



**SECTION ALONG -Y16-**  
(ELEVATIONS TAKEN AT RIGHT ANGLES TO END BENTS AND BENT)

**NOTES:**

INITIAL SET WILL REQUIRE PLACEMENT OF TWO ADJACENT GIRDERS WITH CROSSFRAMES AND LATERAL BRACING.

WITHIN A FIELD SECTION, GIRDERS 3 AND 4, WITH ALL CROSSFRAME MEMBERS AND BOLTS INSTALLED, SHALL BE LIFTED FIRST. GIRDERS 1 AND 2, WITH ALL CROSSFRAME MEMBERS AND BOLTS INSTALLED, SHALL BE LIFTED SECOND. FINALLY, ALL CROSSFRAME MEMBERS AND BOLTS SHALL BE INSTALLED AND TIGHTENED BETWEEN GIRDERS 2 AND 3 BEFORE GIRDERS 1 AND 2 ARE RELEASED.

THE STRUCTURAL STEEL SHALL BE SUPPORTED DURING ERECTION IN ITS CAMBERED POSITION. DURING ERECTION OF GIRDERS, ALL CROSSFRAME MEMBERS SHALL BE INSTALLED AND ALL BOLTS SHALL BE INSTALLED AND PROPERLY TENSIONED PER THE STANDARD SPECIFICATIONS.

DURING THE GIRDER ERECTION PROCEDURE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY LATERAL BRACING AND OTHER MEANS OF SUPPORT, AS REQUIRED, TO ENSURE THE STABILITY OF THE GIRDERS, TO AVOID UPLIFT OF THE GIRDERS AT THE TEMPORARY BENT, AND TO MAINTAIN PLUMBNESS OF THE GIRDER WEBS.

THE CONTRACTOR MAY SUBMIT ALTERNATE ERECTION METHODS. PLANS FOR SUCH ERECTION METHODS SHALL BE APPROVED BY THE ENGINEER.

TEMPORARY BENTS, IF USED, SHALL BE LOCATED AT THE CONNECTOR PLATES, SUPPORT ALL GIRDERS IN THE TYPICAL SECTION, AND REMAIN IN PLACE UNTIL ALL CROSSFRAMES AND TEMPORARY BRACING, IF USED, ARE IN PLACE AND ALL HIGH STRENGTH BOLTS ARE TIGHTENED.

METHOD OF TEMPORARY BENT REMOVAL SHALL UNIFORMLY APPLY THE STRUCTURAL STEEL WEIGHT TO THE GIRDERS AND CROSSFRAMES.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING ANY TEMPORARY BENTS. THE DESIGN SHALL FOLLOW THE AASHTO DESIGN GUIDE SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS, 2017, AND SHALL BE COMPLETED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA. THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED CALCULATIONS AND WORKING DRAWINGS FOR APPROVAL BY THE ENGINEER. WORKING DRAWINGS SHALL INCLUDE PLANS FOR TEMPORARY BENTS, ERECTION SEQUENCE AND TEMPORARY BENT REMOVAL.

NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR PROVIDING THE TEMPORARY BENT. THE COST FOR ALL MATERIALS, EQUIPMENT, TOOLS, LABOR, AND ANY INCIDENTALS NECESSARY TO PROVIDE THE TEMPORARY BENT SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID PRICE FOR STRUCTURAL STEEL.

FOR TEMPORARY BENTS, SEE SPECIAL PROVISIONS.

**ERECTION SEQUENCE**

1. CONSTRUCT TEMPORARY BENTS.
2. INSTALL FIELD SECTION D.
3. INSTALL FIELD SECTION C.
4. INSTALL FIELD SECTION B.
5. INSTALL FIELD SECTION A.
6. REMOVE TEMPORARY BENTS.

PROJECT NO. U-2579AB  
FORSYTH COUNTY  
 STATION: 23+43.03 -Y16-



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GIRDER ERECTION  
 DETAILS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			48
2			4			48

S7-5

DRAWN BY :	TRM	DATE :	11/2019
CHECKED BY :	MAL	DATE :	12/2019
DESIGN ENGINEER OF RECORD:	JMR	DATE :	12/2019

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED