

PLAN OF TOP FLANGE

FOR SHEAR CONNECTORS ON TOP OF FLANGE SPLICE PLATES, SEE FIELD SPLICE DETAILS ON SHEET 3 OF 3.

ON PLATE GIRDERS

SHEAR CONNECTORS

STUDS ON GIRDERS MAY BE SHIFTED SLIGHTLY, IF NECESSARY, TO CLEAR FLANGE SPLICE WELD.

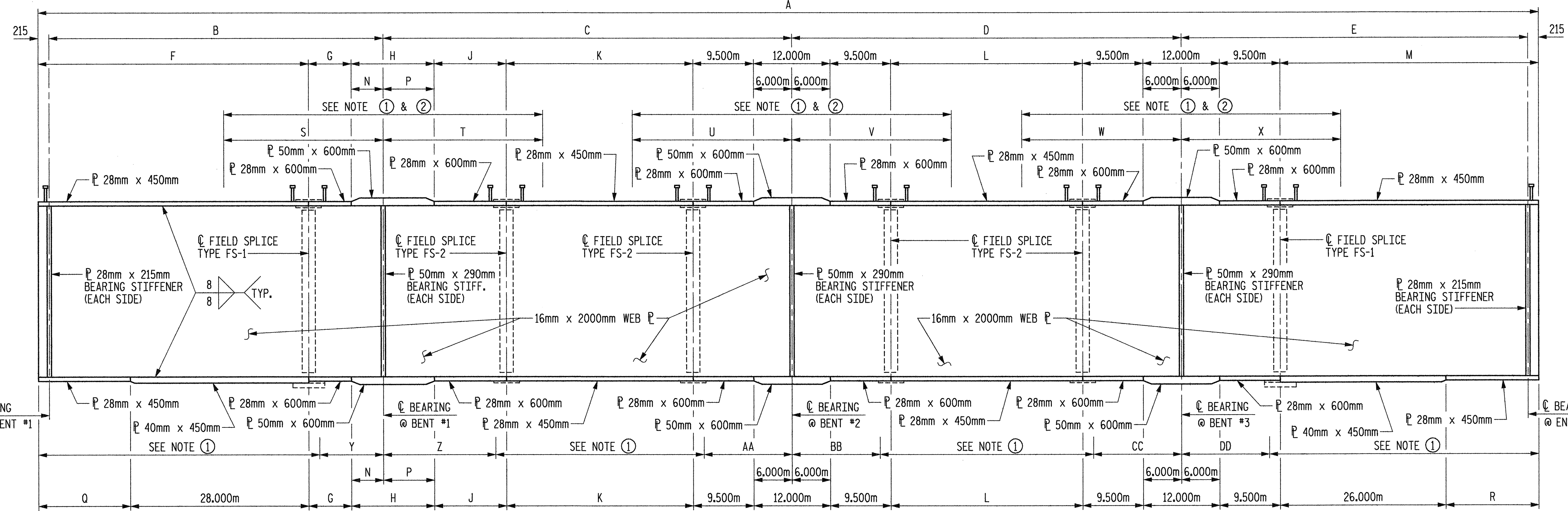
\* SHEAR CONNECTOR SPACING

- (A) 88 SPACES @ 460mm MAX. FOR GIRDER #1  
92 SPACES @ 440mm MAX. FOR GIRDER #2  
84 SPACES @ 480mm MAX. FOR GIRDER #3  
73 SPACES @ 550mm MAX. FOR GIRDER #4
- (B) 65 SPACES @ 460mm MAX. FOR GIRDER #1  
68 SPACES @ 440mm MAX. FOR GIRDER #2  
94 SPACES @ 380mm MAX. FOR GIRDERS #3 AND #4
- (C) 67 SPACES @ 420mm MAX. FOR GIRDER #1  
70 SPACES @ 400mm MAX. FOR GIRDER #2  
57 SPACES @ 380mm MAX. FOR GIRDERS #3 AND #4
- (D) 85 SPACES @ 350mm MAX. FOR GIRDER #1  
75 SPACES @ 400mm MAX. FOR GIRDER #2  
79 SPACES @ 380mm MAX. FOR GIRDERS #3 AND #4
- (E) 69 SPACES @ 420mm MAX. FOR GIRDER #1  
72 SPACES @ 400mm MAX. FOR GIRDER #2  
76 SPACES @ 380mm MAX. FOR GIRDER #3  
65 SPACES @ 440mm MAX. FOR GIRDER #4
- (F) 68 SPACES @ 440mm MAX. FOR GIRDERS #1 THRU #4
- (G) 87 SPACES @ 440mm MAX. FOR GIRDERS #1 THRU #4

TOTAL NUMBER OF STUDS

GIRDER NO.	NUMBER
1	1662
2	1671
3	1710
4	1644

NOTE: TOTAL NUMBER OF STUDS INCLUDES THE STUDS ON THE TOP OF FLANGE SPLICE PLATES.

