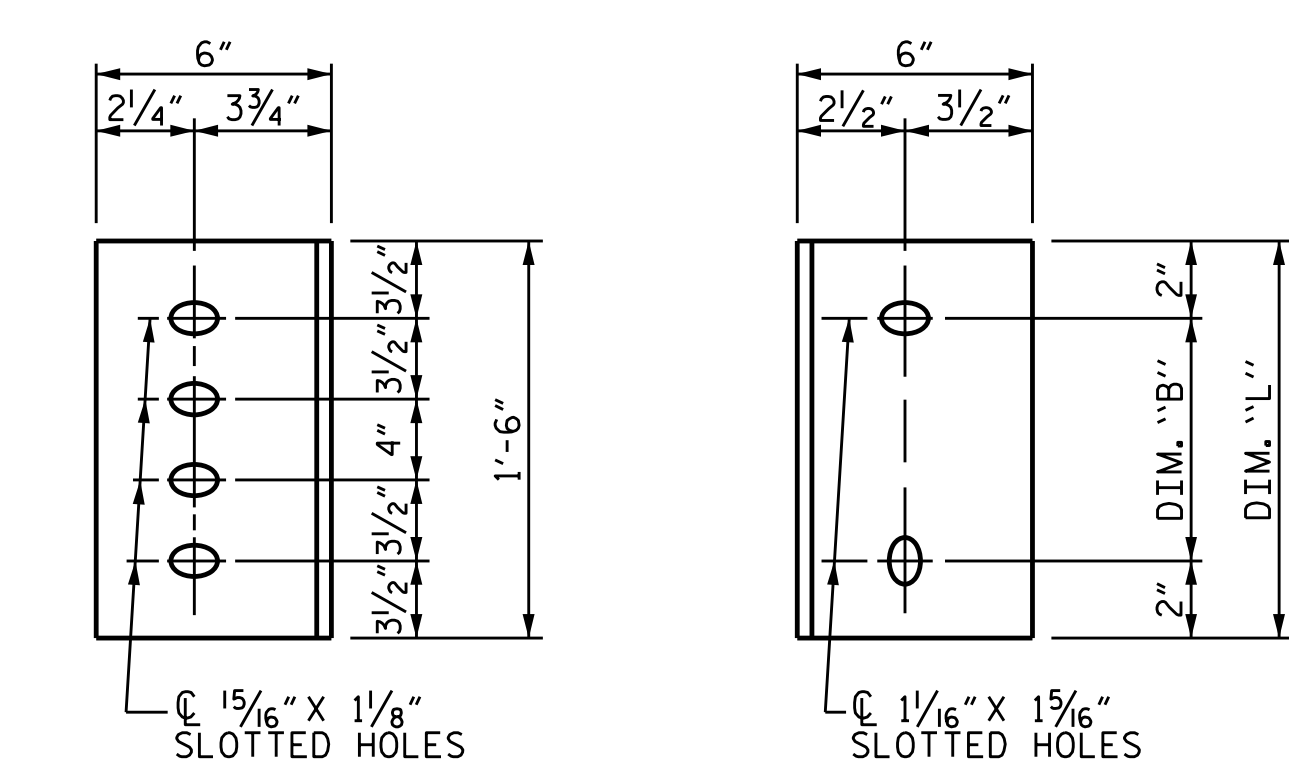


EXTERIOR GIRDER **INTERIOR GIRDER**
PART SECTION AT INTERMEDIATE DIAPHRAGM
 (TYPE III GIRDER SHOWN)



