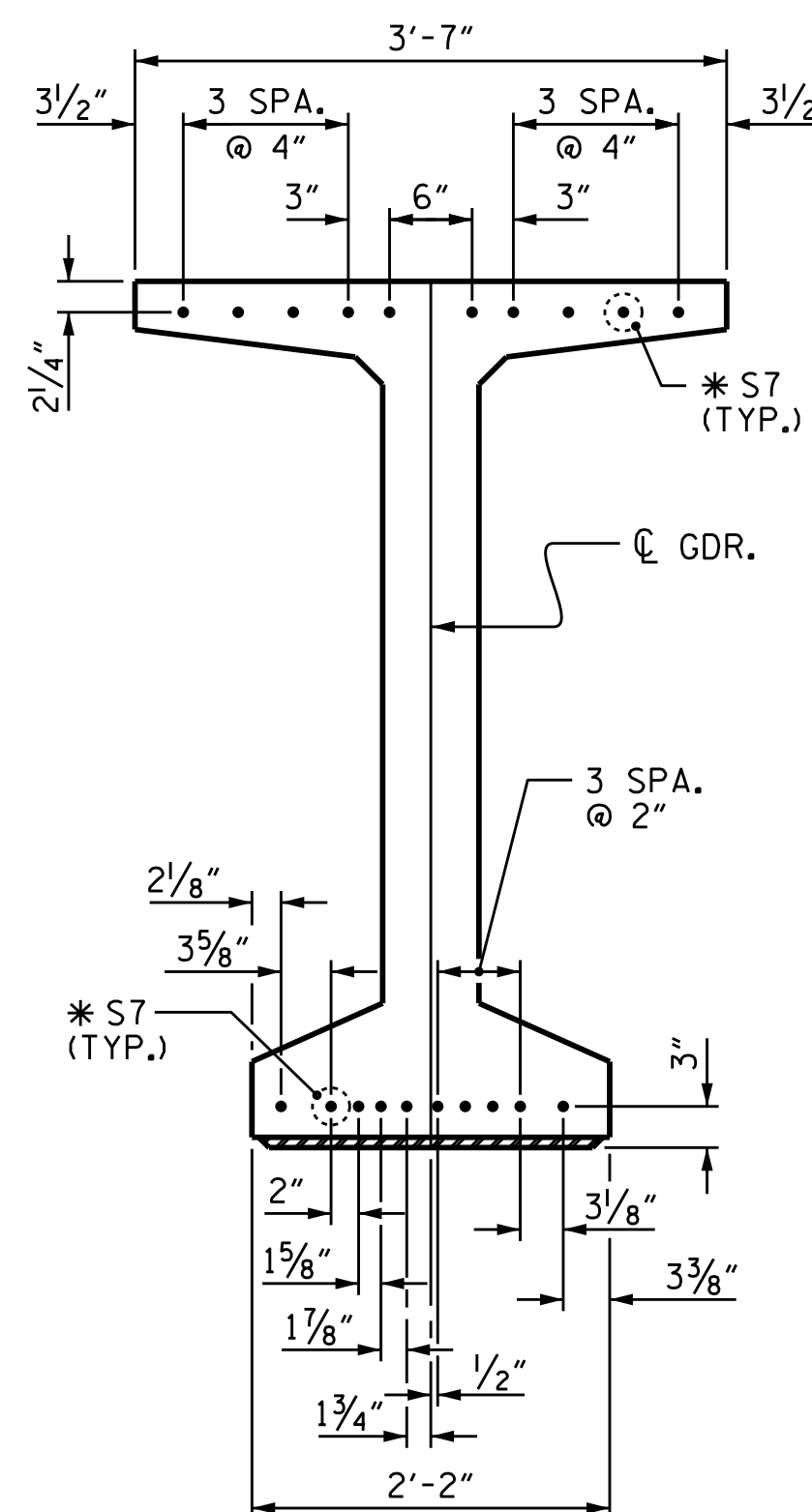
EMBEDDED PLATE "B-1" DETAILS FOR 63" MODIFIED BULB TEES

(2 REQ'D PER GIRDER)



SECTION "F"

