

NOTES

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 345W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

ALL DIMENSIONS SHOWN ARE HORIZONTAL OR VERTICAL, UNLESS OTHERWISE NOTED.

ALL FIELD CONNECTIONS TO BE 22.23mm DIA. HIGH STRENGTH BOLTS UNLESS OTHERWISE NOTED.

SHOP SPLICES ARE PERMITTED TO LIMIT THE MAXIMUM REQUIRED FLANGE PIECE LENGTHS TO 18 METERS AND WEB PIECE LENGTHS TO 14 METERS. PERMITTED FLANGE AND WEB SHOP SPLICES SHALL NOT BE LOCATED WITHIN 4.5 METERS OF MAXIMUM DEAD LOAD DEFLECTION (NOR WITHIN 4.5 METERS OF INTERMEDIATE BEARINGS OF CONTINUOUS UNITS). KEEP 600mm MINIMUM BETWEEN WEB AND FLANGE SHOP SPLICES. KEEP 150mm MINIMUM BETWEEN CONNECTOR PLATE OR TRANSVERSE STIFFENER WELDS AND WEB OR FLANGE SHOP SPLICES.

STUDS ON GIRDERS MAY BE SHIFTED UP TO 25mm IF NECESSARY TO CLEAR FLANGE SPLICE WELD.

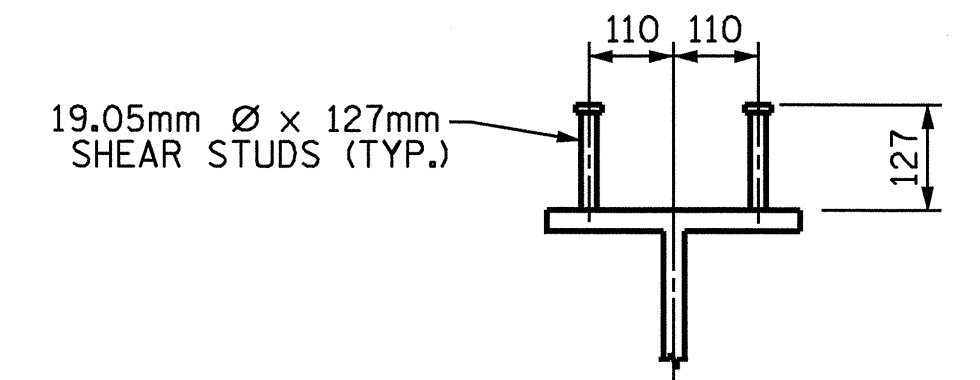
END OF GIRDERS SHALL BE PLUMB.

TENSION ON THE AASHTO M164 BOLTS SHALL BE CALIBRATED USING DIRECT TENSION INDICATOR WASHERS IN ACCORDANCE WITH ARTICLE 440-10 OF THE STANDARD SPECIFICATIONS.

A CHARPY V-NOTCH TEST IS REQUIRED FOR WEB PLATES, AND BOTTOM FLANGE PLATES FOR ALL GIRDERS AND IN ACCORDANCE WITH ARTICLE 1072-9 OF THE STANDARD SPECIFICATIONS.

BEARING STIFFENERS ARE TO BE PLACED ALONG THE SKEW AND SHALL BE PLUMB.

BEARING STIFFENER MAY REQUIRE COPING IF WIDER THAN BOTTOM FLANGE TO AVOID INTERFERENCE WITH THE ANCHOR BOLT.



SHEAR STUD DETAILS

(ON GIRDERS)

PROJECT NO. R-2206C
LINCOLN-CATAWBA COUNTY
STATION: 195+74.885 -L-

SHEET 1 OF 2

GIRDER	HORIZONTAL DISTANCE				SLOPED DISTANCE				
	"A"	"B"	"C"	"D"	"E"	"A"	"B"	"C"	"D"
A1	29.996m	29.626m			381	30.010m	29.640m		
A2	29.998m	29.628m			383	30.012m	29.642m		
A3	29.999m	29.629m			384	30.014m	29.644m		
A4	30.001m	29.631m			386	30.016m	29.646m		
B1			35.270m	34.900m	275			35.295m	34.925m
B2			35.274m	34.904m	279			35.300m	34.930m
B3			35.279m	34.909m	284			35.305m	34.935m
B4			35.284m	34.914m	289			35.310m	34.940m

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
STRUCTURAL STEEL
DETAILS



REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11	
1			3			TOTAL SHEETS	
2			4			374	

DRAWN BY : M. M. PARSONS DATE : 12/2/03
CHECKED BY : P. ADKINS DATE : 2/04