DIAPHRAGM FACE
 (TYPE III GDR.) **WEB FACE**
CONNECTOR PLATE DETAILS

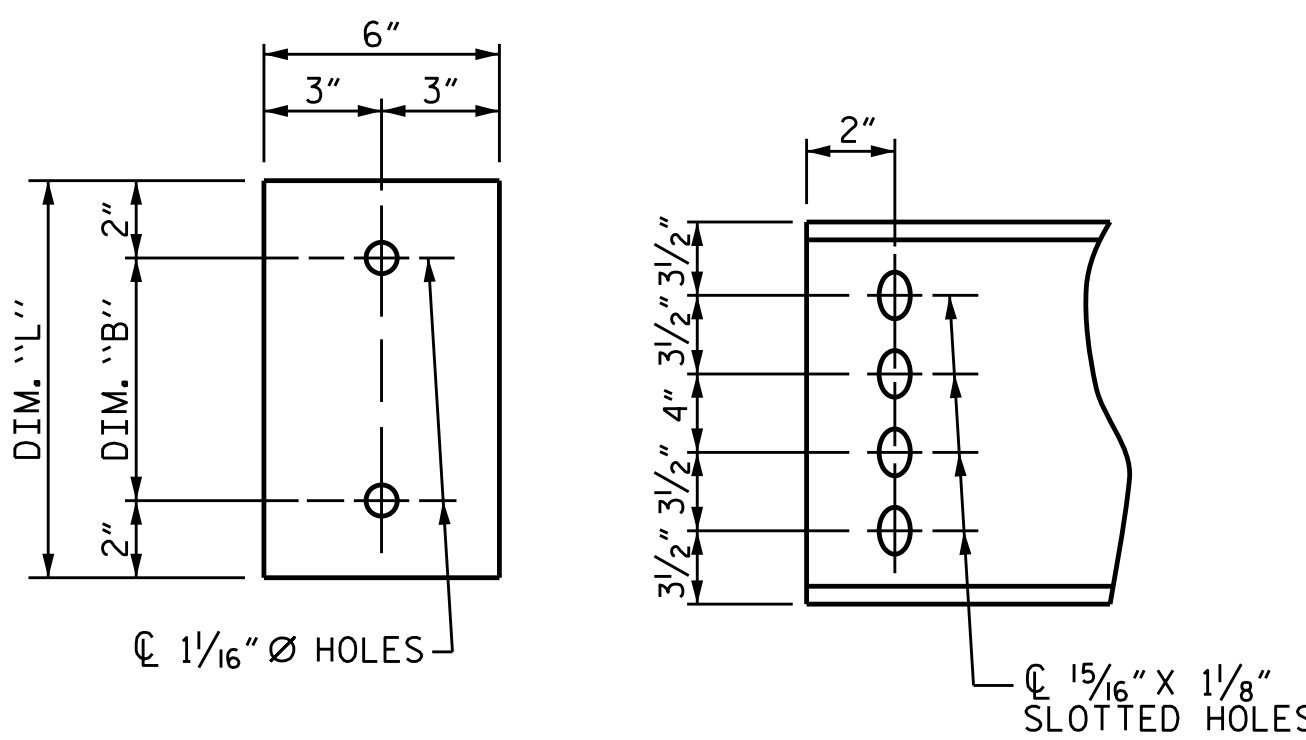
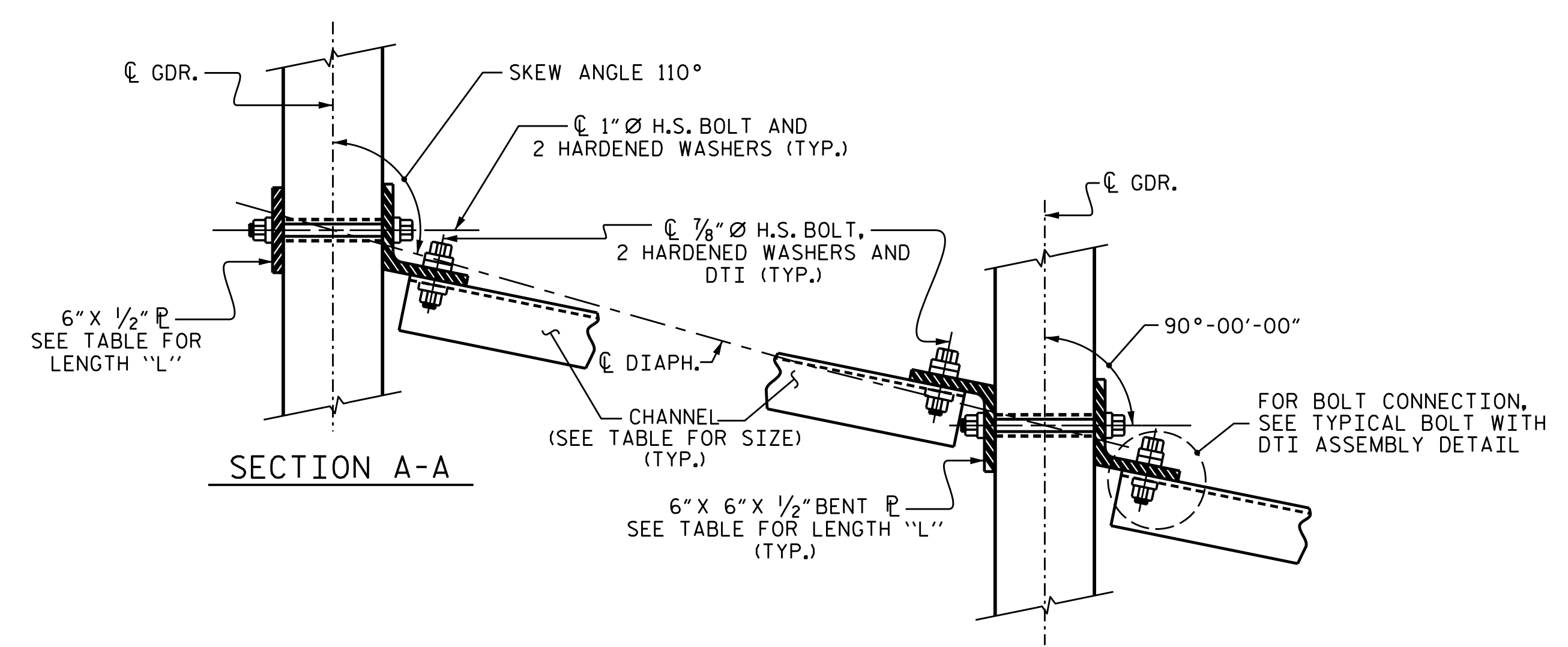
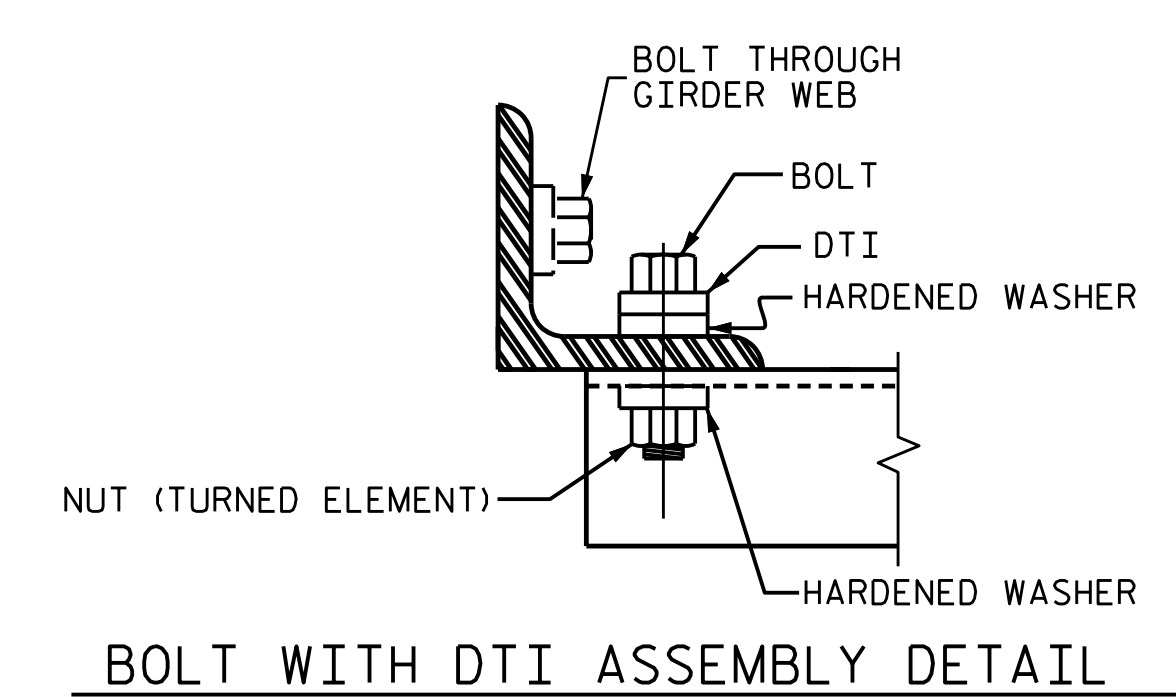


PLATE DETAILS **CHANNEL END**
 (TYPE III GDR.)



SECTION A-A **SECTION B-B**
CONNECTION DETAILS



BOLT WITH DTI ASSEMBLY DETAIL

STRUCTURAL STEEL NOTES

ALL INTERMEDIATE DIAPHRAGM STEEL AND CONNECTOR PLATES SHALL BE AASHTO M270 GRADE 50 OR APPROVED EQUAL.

TENSION ON THE ASTM A325 BOLTS THROUGH THE CHANNEL MEMBER SHALL BE CALIBRATED USING DIRECT TENSION INDICATOR WASHERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TENSION ON THE ASTM A449 BOLTS THROUGH THE GIRDER WEB SHALL BE SNUG TIGHTENED FOLLOWED BY AN ADDITIONAL 1/4 TURN.

THE PLATES, BENT PLATES, CHANNELS, AND ANGLES SHALL BE GALVANIZED OR METALLIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

FOR METALLIZATION, APPLY A THERMAL SPRAYED COATING WITH A SEAL COAT TO ALL STEEL DIAPHRAGM SURFACES IN ACCORDANCE WITH THE DEPARTMENTS THERMAL SPRAYED COATINGS (METALLIZATION) PROGRAM, THERMAL SPRAYED COATINGS SPECIAL PROVISION AND SECTION 442 OF THE STANDARD SPECIFICATIONS.

GALVANIZE THE HIGH STRENGTH BOLTS, NUTS, WASHERS AND DIRECT TENSION INDICATORS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

USE AN ASTM F436 HARDENED WASHER WITH STANDARD AND SLOTTED HOLES UNDER EACH BOLT HEAD AND NUT.

FOR BOLTS THROUGH THE GIRDER WEB, PROVIDE SUFFICIENT LENGTH OF THREADS ON ALL BOLTS TO ACCOMMODATE WASHERS AND THE THICKNESS OF CONNECTING MEMBER PLUS AT LEAST 1/4" PROJECTION BEYOND THE NUT.

INTERMEDIATE DIAPHRAGM ASSEMBLY SHALL COMPLY WITH SECTION 1072 OF THE STANDARD SPECIFICATIONS.

SUBMIT TWO SETS OF WORKING DRAWINGS FOR THE INTERMEDIATE DIAPHRAGM ASSEMBLY FOR REVIEW, COMMENTS AND ACCEPTANCE. AFTER REVIEW, COMMENTS, AND ACCEPTANCE, SUBMIT SEVEN SETS FOR DISTRIBUTION.

IN THE EXTERIOR BAYS, PLACE TEMPORARY STRUTS BETWEEN PRESTRESSED GIRDERS ADJACENT TO THE STEEL DIAPHRAGMS. STRUTS SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS PLACED.

THE COST OF THE STEEL DIAPHRAGMS AND ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE GIRDERS.

TABLE

GIRDER TYPE	CHANNEL SIZE	DIM "A"	DIM "B"	DIM "L"
III	MC 18 x 42.7	1'-5"	1'-2"	1'-6"

PROJECT NO. **BR-0100**
RUTHERFORD COUNTY
 STATION: **18+28.00 -L-**

DRAWN BY: TLA	6/05	REV. 5/1/06RRR	KMM/GM
CHECKED BY: VC	6/05	REV. 10/1/11	MAA/GM
		REV. 12/17	MAA/THC
DESIGNED BY: J. WHEATLEY	DATE: MAY 2024		
DRAWN BY: M. HOBBS	DATE: MAY 2024		
CHECKED BY: E. LAWES	DATE: MAY 2024		
DESIGN ENGINEER OF RECORD: E. LAWES	DATE: MAY 2024		

WSP
 WSP USA Inc.
 434 FAYETTEVILLE STREET
 SUITE 1500
 RALEIGH, NC 27601
 TEL: 1.919.836.4040
 LICENSE NO. F-0165

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

DocuSigned by:
 Elizabeth F. Lawes
 935E842232278/2024

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
**INTERMEDIATE
 STEEL DIAPHRAGMS FOR
 TYPE III PRESTRESSED
 CONCRETE GIRDERS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			5-16
2			4			TOTAL SHEETS 30