(SEE NOTES)



DETAIL "C"

(FOR 63" MODIFIED BULB TEES)

DEAD LOAD DEFLECTION TABLE FOR SPAN A											
0.6" LOW RELAXATION											
GIRDER 1											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE)	↑ 0.0	0.050	0.094	0.129	0.151	0.159	0.151	0.129	0.094	0.050	0.0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓ 0.0	-0.024	-0.046	-0.063	-0.074	-0.077	-0.074	-0.063	-0.046	-0.024	0.0
FINAL CAMBER	↑ 0.0	3/16"	3/16"	13/16"	15/16"	1"	15/16"	13/16"	3/16"	3/16"	0.0

\* 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 SPAN A											
0.6" LOW RELAXATION											
GIRDER 2											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE)	↑ 0.0	0.050	0.094	0.129	0.151	0.159	0.151	0.129	0.094	0.050	0.0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓ 0.0	-0.025	-0.048	-0.066	-0.077	-0.081	-0.077	-0.066	-0.048	-0.025	0.0
FINAL CAMBER	↑ 0.0	3/16"	3/16"	3/4"	7/8"	15/16"	7/8"	3/4"	3/16"	3/16"	0.0

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DEAD LOAD DEFLECTION TABLE FOR SPAN A											
0.6" LOW RELAXATION											
GIRDER 3											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE)	↑ 0.0	0.050	0.094	0.129	0.151	0.159	0.151	0.129	0.094	0.050	0.0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓ 0.0	-0.024	-0.045	-0.062	-0.073	-0.076	-0.073	-0.062	-0.045	-0.024	0.0
FINAL CAMBER	↑ 0.0	3/16"	3/16"	13/16"	15/16"	1"	15/16"	13/16"	3/16"	3/16"	0.0

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DEAD LOAD DEFLECTION TABLE FOR SPAN B											
0.6" LOW RELAXATION											
GIRDER 1											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE)	↑ 0.0	0.054	0.102	0.140	0.164	0.172	0.164	0.140	0.102	0.054	0.0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓ 0.0	-0.030	-0.057	-0.078	-0.091	-0.096	-0.091	-0.078	-0.057	-0.030	0.0
FINAL CAMBER	↑ 0.0	3/16"	3/16"	3/4"	7/8"	15/16"	7/8"	3/4"	3/16"	3/16"	0.0

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

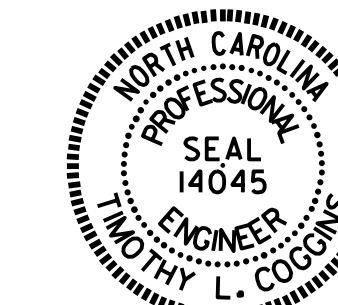
DEAD LOAD DEFLECTION TABLE FOR SPAN B											
0.6" LOW RELAXATION											
GIRDER 2											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0
CAMBER (GIRDER ALONE IN PLACE)	↑ 0.0	0.054	0.102	0.140	0.164	0.172	0.164	0.140	0.102	0.054	0.0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓ 0.0	-0.032	-0.060	-0.082	-0.096	-0.100	-0.096	-0.082	-0.060	-0.032	0.0
FINAL CAMBER	↑ 0.0	1/4"	1/2"	11/16"	13/16"	7/8"	13/16"	11/16"	1/2"	1/4"	0.0

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FINAL CAMBER	↑ 0.0	3/16"	3/16"	3/4"	7/8"	15/16"	7/8"	3/4"	3/16"	3/16"	0.0

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DRAWN BY: M.D.PISO DATE: 08-07-13  
CHECKED BY: K.P.SEDAI DATE: 09-15-14  
DESIGN ENGINEER OF RECORD: R.KOUICHEKI DATE: 02/2015



DocuSigned by:  
Tim Coggins  
3/23/2015

PROJECT NO. R-2514D  
JONES & CRAVEN COUNTY  
STATION: 28+29.35 -Y10-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE  
DEAD LOAD DEFLECTION  
(SPANS A & B)  
(RIGHT LANE)

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS	
1			3			S16-014	
2			4			30	

STR. #16

STD. NO. PCG9