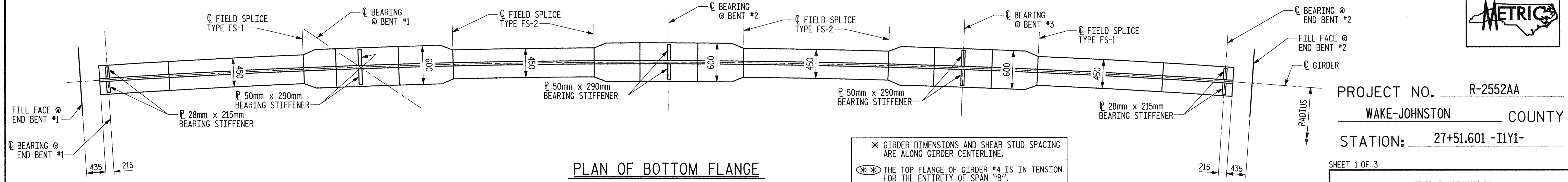


GIRDER ELEVATION

NOTE: SEE FRAMING PLAN FOR INTERMEDIATE TRANSVERSE STIFFENER LOCATIONS.

NOTE ①: CHARPY V-NOTCH TESTS ARE REQUIRED FOR ALL TOP OR BOTTOM FLANGE PLATES WHICH FALL WITHIN THESE LIMITS, ALL WEB PLATES, ALL SPLICE PLATES AND DIAPHRAGMS. IF A PERMITTED SHOP FLANGE SPLICE IS NOT USED, CHARPY V-NOTCH TESTS WILL BE REQUIRED FOR THE ENTIRE FLANGE PLATE.

NOTE ②: NO WELDING OF FORMS OR FALSEWORK TO THE TOP FLANGE WILL BE PERMITTED IN THIS REGION.



PLAN OF BOTTOM FLANGE

\* GIRDER DIMENSIONS AND SHEAR STUD SPACING ARE ALONG GIRDER CENTERLINE.  
\* THE TOP FLANGE OF GIRDER #4 IS IN TENSION FOR THE ENTIRETY OF SPAN "B".

\* GIRDER DIMENSIONS

GIRDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	RADIUS
1	232.370m	52.422m	64.048m	61.063m	54.407m	40.937m	6.700m	13.000m	11.300m	29.248m	30.063m	39.122m	5.000m	8.000m	12.937m	13.122m	16.220m	25.540m	21.270m	21.360m	23.510m	19.530m	8.550m	15.570m	9.170m	8.950m	11.700m	10.050m	1751.800m
2	232.023m	55.930m	60.366m	60.972m	54.325m	40.945m	10.200m	11.000m	9.800m	29.066m	29.972m	39.040m	5.000m	6.000m	12.945m	13.040m	15.930m	23.800m	20.940m	18.120m	21.320m	18.420m	9.280m	12.610m	9.420m	8.850m	11.770m	10.430m	1749.200m
3	231.677m	59.449m	56.674m	60.881m	54.243m	40.964m	12.700m	11.000m	13.300m	22.874m	29.881m	38.958m	6.000m	5.000m	12.964m	12.958m	17.000m	25.690m	22.390m	16.900m	20.610m	18.360m	11.160m	11.260m	9.570m	8.540m	11.740m	10.570m	1746.600m
4	231.331m	62.978m	52.971m	60.791m	54.161m	40.893m	15.300m	12.000m	9.700m	22.771m	29.791m	38.876m	7.000m	5.000m	12.893m	12.876m	19.010m	16.970m	21.490m	19.410m	12.800m	11.200m	8.890m	7.970m	11.610m	10.490m	1744.000m		

PROJECT NO. R-252AA  
WAKE-JOHNSTON COUNTY  
STATION: 27+51.601 -I1Y1-

SHEET 1 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUPERSTRUCTURE  
STRUCTURAL STEEL DETAILS



Plans prepared by:  
**KO & ASSOCIATES, P.C.**  
Consulting Engineers  
101 SCHAUB DR., SUITE #202  
RALEIGH, N.C. 27606  
For Division of Highways

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			5-1
2			4			429

DRAWN BY: B.E. LANNING DATE: JAN. 2005  
CHECKED BY: J.C. KO / A.K. ORR DATE: JAN. 2005

PLOT: 01/28/2005 07:16:46 AM Ko & Associates, P.C.  
FILE NAME: r:\2522aa.ssd.dwg

DWG. NO. 15